GOLDEN HILLS
COMMUNITY SERVICES DISTRICT

GOLDEN HILLS COMMUNITY SERVICES DISTRICT

NATURE PARK MASTER PLAN

DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

KERN COUNTY, CALIFORNIA
AUGUST 2025

PREPARED FOR:
Golden Hills Community Services District
Tehachapi, CA

PREPARED BY:
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ACRONYMS & ABBREVIATIONS

AB ---------- Assembly Bill
APE ---------- Area of Potential Effect
ASM ---------- ASM Affiliates
BERD ---------- Built Environment Resources Directory
BMP ---------- Best Management Practices
BUOW ---------- burrowing owl
CalEEMod ---------- California Emissions Estimator Modeling (software)
CBC ---------- California Building Code
CDFW ---------- California Fish and Wildlife
CEQA ---------- California Environmental Quality Act
CH_4 ---------- Methane
CHRIS ---------- California Historical Resources Information System
CNDDB ---------- California Natural Diversity Database
CNPS ---------- California Native Plant Society
CO ---------- Carbone Monoxide
CO_2 ---------- Carbon dioxide
County ---------- County of Kern
CRHR ---------- California Register of Historical Resources
District ---------- Golden Hills Community Services District
DOC ---------- Department of Conservation
DPM ---------- Diesel Particulate Matter
DTSC ---------- Department of Toxic Substances Control
EIR ---------- Environmental Impact Report
EKAPCD ---------- East Kaweah Air Pollution Control District
EOP ---------- Emergency Operations Plan
FEMA ---------- Federal Emergency Management Agency
FYLF ---------- foothill yellow-legged frog
FMMP ---------- Farmland Mapping and Monitoring Program
GHCC ---------- Golden Hills Country Club
GHG ---------- Greenhouse Gas
IPaC ---------- U.S. Fish and Wildlife Service's Information for Planning and Consultation system
IS ---------- Initial Study
IS/MND ---------- Initial Study/Mitigated Negative Declaration
ITP ---------- Incidental Take Permit
MDAB ---------- Mojave Desert Air Basin
MMRP ---------- Mitigation Monitoring and Reporting Program
MND ---------- Mitigated Negative Declaration
$MTCO_2e$ ---------- metric tons of carbon dioxide equivalent
NAHC ---------- Native American Heritage Commission
NEPA ---------- National Environmental Policy Act
ND ---------- Negative Declaration
NO_2 ---------- Nitrogen dioxide
NO_X ---------- Oxides of nitrogen
NPDES ---------- National Pollutant Discharge Elimination System
NRCS ---------- Natural Resources Conservation Service
NRHP ---------- National Register of Historic Places
O_3 ---------- Ozone
O&M ---------- operation and maintenance

Pb ---------- Lead
PM_{10} ---------- particulate matter 10 microns in size
$PM_{2.5}$ ---------- particulate matter 2.5 microns in size
ppb ---------- parts per billion
ppm ---------- parts per million
PRC ---------- Public Resources Code
Project ---------- Nature Park Master Plan Project
ROG ---------- Reactive Organic Gases
RWQCB ---------- Regional Water Quality Control Board
SCE ---------- Southern California Edison (Company)
SLF ---------- Sacred Lands File (search)
SO_2 ---------- Sulfur Dioxide
SR ---------- State Route
SRA ---------- State Responsibility Area
SSJVIC ---------- Southern San Joaquin Valley Information Center
SWPPP ---------- Storm Water Pollution Prevention Plan
SWRCB ---------- State Water Resources Control Board
TAC ---------- Toxic Air Contaminants
USACE ---------- United States Army Corps of Engineers
USEPA ---------- United States Environmental Protection Agency
USFWS ---------- United States Fish and Wildlife Service
USGS ---------- United States Geological Survey
UST ---------- Underground Storage Tank
$\mu g/m^3$ ---------- micrograms per cubic meter
WEAP ---------- Worker Environmental Awareness Program

CHAPTER 1 INTRODUCTION

Provost & Pritchard Consulting Group (Provost & Pritchard) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of Golden Hills Community Services District (District) to address the environmental effects of the Project Name (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. The District is the CEQA lead agency for this Project.

The site and the Project are described in detail in Chapter 2 Project Description.

1.1 REGULATORY INFORMATION

An Initial Study (IS) is a document prepared by a lead agency to determine whether a project may have a significant effect on the environment. In accordance with California Code of Regulations Title 14 (Chapter 3, Section 15000, *et seq.*)-- also known as the CEQA Guidelines--Section 15064 (a)(1) states that an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the Project under review may have a significant effect on the environment and should be further analyzed to determine mitigation measures or project alternatives that might avoid or reduce project impacts to less than significant levels. A negative declaration (ND) may be prepared instead if the lead agency finds that there is no substantial evidence in light of the whole record that the project may have a significant effect on the environment. An ND is a written statement describing the reasons why a proposed Project, not otherwise exempt from CEQA, would not have a significant effect on the environment and, therefore, why it would not require the preparation of an EIR (CEQA Guidelines Section 15371). According to CEQA Guidelines Section 15070, a ND or *mitigated* ND shall be prepared for a project subject to CEQA when either:

a. The IS shows there is no substantial evidence, in light of the whole record before the agency, that the proposed Project may have a significant effect on the environment, or
b. The IS identified potentially significant effects, but:
    1. Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed MND and IS is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur is prepared, and
    2. There is no substantial evidence, in light of the whole record before the agency, that the proposed Project as revised may have a significant effect on the environment.

1.2 DOCUMENT FORMAT

This IS/MND contains six chapters Chapter 1 Introduction, provides an overview of the Project and the CEQA process Chapter 2 Project Description, provides a detailed description of proposed Project components and objectives. Chapter 3 Determination, the Lead Agency's determination based upon this initial evaluation. Chapter 4 Environmental Impact Analysis presents the CEQA checklist and environmental analysis for all impact areas, mandatory findings of significance, and feasible mitigation measures. If the Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why no impacts are expected. If the Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Chapter 5 Mitigation, Monitoring, and Reporting Program (MMRP), provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation. The California Emissions Estimator Modeling (software) (CalEEMod) Output Files, Biological Resources Evaluation, and Phase I Cultural Resources Assessment are provided as technical Appendix A, Appendix B, and Appendix C, respectively, at the end of this document.

CHAPTER 2 PROJECT DESCRIPTION

2.1 PROJECT BACKGROUND

2.1.1 LEAD AGENCY NAME AND ADDRESS

Golden Hills Community Services District

2.1.2 CONTACT PERSON AND PHONE NUMBER

Christopher Carlson
General Manager
(661) 822-3064

2.1.3 CEQA CONSULTANT

Provost & Pritchard Consulting Group
Jarred Olsen, Environmental Project Manager
(559) 636-1166

2.1.4 PROJECT LOCATION

The Project is located in Unincorporated Kern County, California, approximately 70 miles north of Los Angeles and 30 miles southeast of Bakersfield (see Figure 2-1 and Figure 2-2). The centroid of the Project site is 35° 09' 07.39" N, 118° 29' 06.81" W. The Project site is located approximately on the following Assessor's Parcel Numbers listed in Table 2-1 below.

Table 2-1: Project Assessor's Parcel Numbers

Project Assessor's Parcel Numbers	
270-010-35	223-020-36
270-010-36	223-030-14
270-010-37	223-030-15
270-010-38	

2.1.5 GENERAL PLAN DESIGNATION AND ZONING

Table 2-2: General Plan Designation and Zoning

Project Area	General Plan Designation	Zoning District
ONSITE	Parks and Recreation Resource Reserve General Commercial	RF (Recreation Forestry) R-2 PD (Medium Density Residential, Precise Development Combining) C-2 PD SC (General Commercial, Precise Development Combining, Scenic Corridor Combining) A-1 (Exclusive Agricultural)
ADJACENT LANDS	Parks and Recreation Resource Reserve General Commercial	E-1/4 RS (Estate 0.25 Acres, Residential Suburban Combining R-1 (Low Density Residential) A-1 (Exclusive Agricultural)

2.1.6 DESCRIPTION OF THE PROJECT

2.1.6.1 PROJECT BACKGROUND AND PURPOSE

The community of Golden Hills lies in the unincorporated area of Kern County bordering the growing city of Tehachapi to the east. The community provides an abundance of open space and natural environments for its residents to enjoy. The Project site presently contains the Golden Hills Nature Park (Nature Park), with only passive uses currently provided. The Nature Park, formerly known and used as the Golden Hills Country Club (GHCC), was purchased by the District in 2014 and has been maintained since. Prior to the purchase, the property was not used or maintained since the early 1990s. Since 2014, the District has formed committees and held public workshops focused on gathering and organizing the public's ideas as to what the property could become. The Nature Park is currently being used by regional residents for walking, running, bicycling, horseback riding, and bird watching. The site has seen minor improvements such as the installation of picnic and park benches, informational signage, fencing, and stormwater management and debris removal. The Golden Hills Nature Park Master Plan has been developed over the course of the years since property purchase and this document would be another step towards providing additional recreation activities envisioned to benefit more residents of the Golden Hills community.

2.1.6.2 PROJECT DESCRIPTION

The District proposes to adopt and carry out the Nature Park Master Plan, which seeks to develop the existing passive Golden Hills Nature Park, formerly known as the Golden Hills Country Club. Proposed development would include a new District office, community center, maintenance building, and outdoor recreational facilities. The overall approximate footprint for the three buildings is 50,000 square feet.

Recreational facilities would be built out in approximately five phases, with each phase described below:

- Phase 1
    - Approximately 2-acre Passive Area Parking Lot and approximately 5,000 square foot Pavilion, located at the northeast corner of Westwood Boulevard and Woodford-Tehachapi Road.
    - Approximately 2 miles of horse trails, connecting to the parking lot and through the Nature Park property.
- Phase 2
    - Approximately 5,600 square foot pavilion.
- Phase 3
    - 0.67-acre Dog Park.
    - Two multi-use courts.
    - 2,500 square foot pavilion.
    - 3,000 square foot playground area.
- Phase 4
    - Two multi-use fields on approximately 8.1 acres.
- Phase 5
    - Access roads connecting the Passive Area Parking Lot from Phase 1 to 3.

The phasing implementation of the recreation facilities may be adjusted based on funding available.

2.1.6.3 CONSTRUCTION SCHEDULE

Construction would generally take place daily from 6:00am to 9:00pm on weekdays and 8:00am to 9:00pm on weekends, per the permitted construction times in Kern County.

2.1.6.4 EQUIPMENT

Construction equipment would likely include the following equipment listed in Table 2-3 below.

Table 2-3: Anticipated Construction Equipment

Anticipated Construction Equipment	
Excavators	Compactors
Graders	Bulldozer
Skid steers	Large tractor and large discing unit
Loaders	Water trucks supplying water for dust control and conditioning soil for compaction
Hauling trucks	Large watercannon and hoses
Scrapers	

2.1.6.5 OPERATION AND MAINTENANCE

Operation and maintenance (O&M) of the park area would be handled by the District. O&M would include, but is not limited to, the following:

- Mowing – Mowing each side of trail where applicable.
- Pruning - Prune woody limbs and shrubs near sides of trail.
- Vegetation management of the *California bulrush* within Tom Sawyer Lake.
- Removal of Trees/Limbs - Evaluation/removal of unhealthy or dead trees and limbs. Fallen trees may remain as access control and to minimize disturbance.
- Signage - Maintain directional and informational signs.
- Trail Surface – Restore, regrade, clean and/or resurface when necessary.
- Drainage Structures - Clean inlets, keep swales clear of debris.
- Litter Pick Up - Trailside-litter pickup. Access area litter pickup. Encourage continued user "carry-in, carry-out" policy.
- Trash Collection - Removal of trash from receptacles at access areas.
- Minor bridges and structure Inspection - Maintenance of bridge, overlook and trailhead structures to ensure structural integrity and public safety.
- Lighting – maintain functional safety lighting (replace luminaires, repair outages)
- Landscape irrigation

2.1.7 OTHER PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED

- County of Kern
- California Department of Fish and Wildlife
- Federal Emergency Management Agency

2.1.8 CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Public Resources Code Section 21080.3.1, *et seq. [codification of Assembly Bill (AB) 52, 2013-14*] requires that a lead agency, within 14 days of determining that it will undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an

agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement will be made.

The District has not received any written correspondence from a Tribe pursuant to Public Resources Code Section 21080.3.1 requesting notification of proposed project.

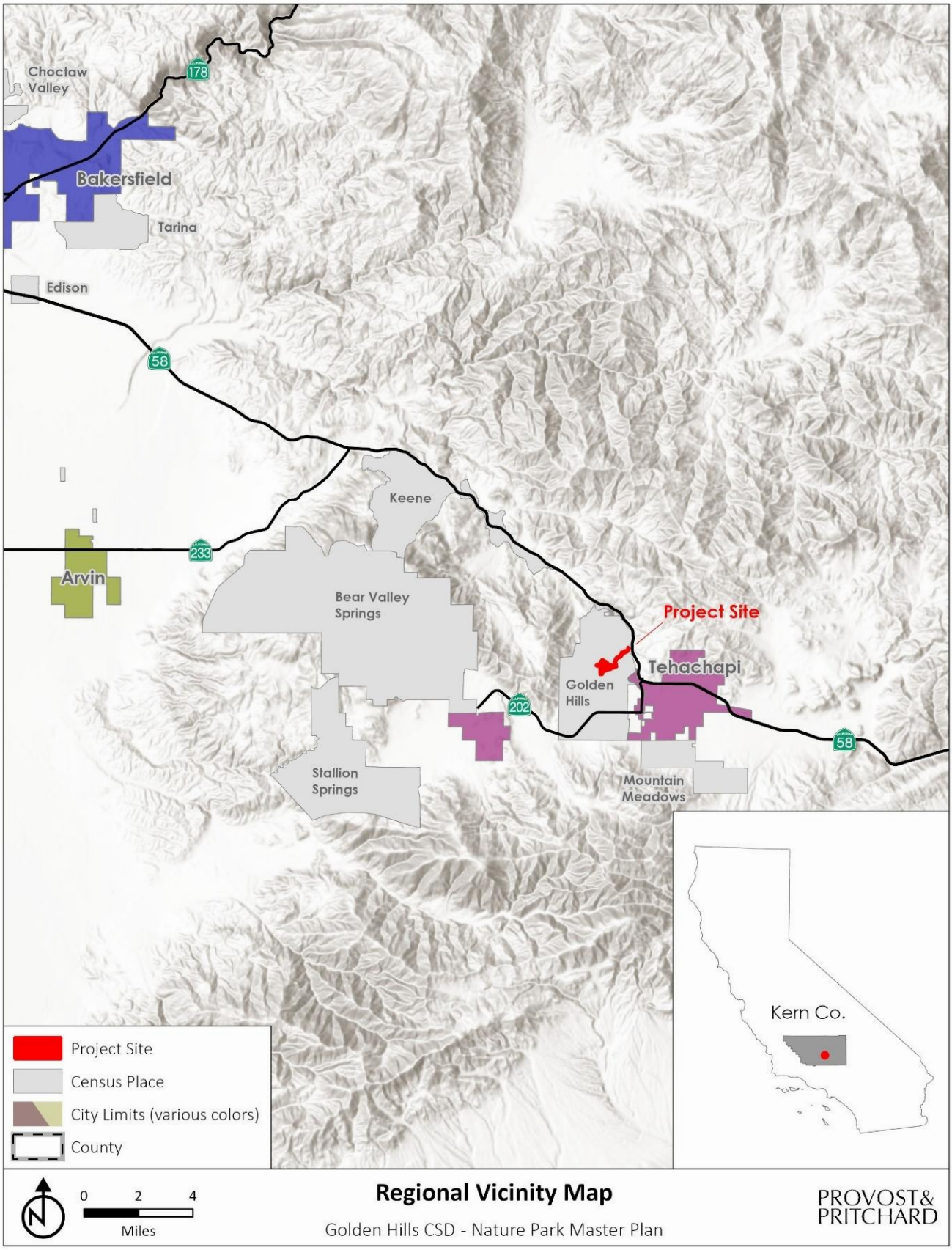


Figure 2-1: Regional Location Map



Figure 2-2: Aerial Site Map

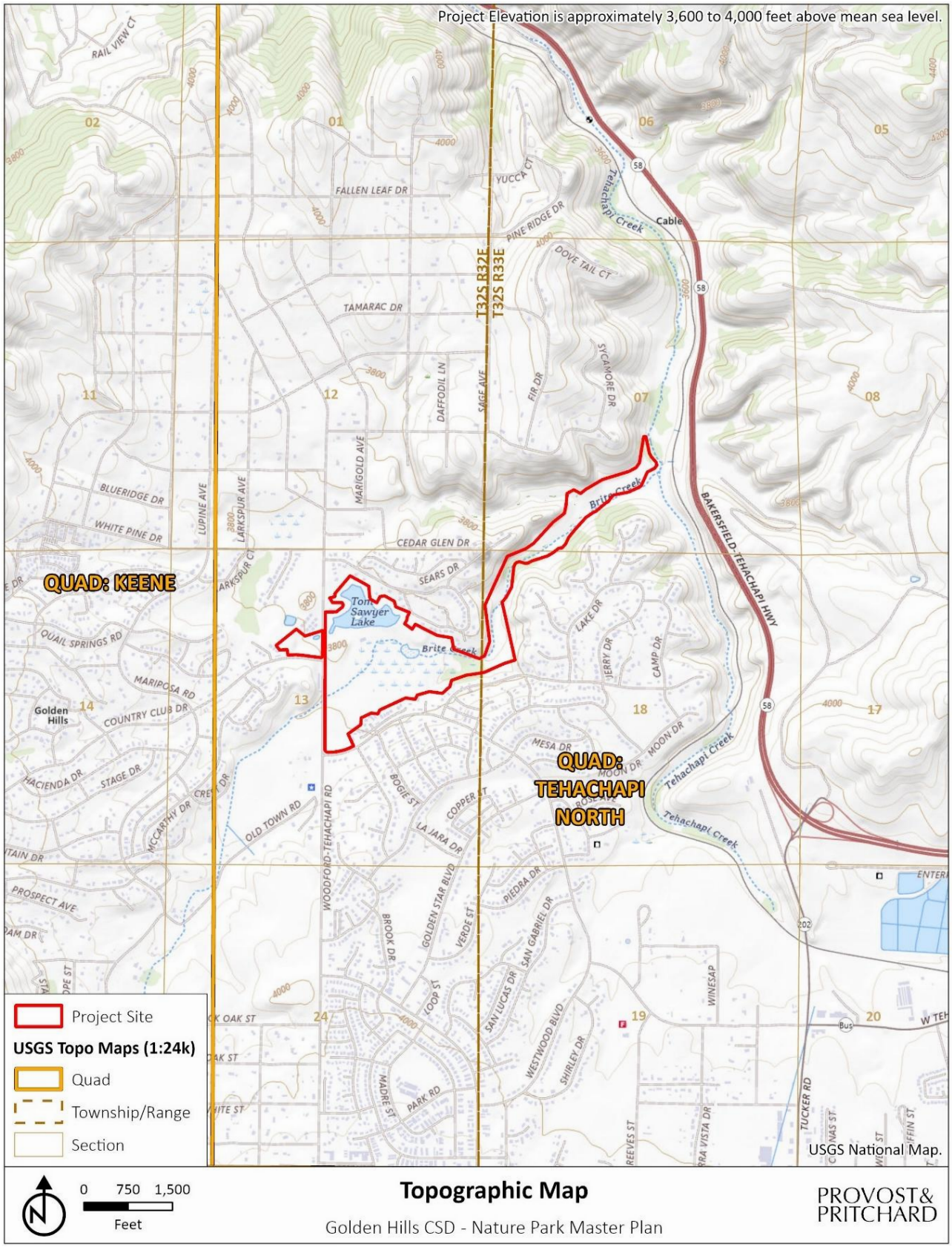


Figure 2-3: Topo Quad Map

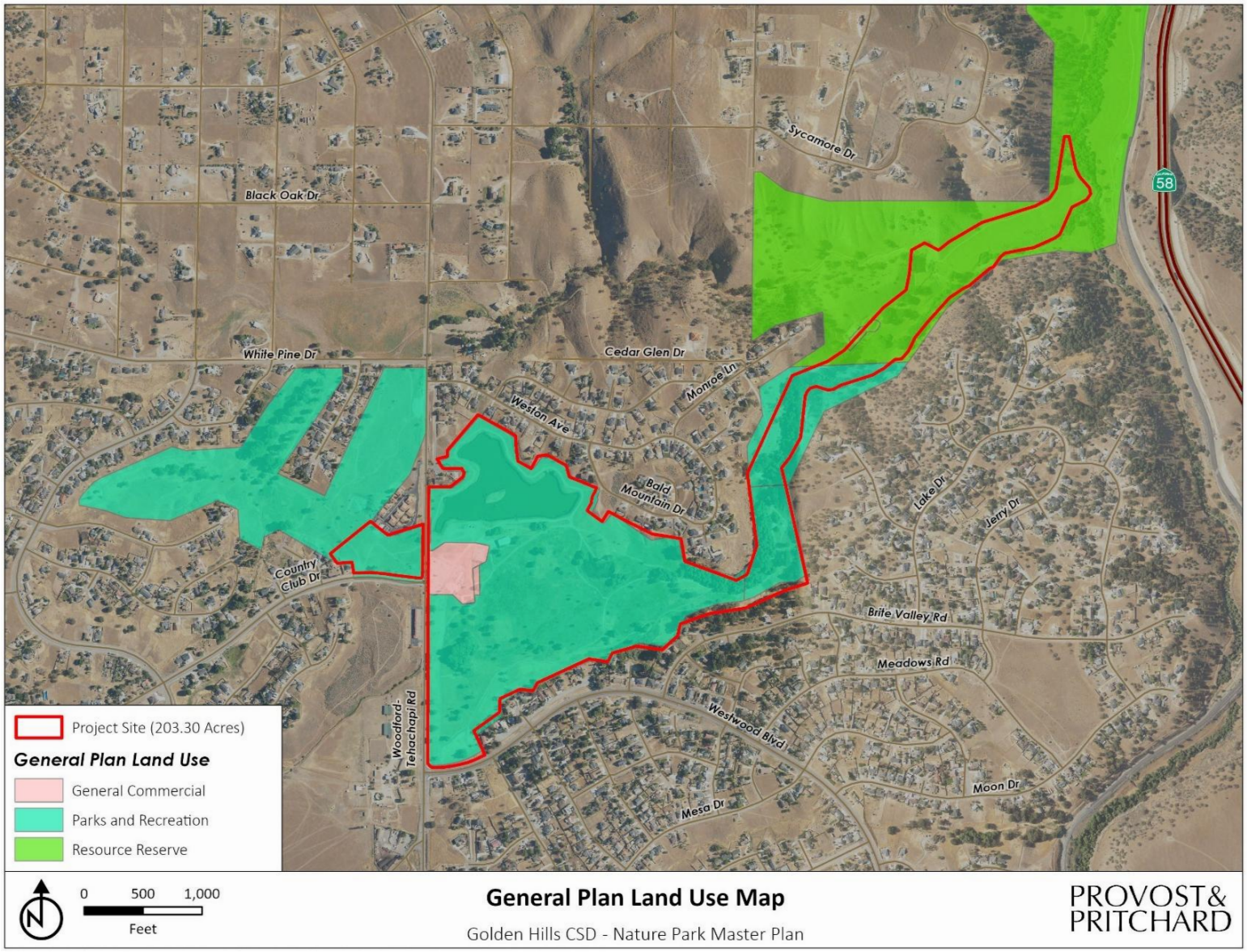


Figure 2-4: General Plan Land Use Map



Figure 2-5: Zoning Map

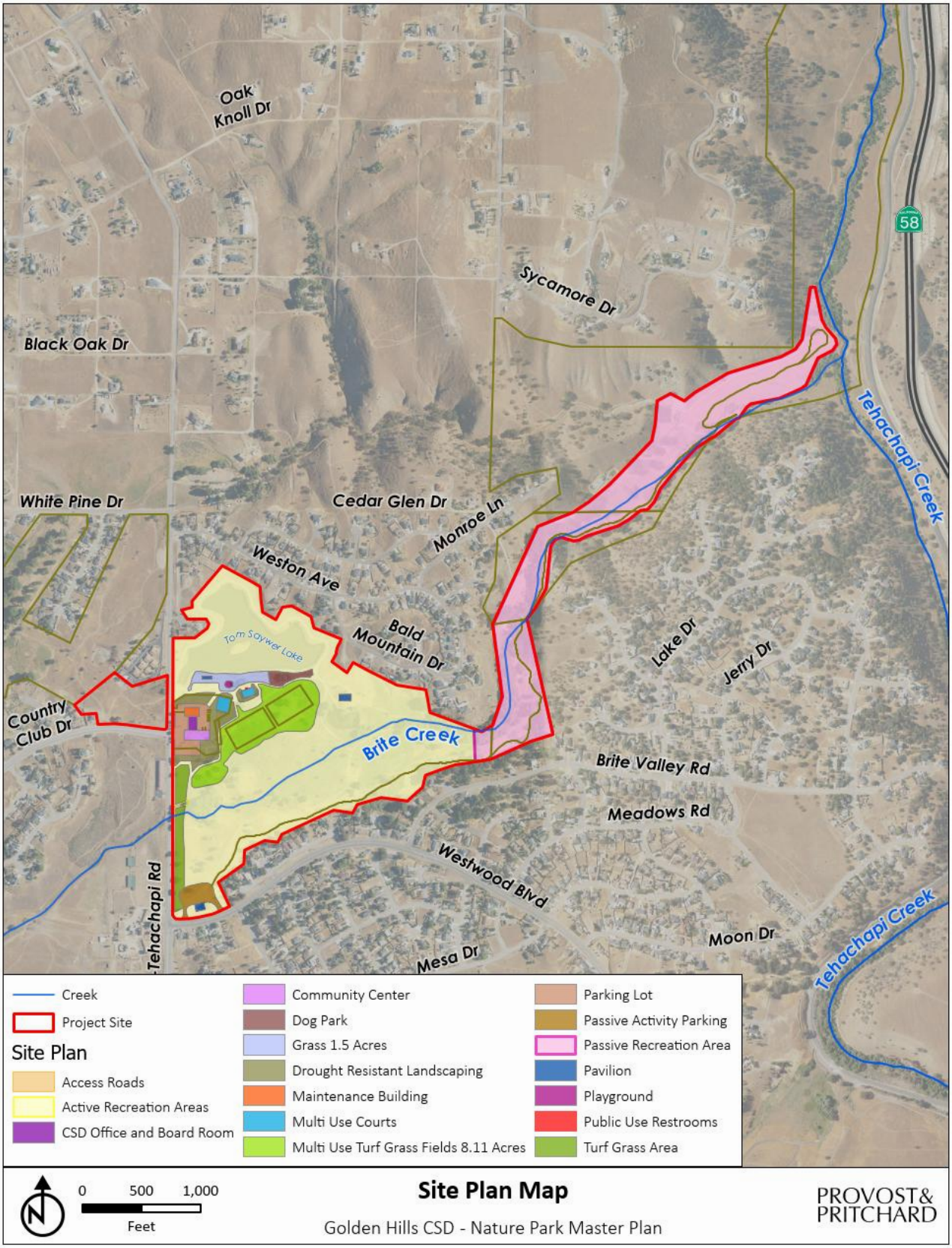


Figure 2-6: Site Plan

CHAPTER 3 DETERMINATION

3.1 POTENTIAL ENVIRONMENTAL IMPACTS

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts resulting from the project. Environmental factors that are. checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

The analyses of environmental impacts in Chapter 4 Impact Analysis result in an impact statement, which shall have the following meanings.

Potentially Significant Impact. This category is applicable if there is substantial evidence that an effect may be significant, and no feasible mitigation measures can be identified to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Less than Significant with Mitigation Incorporated. This category applies where the incorporation of mitigation measures would reduce an effect from a "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measure(s), and briefly explain how they would reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).

Less than Significant Impact. This category is identified when the proposed Project would result in impacts below the threshold of significance, and no mitigation measures are required.

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 DETERMINATION

On the basis of this initial evaluation (to be completed by the Lead Agency):

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date 8/14/25

CHRISTOPHER CARLSON / GENERAL MANAGER
Printed Name/Position

CHAPTER 4 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AESTHETICS

Table 4-1: Aesthetics Impacts

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

4.1.1 BASELINE CONDITIONS

The Project is located in the unincorporated community of Golden Hills in Kern County, located on the eastern side of the Sierra Nevada mountain range. The Project site is located within the Golden Hills Nature Park (Nature Park), which is a wooded preserve that provides accessible recreational space. The Nature Park was once a golf course and a subdivision but has been converted to a passive recreational park. The Nature park contains trails surfaced with either gravel or dirt and are typically at least eight (8) feet wide. Tom Sawyer Lake, which was built by developers in 1962 to promote recreational activities for residents living with the subdivision, is located within the Project site.

Scenic features or conditions are generally determined by consensus. With that in mind, scenic features on the Project site may consist of the oak woodlands throughout the site, Tom Sawyer Lake nestled in the center, and the general undulation of the terrain.

According to the California Department of Transportation, the Project site is not located on or near an officially designated state scenic highway.[1] However, according to Kern County's General Plan EIR, the adjacent State Route (SR) 58 is considered scenic.[2] From SR 58, views of the Golden Hills Nature Park are apparent.

[1] (California Department of Transportation, 2023)
[2] (Kern County Planning Department, 2004)

4.1.2 IMPACT ANALYSIS

a) Have substantial adverse effect on a scenic vista?

Less than Significant Impact. SR 58 runs adjacent to the Project site at an elevation higher than the Project site. This can be deemed a scenic vista since it overlooks an area characterized with scenic qualities. Implementation of the Project would bring improvements to the Golden Hills Nature Park that would enhance the site but would also provide facilities that would attract more visitors to the site to take advantage of the recreational activities. Implementation of the Project would not block any views from SR 58. Impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. As mentioned above, SR 58 runs adjacent to the Project site at an elevation higher than the Project site. Several trees on site may be removed, however these are not considered a landmark tree or a group of distinctive trees accented in a setting as a focus of attention. According to Caltrans, SR 58 is not a designated state scenic highway; however, Kern County considers it scenic. Implementation of the Project would not damage any scenic resources within the right-of-way of SR 58; therefore, there would be no impact.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Implementation of the Project would enhance the site by providing outdoor recreational facilities for residents and visitors to utilize. Each structure, equipment, and trail enhancements would be constructed in a manner that would blend in naturally with the existing setting. Furthermore, the site is surrounded by existing single-family residences. Project facilities would not visually conflict with said development. Impacts would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. The Project is located within a rurally urbanized area of Golden Hills. Existing sources of light include residential lighting, vehicle lights, and existing sources of glare include reflection off vehicles. Potential new sources of light could arise from the installation of new light fixtures within the parking lot, restroom, entrance areas, and the proposed District office, community center, and maintenance building. Project lighting would be designed in accordance with the California Energy Code Title 24 Outdoor Lighting Standards. Furthermore, the Project would have to comply with Kern County Dark Skies Ordinance, which is intended to reduce unnecessary night lighting and to minimize lighting impacts on surrounding properties to help protect Kern County's rural characteristic of access to a natural dark sky environment and to avoid public nuisances. The Project would not include the installation or use of reflective/glare generating sources. Complying with Title 24 and Kern County's Dark Sky Ordinance, the Project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views. Impacts would be less than significant.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Table 4-2: Agriculture and Forest Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒	☐	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☒	☐	☐

4.2.1 BASELINE CONDITIONS

The Project is located in the eastern region of Kern County. The Project site is located on land that was previously used as a golf course but is now the existing Nature Park containing is scattered with oak woodlands.

As part of the Farmland Mapping and Monitoring Program (FMMP), the California Department of Conservation (DOC) applies the Natural Resources Conservation Service (NRCS) soil classifications to identify agricultural lands, and these agricultural designations are used in planning for the present and future of California's agricultural land resources. These designated agricultural lands are included in the Important Farmland Maps. The FMMP was established in 1982 to assess the location, quality, and quantity of agricultural lands and the conversion of these lands. The FMMP provides analysis of agricultural land use and land use changes throughout California. The DOC has a minimum mapping unit of 10 acres, with parcels that are smaller than 10 acres being absorbed into the surrounding classifications.

The list below provides a comprehensive description of all the categories mapped by the DOC.

- Prime Farmland. Farmland that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- Farmland of Statewide Importance. Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been

used for irrigated agricultural production at some time during the four years prior to the mapping date.

- Unique Farmland. Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- Farmland of Local Importance. Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land. Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- Native Vegetation. Land that is heavily wooded, rocky, barren, or riparian. It also includes wetland areas, grasslands that don't qualify as grazing land, and small bodies of water. Constructed wetlands are also considered non-agricultural and native vegetation.
- Urban and Built-up Land. Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- Other Land. Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

As demonstrated in Figure 4-1, the FMMP for Kern County designates the Project site as Grazing Land, Native Vegetation, and Rural Residential.

4.2.2 IMPACT ANALYSIS

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the FMMP for Kern County, the Project does not contain any lands designated as Farmland (see also Figure 4-1). Therefore, the Project could not convert Farmland to a non-agricultural use. There would be no impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less than Significant Impact. The northeast portion of the Project site is zoned for agriculture under the A-1 (Limited Agriculture) zone district; however, the site has not and is not being farmed. According to the A-1 zone district, a wildfire or nature preserve is allowed in the A-1 zone district. The Project site does not contain any lands that are subject to a Williamson Act contract. Overall, impacts would be less than significant.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project site contains land zoned RF (Recreational Forestry). This district allows the development of a park.[3] Therefore, the Project would be consistent with its zone district designation and there would be no impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less than Significant Impact with Mitigation Incorporated. The site is primarily composed of valley oak woodland and forest habitat, which is dominated by widely spaced blue oak and valley oak trees and annual grasslands. As seen in Section 4.4 Biological Resources, the Project would implement mitigation measures BIO-39 and BIO-40 to reduce impacts to oak trees. BIO-39 would ensure that, when possible, the Project avoids areas of valley oak woodland and forest, and valley oak riparian forest and woodland. If work occurs in these habitats oak tree removal will be avoided, and oak trees will be avoided by a minimum 90-foot buffer from the dripline, to avoid damaging their roots. With regard to BIO-40, if tree removal within these natural communities or ground disturbance within 90 feet of oak trees cannot be avoided, a revegetation plan will be prepared for approval by the California Department of Fish and Wildlife (CDFW) and implemented after Project completion. With implementation of mitigation measures BIO-39 and BIO-40, impacts would be less than significant.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant Impact with Mitigation Incorporated. As discussed above, the Project would not convert farmland to a non-agricultural use. While there is a portion of the Project site that is zoned A-1, the A-1 zone district allows by- the right nature or wildlife preserve. Similarly, the R-F zone district permits a park to be constructed. However, the Project would potentially impact oak trees that are located onsite. To reduce impacts to the valley oak woodland and forest and valley oak riparian forest and woodland, the Project would be required to implement BIO-39 and BIO-40 as discussed above.

4.2.3 MITIGATION

See BIO-39 and BIO-40 in Section 4.4 Biological Resources.

[3] (Kern County, 2022)

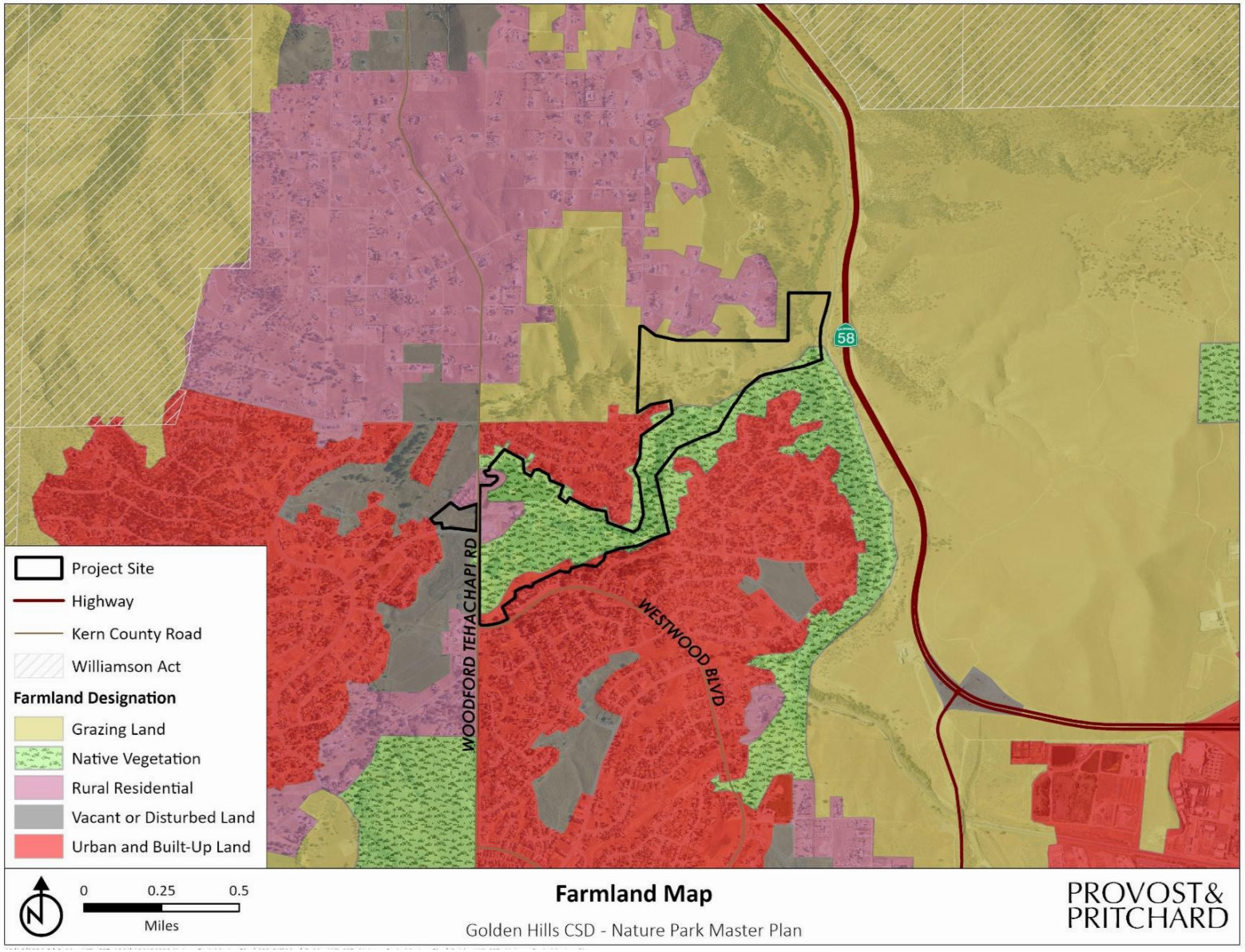


Figure 4-1: Farmland Designation Map

4.3 AIR QUALITY

Table 4-3: Air Quality Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 BASELINE CONDITIONS

The Project site currently consists of a recreational trail site. The Project site is within the boundary of the East Kern Air Pollution Control District (EKAPCD) and the Mojave Desert Air Basin (MDAB). The MDAB is made up of mountain ranges interspersed with long broad valleys, many of which contain dry lakes. Winds in the MDAB are typically out of the west and southwest and exist due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and Central California valley regions by mountains (the highest elevation of which is about 10,000 feet) whose passes form the main channels for these air masses. During the summer, the MDAB is generally influenced by a pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska as these frontal systems are weak and diffuse by the time that they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south.

4.3.2 IMPACT ANALYSIS

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. Projects that would result in a significant increase in emissions, in excess of EKAPCD significance thresholds, would be considered to potentially conflict with or obstruct implementation of applicable air quality attainment plans. As noted below, the Project would not result in significant short-term or long-term increases of criteria air pollutants that would exceed applicable thresholds. For purposes of demonstrating strict compliance with regulations, all phases of construction were analyzed as occurring consecutively. Emissions would not exceed established thresholds and the impact is considered less than significant, as depicted below in Table 4-4 and Table 4-5.

Table 4-4: Maximum Annual Construction-Generated Emissions of Criteria Air Pollutants

	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Emissions	0.470	1.237	1.489	0.003	0.085	0.056
Thresholds	25	25	N/A	27	15	15
Significant Impact?	No	No	N/A	No	No	No
Source: Appendix A						

Table 4-5: Maximum Annual Operational Emissions of Criteria Air Pollutants

	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Emissions	1.465	0.987	5.663	0.010	0.795	0.214
Thresholds	25	25	N/A	27	15	15
Significant Impact?	No	No	N/A	No	No	No
Source: Appendix A						

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact. As depicted above in Table 4-4 and Table 4-5, the Project would not exceed established EKAPCD thresholds. The Project would be required to comply with applicable EKAPCD rules and regulations, including Rule 402, which imposes limitations on visible dust emissions at offsite locations and Rule 419 for nuisance-related impacts. Impacts would be considered less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Construction emissions could contain diesel particulate matter (DPM) which is a known cancer-causing air pollutant. However, due to the short duration of construction and the majority of construction would occur approximately 1,000 feet away from residents, impacts would be minimal and less than significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. Construction of the Project would require the use of diesel-powered off-road construction equipment, however these emissions would not occur continuously and would cease after construction concludes. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roaster, asphalt batch plants, and rendering plants, among other uses. The Project does not include any of these activities or land uses. The Project would therefore have a less than significant impact with respect to generation of emissions leading to odors or other adverse or objectionable emissions.

4.4 BIOLOGICAL RESOURCES

Table 4-6: Biological Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4.4.1 BASELINE CONDITIONS

4.4.1.1.1 GENERAL

The Project site is located in the Tehachapi Mountains of the Transverse Ranges, within the unincorporated community of Golden Hills. Within the community of Golden Hills, the Project site is located north of Westwood Boulevard, west of California State Route (SR) 58, east and west of Woodford – Tehachapi Road, and south of Sycamore Drive. The Project site includes approximately 135 acres, which includes a paved parking lot, dirt roads/trails, Brite Creek, Tehachapi Creek, and various wetland areas. Surrounding lands include natural landscapes with sparse residential housing and infrastructure. The topography of the site is rolling with elevations ranging from approximately 3,600 to 4,000 feet above mean sea level.

The Project site experiences warm, arid summers and cold winters. In the summer, average high temperatures range between 80- and 86-degrees Fahrenheit (°F), and rarely exceed 95 °F, and the humidity is generally low. Winter temperatures are often below 50 °F during the day and rarely exceed 55 °F. On average, the Project Area receives approximately 12 inches of precipitation in the form of rain yearly, most of which occurs between October and April, and 14 inches of precipitation in the form of snow yearly, most of which occurs between December and January.[4] The Project site would be expected to receive similar amounts of precipitation.

4.4.1.1.2 HYDROLOGY

The nearest surface water to the Project is Brite Creek which flows through the project site. Brite Creek begins in the upland areas and is fed by stormwater or snowmelt runoff which flows through the project site and turns into Tehachapi Creek. Tehachapi Creek flows down from the Tehachapi Mountains into Caliente Creek, which continues northwest through Caliente Canyon and onto the valley floor. Caliente Creek's flow typically dissipates into the ground before reaching any major waterway.

4.4.1.1.3 SOILS

Six soil mapping units representing four soil types were identified within the site and are listed in below in Table 4-7 (see Appendix D of Appendix B for the full NRCS Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. All four soil types are primarily used for watershed, recreation, range, and wildlife.

Table 4-7: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Arujo-Friant-Tunis	9 to 15 percent slopes	3.8%	Nonhydric	Well drained	Moderately high	Medium runoff
Steuber	Sandy loam, 0 to 2 percent slopes	55.2%	Nonhydric	Well drained	Moderately rapid	Medium runoff
	Sandy loam, 2 to 5 percent slopes	14.3%	Nonhydric	Well drained	Moderately rapid	Medium runoff
Tehachapi	Sandy loam, 2 to 15 percent slopes	12.9%	Nonhydric	Well drained	Moderately rapid	Medium runoff
Xerorthents	Loamy, very steep	5.8%	Nonhydric	Well drained	Moderately slow	Medium runoff
Water	-	8.0%	-	-	-	-

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. None of the major soil mapping units located on the Project site were identified as hydric.

[4] (Weather Spark, 2024)

4.4.1.1.4 BIOTIC HABITATS

Five biotic habitats were observed within the Project site and included valley oak woodland and forest, riverine/valley oak riparian forest, freshwater pond, wetland/wet meadow, and ruderal (see Figure 4-2). These habitats and their constituent plant and animal species are described in more detail in the following sections.

Valley Oak Woodland and Forest

The site is primarily composed of valley oak woodland and forest habitat, which is dominated by widely spaced blue oak (*Quercus douglasii*) and valley oak (*Quercus lobata*) trees and annual grasslands. Additional vegetation in this habitat included shortpod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), yellow flower tarweed (*Holocarpha virgata*), great brome (*Bromus diandrus*), camphorweed (*Heterotheca subaxillaris*), wild oat (*Avena fatua*), prostrate spurge (*Euphorbia maculata*), silver lupine (*Lupinus albifrons*), doveweed (*Croton setiger*), brownplume wirelettuce (*Stephanomeria pauciflora*), kelch-grass (*Schismus barbatus*), redberry juniper (*Juniperus pinchotii*), narrowleaf milkweed (*Asclepias fascicularis*), big sagebrush (*Artemisia tridentata*), prairie tea (*Croton monanthogynus*), California brickellbush (*Brickellia californica*), yellow star thistle (*Centaurea solstitialis*), prickly lettuce (Lactuca serriola), curlycup gumweed (*Grindelia squarrosa*), sacred datura (*Datura wrightii*), rubber rabbitbrush (*Ericameria nauseosa*), Spanish clover (*Acmispon americanus*), tall annual willowherb (*Epilobium brachycarpum*), gray goldenrod (*Solidago nemoralis*), western aster (*Symphyotrichum ascendens*), stinknet (*Oncosiphon piluliferum*), tumbling saltweed (*Atriplex rosea*), common mallow (*Malva neglecta*), beardless wildrye (*Leymus triticoides*), cheatgrass (*Bromus tectorum*), desert saltgrass (*Distichlis spicata*), plumleaf crab apple (*Malus prunifolia*), peppercress (*Lepidium draba*), triangle orache (*Atriplex prostrata*), annual sunflower (*Helianthus annuus*), and chaparral yucca (*Hesperoyucca whipplei*).

The survey of this habitat resulted in the identification of numerous bird species including red-shouldered hawk (*Buteo lineatus*), oak titmouse (*Baeolophus inornatus*), acorn woodpecker (*Melanerpes formicivorus*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), Bewick's wren (*Thryomanes bewickii*), and bushtit (*Psaltriparus minimus*). California ground squirrel (*Otospermophilus beecheyi*), California mule deer (*Odocoileus hemionus*), and a western fence lizard (*Sceloporus occidentalis*) were also observed.

The valley oak woodland and forest habitat within the site provides expansive high-quality habitat to a variety of wildlife, year-round, and it is prevalent in the vicinity of the site. This habitat also serves foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

Riverine/Valley Oak Riparian Forest and Woodland

The riverine/valley oak riparian forest and woodland habitat includes Brite Creek and its associated riparian vegetation along the banks. Brite Creek contained ponded water in some sections but was mainly dry at the time of the biological survey. Vegetation within this habitat included curly dock (*Rumex crispus*), narrow leaf willow (*Salix exigua*), red willow (*Salix laevigata*), seep monkey flower (*Erythranthe guttata*), stinging nettle (*Urtica dioica*), California mugwort (*Artemisia douglasiana*), clasping bellflower (*Triodanis perfoliate*), woods bluegrass (*Poa nemoralis*), Fremont cottonwood (*Populus fremontii*), silverscale saltbush (*Atriplex argentea*), tall annual willowherb (*Epilobium brachycarpum*), Arroyo willow (*Salix lasiolepis*), wood bluegrass (*Poa nemoralis*), California wildrose (*Rosa californica*), watercress (*Nasturtium officinale*), greater periwinkle (*Vinca major*), annual rabbitsfoot grass, stinging nettle (*Urtica dioica*), bird's-foot trefoil (*Lotus corniculatus*), bulbous canarygrass (*Phalaris aquatica*), salt heliotrope (*Heliotropium curassavicum*), and bulbous bluegrass (*Poa bulbosa*).

The survey of the riverine/valley oak riparian forest and woodland habitat resulted in the observation of white-breasted nuthatch (*Sitta carolinensis*), California quail (*Callipepla californica*), house wren (*Troglodytes aedon*), Cooper's hawk (*Accipiter cooperii*), yellow-rumped warbler (*Setophaga coronata*),

California ground squirrel, and desert woodrat (*Neotoma lepida*) nests. Within Brite Creek, Pacific tree frog (*Pseudacris regilla*) larvae, frogs, and froglets were observed.

The riverine/valley oak riparian forest and woodland habitat within the site provides expansive high-quality habitat to a variety of wildlife, year-round. The creek would be used by various amphibian species, and the site serves foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night. The riparian trees and vegetation could provide cover for wildlife movement through the site.

Freshwater Pond

Tom Sawyer Lake and Supply Lake are categorized within the freshwater pond habitat. Vegetation in this section of the site included California bulrush (*Schoenoplectus californicus*) and hardstem tule (*Schoenoplectus acutus*). The survey of this habitat did not result in any new wildlife observations.

The freshwater pond habitat within the site provides high-quality habitat to a variety of wildlife, year-round. This habitat could be used by various amphibian species, foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night. The focused survey for tricolored blackbirds within this area resulted in no observations of the species. However, nesting habitat was prevalent within the tule stands around and within Tom Sawyer Lake and was being utilized by red-winged blackbirds (*Agelaius phoeniceus*) at the time of the survey.

Wetland/Wet Meadow

The wetland/wet meadow habitat of the site contained areas of moist soil with surrounding dirt walking trails. Vegetation in this habitat included fringed willowherb (*Epilobium ciliatum*), hardstem tule, common marigold (*Calendula officinalis*), white sagebrush (*Artemisia ludoviciana*), annual rabbitsfoot grass, narrowleaf cattail (*Typha angustifolia*), nettle-leaved goosefoot (*Chenopodiastrum murale*), yerba mansa (*Anemopsis californica*), desert saltgrass, California mugwort (*Artemisia douglasiana*), sharp club rush (*Schoenoplectus americanus*), salt heliotrope, bird's-foot trefoil (*Lotus corniculatus*), and water fern (*Azolla filiculoides*). The survey of this habitat did not result in any new wildlife observations.

The wetland/wet meadow habitat within the site provides high-quality habitat to a variety of wildlife. This habitat could be used by various amphibian species, foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

Ruderal

The ruderal habitat of the site contained a paved parking lot, a facility, and hard packed dirt roads/trails throughout the site. Vegetation in this section of the site included invasive grasses and ornamental juniper trees within planters in the parking lot. The survey of this habitat did not result in any new species observations.

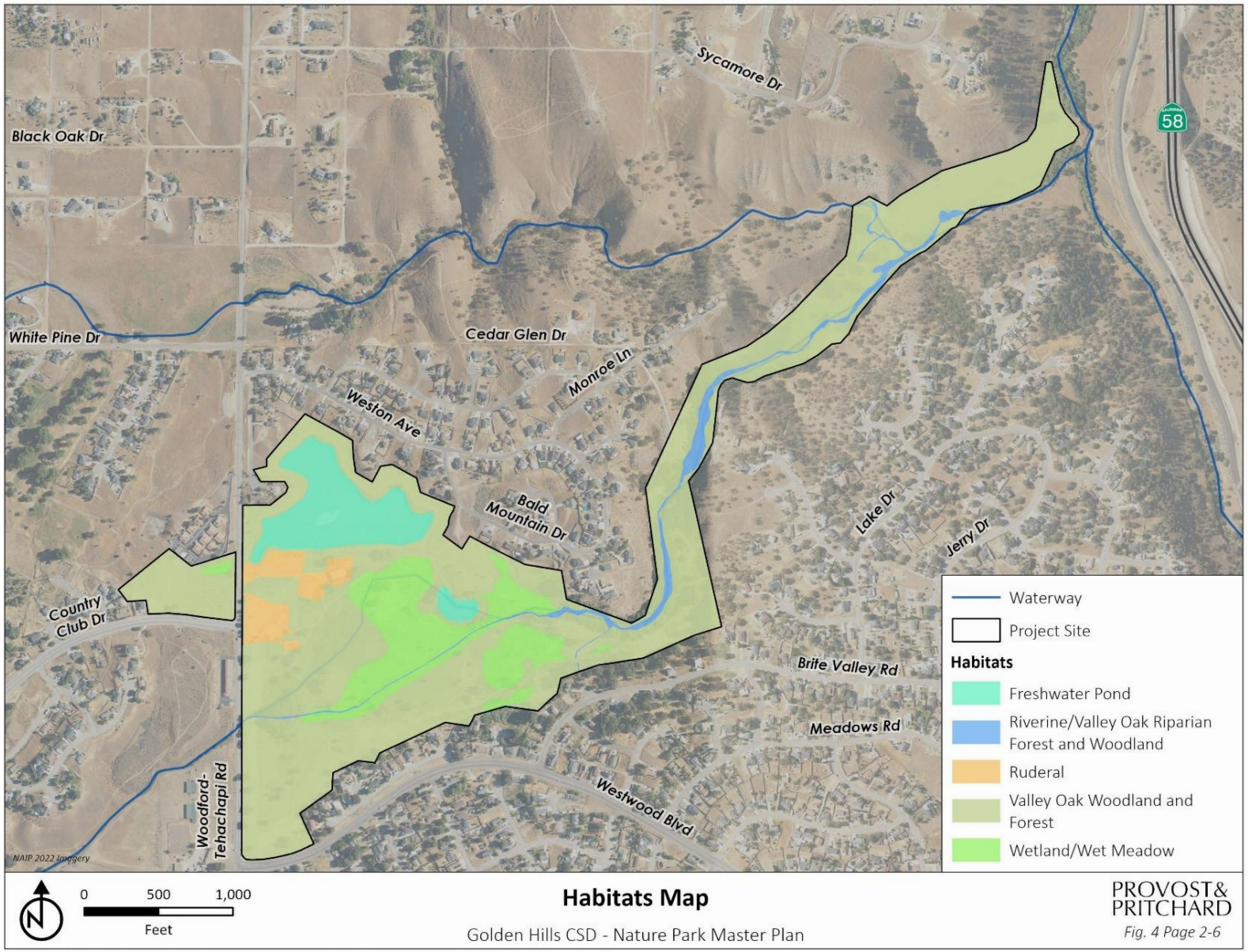


Figure 4-2: Habitats Map

4.4.1.1.5 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW has classified and mapped all natural communities in California. Just as the special status plant and animal species (see Section 3.6), these natural communities of special concern can be found within the California Natural Diversity Database (CNDDB). While there are no recorded observations of natural community of special concern identified by the CNDDB, valley oak woodland and forest and valley oak riparian forest and woodland were observed during the field survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. The riverine/valley oak riparian forest and woodland habitat contained riparian habitat associated with Brite Creek and Tom Sawyer Lake. Various wetlands/ wet meadows occurred within the project site and contained riparian habitat as well.

4.4.1.1.6 DESIGNATED CRITICAL HABITAT

The Unites States Fish and Wildlife Service (USFWS) often designates areas of "critical habitat" when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to the USFWS' Information for Planning and Consultation system (IPaC), designated critical habitat is absent from the site and vicinity.

4.4.1.1.7 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation. The valley oak woodland and forest habitat of the site and surrounding areas consists of expansive open grasslands. Numerous game trails and abundant wildlife were observed during the field survey throughout the valley oak woodland and forest habitat, including mule deer. Brite Creek flowing through the riverine/ valley oak riparian forest and woodland habitat within the site could be used as a corridor for terrestrial and aquatic wildlife.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. The valley oak woodland and forest habitat contained trees with natural cavities within the site which may support tree-roosting species of bats, like pallid bats (*Antrozous pallidus*). Brite Creek was being used as wildlife nursery site for amphibian species such as Pacific tree frogs which were observed during the survey.

4.4.1.1.8 SPECIAL STATUS PLANTS AND ANIMALS

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Tehachapi North* United States Geological Survey (USGS) 7.5-minute quadrangle that contains the site, and for the eight surrounding USGS quadrangles: *Cummings Mountain*, *Emerald Mountain*, *Keene*, *Loraine*, *Monolith*, *Oiler Peak*, *Tehachapi Northeast*, and *Tehachapi South*. A query of the IPaC was also completed for the site. These species, and their potential to occur within the site, are listed in Table 4-8 and Table 4-9, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 4-9. Species lists obtained from CNDDB and IPaC are available in Appendix B and Appendix C respectively of Appendix B.

Table 4-8: List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Aromatic canyon gooseberry (*Ribes menziesii* var. *ixoderme*)	CNPS 1B	Occurs in chaparral and cismontane woodland communities at elevations between 2,000 and 3,900 feet. Blooms in April.	**Unlikely.** The site lacked suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 10 miles north of the site in 1964.
Baja navarretia (*Navarretia peninsularis*)	CNPS 1B	Found in open, wet areas within lower montane coniferous forest, chaparral, pinyon and juniper woodland, meadows, and seeps at elevations between 4,500 and 7,600 feet. Blooms June – August.	**Absent.** The site is outside of the elevational range for this species.
Bakersfield cactus (*Opuntia basilaris* var. *treleasei*)	FE, CE, CNPS 1B	Found in coarse or cobbly well-drained granitic sand within grasslands at elevations between 350 and 500 feet. Blooms March – April.	**Absent.** The site is outside of the elevational range for this species.
Calico monkeyflower (*Diplacus pictus*)	CNPS 1B	Found in the Sierra Nevada foothills and the Tehachapi mountains in bare, sunny, shrubby areas, around granite outcrops within foothill woodland communities at elevations between 450 and 4,100 feet. Blooms March – May.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southeast of the site in 1884.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CNPS 1B	Found on alkaline and saline soils in vernal pools and playas in grassland at elevations below 4,500 feet. Blooms April – May.	**Unlikely.** The site lacked suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 0.5 miles southeast of the site in 1905 but is listed as possibly extirpated.
Grey-leaved violet (*Viola pinetorum* ssp. *grisea*)	CNPS 1B	Found in the Sierra Nevada range as well as areas of interior Southern California. Grows in subalpine forested areas, meadows, and seeps at elevations between 6,400 and 12,200 feet. Blooms June – July.	**Absent.** The site is outside of the elevational range for this species.
Kern buckwheat (*Eriogonum kennedyi* var. *pinicola*)	CNPS 1B	Occurs within chaparral, pinyon, and juniper woodland communities. Can be found in open places on barren, clay, or gravelly soil. Grows at elevations between 5,300 and 6,200 feet. Blooms May – June.	**Absent.** The site is outside of the elevational range for this species.
Latimer's woodland-gilia (*Saltugilia latimeri*)	CNPS 1B	Found in chaparral, Mojavean desert scrub, pinyon, and juniper woodland communities on rocky or sandy substrate, and sometimes in washes. Also, can be associated with limestone. Grows at elevations between 750 and 7,200 feet. Blooms March – June.	**Unlikely.** The site is outside of the current known range of this species. The nearest recorded observation of this species within the vicinity was approximately 12 miles southeast of the site in 2014.
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found within openings of foothill woodland, often yellow-pine forest, and chaparral at elevations between 1,000 and 4,300 feet. Blooms April – May.	**Unlikely.** The site offers foothill woodland habitat and oak woodland habitat, which is often associated with this species, but the site is outside of the current known rangespatial distribution of thisthe species. The nearest recorded observation of this species withinin the vicinity was approximately 9.5 miles southwest of the site in 1935.
Mt. Pinos onion	CNPS 1B	Generally found in the Transverse Ranges and Coastal Ranges growing at elevations between 4,200 and 6,100 feet.	**Absent.** The site is outside of the elevational range for this species.

Species	Status*	Habitat	Occurrence within the Site
(*Allium howellii* var. *clokeyi*)		Associated with a variety of habitats including Great Basin scrub, pinyon and juniper woodlands, and meadows and seeps. Blooms May – June.	
Pale-yellow layia (*Layia heterotricha*)	CNPS 1B	Found in the Coastal Ranges, the Transverse Ranges, and occasionally on the San Joaquin Valley floor in a variety of habitats including juniper woodlands, coastal scrublands, and foothill grasslands. Grows at elevations between 650 and 5,900 feet. Blooms April – June.	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southeast of the site in 1933.
Palmer's mariposa-lily (*Calochortus palmeri* var. *palmeri*)	CNPS 1B	Found throughout southwestern California, primarily in wetland habitats, but occasionally in non-wetland habitats, including woodlands and shrublands. Grows at elevations between 3,900 and 7,300 feet. Blooms May – July.	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southeast of the site in 1889.
Piute cypress (*Hesperocyparis nevadensis*)	CNPS 1B	Found in closed-cone coniferous forest, chaparral, cismontane woodland, pinyon, and juniper woodland habitats. Found at elevations between 2,400 and 5,900 feet.	**Unlikely.** The site is outside of the current known spatial range of this species. The nearest recorded observation of this species within the vicinity was approximately 14 miles northeast of the site in 1980.
Piute Mountains jewel flower (*Streptanthus cordatus* var. *piutensis*)	CNPS 1B	Occurs in broad-leafed upland forests, closed-cone coniferous forest, as well as pinyon and juniper woodlands. Can be found along road banks and cliffs. Grows in metamorphic, red clay soils. Occurs at elevations between 3,900 and 6,200 feet. Blooms June – July.	**Unlikely.** While there were clay soils onsite, the habitats were unsuitable for this species. The nearest recorded observation of this species within the vicinity was approximately 14.5 miles northeast of the site in 2012.
Piute Mountains navarretia (*Navarretia setiloba*)	CNPS 1B	Occurs in the Sierra Nevada foothills, San Joaquin Valley, and the Transverse Ranges in woodlands and grasslands in red, clay soils or gravelly loam at elevations between 1,600 and 6,900 feet. Blooms April – July.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 12 miles northwest of the site in 2015.
Piute Mountains triteleia (*Triteleia piutensis*)	CNPS 1B	Found in openings in pinyon and juniper woodlands on fine, volcanic soil throughout scattered boulders or heavy clay soil with volcanic hardpan at elevations between 5,100 and 5,500 feet. Blooms May – June.	**Absent.** The site is outside of the elevation range for this species.
Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*)	CNPS 2B	Occurs in Great Basin scrub, Sonoran Desert scrub, and desert dunes. Found in sandy flats and dunes and sandy areas around clay slicks w/ greasewood (*Sarcobatus)*, saltbushes (*Atriplex)*, and horsebrush (*Tetradymia)*, at elevations between 2,300 and 5,300 feet. Blooms March – August.	**Unlikely.** While there were sandy soils onsite, the habitats were unsuitable for this species. The nearest recorded observation of this species within the vicinity was approximately 4.5 miles northwest of the site in 1909.
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT, CE, CNPS 1B	Found in the San Joaquin Valley and the Sierra Nevada foothills in bare, dark, clay soils in valley and foothill grassland and cismontane woodland communities at elevations between 300 and 3,000 feet. Blooms March – May.	**Absent.** The site is below the elevation range for this species.

Species	Status*	Habitat	Occurrence within the Site
Southern Sierra monadella (*Monardella linoides ssp. anemonoides*)	CNPS 1B	Occurs in chaparral and montane forests in the southern Sierra Navada. Found at elevations between 720 and 7,850 feet. Blooms June-August.	**Unlikely.** The site lacked suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles south of the site in 1895.
Spanish Needle onion (*Allium shevockii*)	CNPS 1B	Found in pinyon and juniper woodlands and upper montane coniferous forests. Occurs in soil pockets on rock outcrops and talus slopes. The bulbs mostly occur on margins of outcrops at elevations between 7,215 and 11,480 feet. Blooms June-July.	**Absent.** The site is outside of the elevation range for this species.
Tehachapi monardella (*Monardella linoides* ssp. *oblonga*)	CNPS 1B	Found on dry slopes and in granitic soils within montane coniferous forest and pinyon-juniper woodland habitats at elevations between 4,700 and 8,700 feet. Blooms June – August.	**Absent.** The site is outside of the elevation range for this species.
Tejon poppy (*Eschscholzia lemmonii* ssp. *kernensis*)	CNPS 1B	Occurs in the grasslands of the southern portion of the San Joaquin Valley and the foothills of the Transverse Ranges at elevations between 650 and 3,300 feet. Blooms March – May.	**Absent.** The site is outside of the elevation range for this species.

Table 4-9: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
American badger (*Taxidea taxus*)	CSSC	Prefers drier open stages of shrub, forest, and herbaceous habitats with friable soils to burrow, but can be found within numerous habitats throughout California, including the margins of agricultural lands. Needs a sufficient prey base of burrowing rodents.	**Possible.** The site contained suitable habitat for this species to forage and den. The nearest recorded observation of this species within the vicinity was approximately 13 miles southeast of the site in 1925.
Bendire's thrasher (*Toxostoma bendirei*)	CSSC	This migratory species is found in the spring and summer in the Mojave Desert. Inhabits flat areas of Joshua tree woodland and Mojavean dessert scrub. Nests in cholla, yucca, palo verde, thorny shrubs, or small trees usually 0.5 to 20 feet above ground.	**Absent.** The site is outside of the current range for this species.
Burrowing owl (*Athene cunicularia*)	CSSC, CC	Resides in open, dry grasslands, deserts, scrublands, and other areas with low growing vegetation. Nests and roosts underground in existing burrows created by mammals, most often by ground squirrels, and human-made structures.	**Possible.** The site contained habitat for this species to forage and burrow. The nearest recorded observation of this species within the vicinity was approximately 14 miles southeast of the site in 2009.
California condor (*Gymnogyps californianus*)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but has also been recorded nesting in giant sequoias in Tulare County. Requires vast expanses of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages for carrion up to 100 miles from their roost/nest sites.	**Unlikely.** The site lacked suitable nesting habitat. This species could fly over or forage on the site. There are no recorded observations of this species on CNDDB within the regional vicinity of the project.
California legless lizard (*Anniella* sp.)	CSSC	Inhabits a variety of habitats which contain moist, loose soils and plant cover. Often can be found under objects such as rocks, boards, driftwood, and logs.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was

Species	Status*	Habitat	Occurrence within the Site
			approximately 0.5 mile north of the site in 1955.
Coast horned lizard (*Phrynosoma blainvillii*)	CSSC	Found in grasslands, coniferous forests, woodlands, and chaparral, primarily in open areas with patches of loose, sandy soil and low-lying vegetation in valleys, foothills, and semi-arid mountains. Frequently found near ant hills and along dirt roads in lowlands along sandy washes with scattered shrubs.	**Possible.** The site contained suitable habitat and sandy soils where this species could occur. The nearest recorded observation of this species within the vicinity was approximately 6.5 miles southeast of the site in 2010.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats.	**Possible.** The valley oak woodland and forest and riverine/valley oak riparian forest and woodland habitats were suitable for foraging for this species. The valley oak woodland and forest habitat contained cavities in dead trees and small mammal burrows where this species could nest and overwinter. The nearest recorded observation of this species was on iNaturalist, 3.5 miles east of the site in 2024.
Desert tortoise (*Gopherus agassizii*)	FT, CT	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Requires friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	**Absent.** The site lacked suitable habitat for this species.
Foothill yellow-legged frog – south Sierra Distinct Population Segment (*Rana boylii*)	FE, CE	Frequents rocky streams and rivers with rocky substrate and open, sunny banks in forests, chaparral, and woodlands. Occasionally found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	**Possible.** The site contained suitable habitat along Brite Creek. The nearest recorded observation of this species within the vicinity was approximately 1 mile north of the site in 1959 but is listed as extirpated.
Fisher- Southern Sierra Nevada-ESU (*Pekania pannanti*)	FE, CT	Can be found in intermediate to large-tree stages of coniferous forests with high percent canopy closure, generally within the low-medium elevational areas of the southern Sierra Nevada.	**Absent.** The site is outside of the current known range for this species.
Golden eagle (*Aquila chrysaetod*)	CFP	This species typically nests on cliff ledges or large trees, rarely on the ground. They prefer an expanse of open terrain and are found over tundra, prairie, rangeland, desert, and grassland habitats.	**Unlikely.** The site lacked suitable nesting habitat. This species could fly over or forage on the site. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles southeast of the site in 1949.
Le Conte's thrasher (*Toxostoma lecontei*)	CSSC	Primarily resides in desert habitats in the Mojave and Sonoran deserts, including open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub. Nests 2-8 feet above the ground in dense, spiny shrub or densely branched cacti.	**Absent.** The site lacked suitable desert habitat for this species.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Possible.** The valley oak woodland and forest and riverine/valley oak riparian forest and woodland habitats were suitable for foraging for this species. Monarchs could travel through the site during the breeding season. While it could travel through the site, roosting

Species	Status*	Habitat	Occurrence within the Site
			habitat was absent. There are no recorded observations of this species on the CNDDB within the regional vicinity of the project.
Northern California legless lizard (*Anniella pulchra*)	CSSC	Found primarily underground, burrowing in loose, sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 13 miles southeast of the site in 2019.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Possible.** The site contained suitable habitat along Brite Creek and Tom Sawyer Lake. However, there are no recorded observations of this species on CNDDB within the regional vicinity of the project.
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Possible.** The site contained oak trees where this species could roost, and pallid bats could forage over all habitats within the site. There are no recorded observations of this species on CNDDB within the regional vicinity of the project.
Southern California legless lizard (*Anniella stebbinsi*)	CSSC	Found in broadleaved upland forests, chaparral coastal dunes, and coastal scrub. The disjunct northern populations occur in sandy soils in the Piute and Tehachapi mountains at elevations of 1,300–2,950 feet. They prefer soils with a high moisture content.	**Unlikely.** The site is outside of the current known spatial range and elevational range for this species. The nearest recorded observation of this species within the vicinity was approximately 9.5 miles northeast of the site in 2018.
Southern rubber boa (*Charina umbratical*)	CT	Found in the vicinity of streams or wet meadows. Requires loose, moist soil for burrowing and seeks cover in rotting logs, rock outcrops, and under surface litter. Occurs in the San Bernardino and San Jacinto mountains at elevations roughly between 5,000 and 8,200 feet.	**Unlikely.** While the site contained suitable habitat, the site is below the elevational range for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles south of the site in 1999.
Swainson's hawk (*Buteo swainsoni*)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	**Unlikely.** Suitable foraging habitats are absent from the site and vicinity, and it would be unlikely that this species would nest on or adjacent to the site. This species could fly over or forage on the site. The nearest recorded observation of this species within the vicinity was approximately 12 miles northwest of the site in 2016.
Tehachapi pocket mouse (*Perognathus alticola inexpectatus*)	CSSC	Inhabits arid annual grassland and desert shrub communities, but also found in fallow grain fields and in fields with Russian thistle. Burrows for cover and nesting and will hibernate or estivate during extreme weather. Forages on open ground and under shrubs.	**Possible.** The site contained valley oak woodland and forest habitat which was vegetated with annual grasslands and shrubs with small mammal burrows that this species could use. The nearest recorded observation of this species within the vicinity was approximately 3 miles southeast of the site in 1972.
Tehachapi slender salamander (*Batrachoseps stebbinsi*)	CT	Inhabits north-facing moist canyons and ravines in oak and mixed woodlands in arid to semi-arid locations. Found under rocks, logs, bark, and other debris in moist areas, especially in areas with a lot	**Unlikely.** The site does not overlap the locations of the currently known populations of this species. The nearest recorded observation of this species

Species	Status*	Habitat	Occurrence within the Site
		of leaf-litter, often near talus slopes. Found in scattered populations in the Caliente Creek drainage at the juncture of the Sierra Nevada and the Tehachapi Mountains, and in isolated canyons on the northern slopes of the Tehachapi Mountains from Tejon Canyon to Fort Tejon at elevations between 2,000 - 4,600 feet.	within the vicinity was approximately 1 mile north of the site in 1979.
Tricolored blackbird (*Agelaius tricolor*)	CT, CSSC	Nests colonially near fresh water in dense cattails or tules, or in thickets of riparian shrubs. Forages in grassland and cropland. Large colonies are often found foraging in dairy farm feed fields.	**Absent.** The site contained suitable habitats in the form of freshwater pond (i.e., Tom Sawyer Lake). While this species was observed in this lake in 2008,. a focused survey for this species on May 28, 2025 resulted in no observations of this species during the breeding season.
Tulare grasshopper mouse (*Onychomys torridus tularensis*)	CSSC	Typically inhabits arid shrubland communities in hot, arid grassland and shrubland associations.	**Absent.** The site lacked suitable habitat for this species.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent.** The site is outside of the known populations of this species and no elderberry shrubs were observed during the survey.

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CFP	California Fully Protected
		CSSC	California Species of Special Concern
		CC	California Candidate

CNPS LISTING

1B Plants rare, threatened, or endangered in California and elsewhere.

Impact Analysis

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated. Of the 22 regionally occurring special status plant species, 18 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: aromatic canyon gooseberry, Baja navarretia, Bakersfield cactus, Coulter's goldfields, grey-leaved violet, Kern buckwheat, Latimer's woodland-gilia, Madera leptosiphon, Mt. Pinos onion, Piute cypress, Piute Mountains jewel flower, Piute Mountains triteleia, sagebrush loeflingia, San Joaquin adobe sunburst, southern Sierra monardella, Spanish Needle onion, Tehachapi monardella, and Tejon poppy.

Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these 18 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

Of the 24 regionally occurring special status animal species, 13 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: Bendire's thrasher, California condor, desert tortoise, fisher, golden eagle, Le Conte's thrasher, southern California legless lizard, southern rubber boa, Swainson's hawk, Tehachapi slender salamander, tricolored blackbird, Tulare grasshopper mouse, and valley elderberry longhorn beetle.

Since it is unlikely that these species would occur onsite, implementation of the Project should have no impact on these 13 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

Designated critical habitat is absent from the site and surrounding lands. Therefore, there would be no impact to critical habitat, and mitigation measures are not warranted.

Species protected by California Fish and Game Code, CDFW, USFWS, CEQA, or NEPA that have the potential to be impacted by project activities include: calico monkeyflower, pale-yellow layia, Palmer's mariposa-lily, Piute Mountains navarretia, American badger, burrowing owl (BUOW), California legless lizard, coast horned lizard, Crotch's bumble bee, foothill yellow-legged frog (FYLF), monarch butterfly, northern California legless lizard, northwestern pond turtle, pallid bat, Tehachapi pocket mouse, and tricolored blackbird. Other sensitive resources that have the potential to be impacted by the project include nesting migratory birds, jurisdictional waters, wildlife movement corridors, and native wildlife nursery sites. Corresponding mitigation measures are described below.

General Project Related Impacts

The Project has the potential to impact a number of sensitive resources, as described in more detail in the following sections. Impacts to these resources would be a violation of state and federal laws or considered a potentially significant impact under CEQA. Implementation of mitigation measures BIO-1 and BIO-2 will help reduce potential impacts to these resources to a less than significant level under CEQA and will help with complying with state and federal laws protecting these resources

Project-Related Impacts to Special Status Plant Species

The following special status plant species were identified to potentially occur within the site: calico monkeyflower, pale-yellow layia, Palmer's mariposa-lily, and Piute Mountains navarretia. Calico monkeyflower, pale-yellow layia, and Piute Mountains navarretia may occur within the valley oak woodland and forest and Palmer's mariposa-lily may occur within the wetland/wet meadow habitats of the site. Projects that adversely affect special status plants or result in the mortality of special status plants would be considered a potentially significant impact under CEQA and may be a violation of state and/or federal laws. Implementation of mitigation measures BIO-3 through BIO-5 will reduce potential impacts to special status plants to a less than significant level under CEQA and will help the project comply with state and federal laws protecting these plant species

Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds

The site and adjacent areas contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, raptors, and special status birds including tricolored blackbird. It is anticipated that during the nesting bird season, protected birds could nest on the ground or in shrubs and trees within, and adjacent to, the site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by project-related

activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of state and federal laws and considered a potentially significant impact under CEQA.

While foraging habitat for protected birds, such as California condor, golden eagle, and tricolored blackbird, is present on the site, suitable foraging habitat is located adjacent to the site and within the vicinity of the site. Loss of the foraging habitat from implementation of the project is not considered a significant impact.

Implementation of mitigation measures BIO-6 through BIO-8 will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and will help the Project comply with state and federal laws protecting these bird species. Mitigation measures specific to Burrowing owls (BUOW) are presented below in the following section.

Project- Related Mortality and/or Disturbance to Burrowing Owl

As discussed in Baseline Conditions, the site contained suitable foraging habitat for BUOW, and this species also may nest or roost within burrows within, or adjacent to, the site. Construction activities that adversely affect the nesting success of BUOWs or result in the mortality of individuals constitute a violation of state and federal laws and would be considered a significant impact under CEQA. While the project site may remove some potential nesting/roosting and foraging habitat for BUOW, there is abundant habitat adjacent to the site that could be used, and implementation of the project would not significantly reduce potential nesting, roosting, and foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of BUOW nesting/roosting and foraging habitat.

Implementation of mitigation measures BIO-9 through BIO-11 will reduce potential impacts to nesting and roosting BUOW to a less than significant level under CEQA and will help the Project comply with state and federal laws protecting this avian species.

Project- Related Mortality and/or Disturbance to American Badger

The site contained annual grasslands within the valley oak woodland and forest habitat that could potentially be used by American badger for foraging and denning. American badgers denning within the site during construction have the potential to be injured or killed by project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA. While foraging habitat for American badger is present within the site, loss of foraging habitat would not be considered a potential significant impact under CEQA because some project areas will continue to provide foraging habitat after implementation of project activities and there is plenty of suitable foraging habitat surrounding the Project site

Implementation of mitigation measures BIO-12 through BIO-15 will reduce potential impacts to American badgers to a less than significant level under CEQA.

Project- Related Mortality and/or Disturbance of California Legless Lizard and Northern California Legless Lizard

The Project site contains suitable valley oak woodland and forest and riverine/valley oak riparian forest and woodland habitats with leaf litter for California legless lizards and Northern California legless lizards to use. These species are known to forage in loose soil and leaf litter during the day and are occasionally observed on the surface at dusk and at night. Legless lizards occurring within the project site during construction have the potential to be injured or killed by project-related activities. Projects that adversely

affect California legless lizards and Northern California legless lizards or result in the mortality of individuals would be considered a potentially significant impact under CEQA.

Implementation of mitigation measures BIO-16 and BIO-17 prior to the start of construction will reduce potential impacts to California legless lizards and Northern California legless lizards to a less than significant level under CEQA.

Project- Related Mortality and/or Disturbance to Coast Horned Lizards

The valley oak woodland and forest, riverine/valley oak riparian forest and woodland, and ruderal habitats within the site and surrounding area were determined to be suitable for this species. Project-related activities occurring within these habitats could result in injury, mortality, displacement, disturbance, or inhibit the movement of this species, and would be considered a significant impact under CEQA.

Implementation of mitigation measure BIO-18 will reduce potential impacts to coast horned lizards to a less than significant level under CEQA.

Project- Related Mortality and/or Disturbance to Crotch's Bumble Bee

All habitats within the site and surrounding area were determined to be suitable for foraging, nesting, and overwintering Crotch's bumble bee. Queens are actively flying for only two months from March until May and reach maximum flying activity in April. Males are generally present and flying from May to September with peak flying activity occurring in July. Workers of this species are present and flying from April to August, with peak flying activity occurring between May and June. Construction activities occurring within nesting or overwintering habitat could result in injury, mortality, displacement, disturbance, or inhibit the movement of this species, and would be considered a significant impact under CEQA and a violation of CESA.

There is abundant foraging habitat adjacent to the site that could be used, and implementation of the project would not significantly reduce potential foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of foraging habitat.
Implementation of mitigation measures BIO-19 and BIO-20 will reduce potential impacts to nesting and overwintering Crotch's bumble bee to a less than significant level under CEQA and help the project comply with state law protecting this species.

Project- Related Mortality and/or Disturbance to Monarch Butterfly

Habitats within portions of the site are likely to be suitable for foraging Monarch butterflies. Monarchs could travel through the site during the breeding season and potentially lay eggs on milkweeds. While monarch could travel through the site, roosting habitat was absent. There is abundant foraging habitat adjacent to the site that could be used, and implementation of the project is unlikely to significantly reduce potential foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of foraging habitat. Construction activities during the breeding season could result in injury, mortality, displacement, or disturbance and would be considered a significant impact under CEQA.

Implementation of mitigation measures BIO-21 through BIO-25 will reduce potential impacts to Monarch eggs and larvae to a less than significant level under CEQA will help the project comply with federal laws protecting this species.

Project- Related Mortality and/or Disturbance to Foothill yellow-legged Frog

The site contained riverine/valley oak riparian forest along Brite Creek and woodland and valley oak woodland and forest habitats that serve as suitable habitat for FYLF. Foothill yellow-legged frogs present

within these habitats during construction have the potential to be injured or killed by project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and violate federal and state laws protecting this species.

Implementation of mitigation measures BIO-26 through BIO-29 will reduce potential impacts to FYLF to a less than significant level and help the project comply with federal and state laws that protect this species.

Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle

The site contained riverine/valley oak riparian forest and woodland along Brite Creek, freshwater pond, wetland/wet meadow, and the valley oak woodland and forest habitat that serve as suitable habitat for northwestern pond turtle. Noise, vegetation removal, movement of workers, construction, and ground disturbance as a result of project activities have the potential to significantly impact northwestern pond turtle. Potentially significant impacts associated with project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA.

Mitigation measures BIO-30 through BIO-32 will be implemented prior to the start of construction if work is occurring in the riverine/ valley oak riparian forest and woodland, freshwater pond, wetland/wet meadow, basin, or the valley oak woodland forest habitat within 330 feet of the creeks onsite and will reduce impacts to northwestern pond turtle to a less than significant level.

Project-Related Mortality and/or Disturbance of Maternity Roosting Bats and Special Status Bats

Trees with natural cavities within the site may support tree-roosting species of bats like pallid bats. Roosting habitat becomes especially sensitive to bat populations during the maternity season (March 1 to September 30) when pups are maturing. It is unlikely bats would occur in the area during the overwintering season (December 1 through February 28) since they are known to migrate to warmer locations. Projects that impact maternity roosting bats or roosting special status bats would be considered a significant impact under CEQA.

Implementation of mitigation measures BIO-33 through BIO-35 will reduce potential impacts to roosting maternity bats and roosting special status bats to a less than significant level under CEQA.

Project- Related Mortality and/or Disturbance to Tehachapi Pocket Mouse

The Project site contained suitable foraging and burrowing habitat for Tehachapi pocket mouse. Suitably sized burrows for Tehachapi pocket mouse were observed throughout the valley oak woodland and forest habitat. If Tehachapi pocket mice are denning within the project site during construction, they have the potential to be injured or killed by project-related activities. Projects that adversely affect Tehachapi pocket mouse or result in the mortality of individuals would be considered a potentially significant impact under CEQA.

Implementation of mitigation measures BIO-36 through BIO-39 will reduce potential impacts to Tehachapi pocket mouse to a less than significant level under CEQA and NEPA.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated. While there are no CNDDB-designated "natural communities of special concern" recorded within the site, valley oak woodland and forest and valley oak

riparian forest and woodland were observed during the field survey and impacts to these habitats would be considered a significant impact under CEQA.

Implementation of mitigation measures BIO-40 and BIO-41 will reduce potential impacts to natural communities of special concern to a less than significant level under CEQA

Furthermore, riparian habitat is present along Brite Creek, within the riverine/valley oak riparian forest and woodland habitat. Impacts to riparian habitat are addressed below in Impact Analysis "c", which includes a mitigation measure (BIO-40)

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact with Mitigation Incorporated. The USFWS National Wetlands Inventory Map was consulted for known wetlands in the area and riverine/valley oak riparian forest and woodland, freshwater pond, freshwater emergent wetland, and freshwater forested/shrub wetland was classified to occur or was observed within the boundaries of the site. Project-related impacts to some or all of these waters would be considered a potentially significant impact under CEQA and NEPA. Impacts to waters of the U.S. are also subject to the permit requirements of Sections 401 and 404 of the Clean Water Act and impacts to waters of the state are subject to the permit requirements of Section 401 of the Clean Water Act and California Fish and Game Code. The placement of fill within any wetlands or other jurisdictional features will require a 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), 404 permit from the United States Army Corps of Engineers (USACE), and a Lake or Streambed Alteration Agreement from CDFW. An aquatic resources delineation should be performed to determine the jurisdictional status of waters onsite.

There are no designated wild and scenic rivers within the site; therefore, the project would not result in direct impacts to wild and scenic rivers.

The Project would need to obtain a Construction General Permit under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a Stormwater Pollution Prevention Plan (SWPPP) to ensure construction activities do not adversely affect water quality. This plan will need to be prepared in support of the Construction General Permit application.

Implementation of mitigation measure BIO-42 will reduce potential impacts to waters to a less than significant level under CEQA and will help the project comply with state and federal laws protecting these waters.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact with Mitigation Incorporated. The habitats of the site and surrounding areas consists of expansive open valley oak woodland and forest habitat. Within the riverine/valley oak riparian forest and woodland habitat Tehachapi Creek and Brite Creek could be used as wildlife movement corridors, but wildlife may be able to continue using it at night while construction is occurring and would be able to continue utilizing it after construction activities are completed.

The site has suitable features that could be used as native wildlife nursery sites. Large trees with natural cavities were located within the site and could function as native wildlife nursery sites for bats. Project-related impacts to any native wildlife nursery sites would be considered a significant impact under CEQA.

The potential impacts to species that could use the trees as a wildlife nursery site have been addressed in mitigation measures BIO-31 through BIO-33. Implementation of these will reduce potential impacts to native wildlife nursery sites to a less than significant level under CEQA. Implementation of mitigation measures BIO-41 and BIO-42 will reduce potential impacts to wildlife movement corridors to less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The Project appears to be consistent with the goals and policies of the Kern County General Plan. There are no known Habitat Conservation Plans (HCPs) or Natural Communities Conservation Plan (NCCPs) in the Project vicinity. There would be no impact and mitigation measures are not warranted.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project is not located within the boundaries of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. There would be no impact and mitigation measures are not warranted.

4.4.2 MITIGATION

General Project-Related Impacts

BIO-1 (Worker Environmental Awareness Program *Training*): Prior to initiating construction activities (including staging and mobilization), all personnel associated with project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them.

BIO-2 (*Best Management Practices*): The project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes
- All open trenches, holes, sumps, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material

such that animals are unable to dig or squeeze under the barrier and become entrapped

- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited

- The presence of any special status species will be reported to the project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

Project-Related Impacts to Special Plant Species

BIO-3 (*Botanical Surveys*): Prior to project activities occurring within valley oak woodland and forest or wetland/wet meadow habitats of the site, a qualified botanist/biologist will conduct focused botanical surveys during the appropriate blooming seasons for calico monkeyflower (March – May), pale-yellow layia (April – June), Palmer's mariposa-lily (May – July), and Piute Mountains navarretia (April – July) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site.

BIO-4 (*Avoidance Buffers*): If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area to avoid disturbing the plants and their root systems.

BIO-5 (*Formal Consultation*): If rare plant individuals or populations are detected within project work areas during the focused botanical surveys, and the plants cannot be avoided, the project proponent will initiate consultation with CNPS to determine next steps for relocation.

Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds

BIO-6 (*Avoidance*): The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.

BIO-7 (*Pre-construction Surveys*): If activities must occur within the nesting bird season (February 1 to September 15), a qualified biologist (someone familiar with these species and nesting birds) will conduct a single pre-construction survey for tricolored blackbird colonies on the site and up to 300 feet outside of the site within five (5) calendar days prior to the start of construction. The survey would also include inspecting for nesting migratory birds within the site and up to 100 feet outside of the site and for nesting raptors within the site and up to 500 feet outside of the site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required.

BIO-8 (*Avoidance Buffers*): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. For tricolored blackbirds a qualified biologist will determine appropriate avoidance buffer distances based in accordance with the *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields* (California Department of Fish and Wildlife 2015), conditions of the nest(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

Project-Related Mortality and/or Disturbance to Burrowing Owl

BIO-9 (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction take avoidance survey for BUOW and suitable burrows, in accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (2012), within seven (7) days prior to the start of construction activities. The survey will include the proposed work area and surrounding lands up to 500 feet. If no BUOW individuals or active burrows are observed, no further mitigation is required.

BIO-10 (*Avoidance*): If an active BUOW burrow is detected, avoidance buffers will be implemented. A qualified biologist will determine appropriate avoidance buffer distances based on CDFW's 2012 *Staff Report on Burrowing Owl Mitigation*, the biology of BUOW, conditions of the burrow(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged and all BUOW have left the project area.

Level of Disturbance				
Location	Time of Year	Low	Med	High
Nesting sites	April 1-Aug 15	200 meters	500 meters	500 meters
Nesting sites	Aug 16-Oct 15	200 meters	200 meters	500 meters
Nesting sites	Oct 16-Mar 31	50 meters	100 meters	500 meters

BIO-11 (*Incidental Take Permit* and *Passive Relocation*): If an active BUOW burrow is detected within the proposed work area and cannot be avoided, it is recommended the project obtain an Incidental Take Permit (ITP) in order to implement protection plans and/or relocation plans in consultation with CDFW and/or USFWS and protect the project from "take" of this species.

Project-Related Mortality and/or Disturbance to American Badger

BIO-12 (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction survey of project areas within seven (7) days prior to vegetation clearing or ground disturbing activities within the valley oak woodland and forest habitat. The goal of this survey is to search for potentially active badger dens.

BIO-13 (*Remote Cameras*): If potential American badger dens are detected during the pre-construction survey, each potential den will be monitored with a remote camera for a

period of at least three consecutive nights. If there is no activity recorded at the den location, the den can be deemed "inactive" or "unoccupied" and closed or excavated the same day as determining the den inactive.

BIO-14 (*Den Avoidance*): If an American badger is denning on or within 50 feet of the site, the project proponent will avoid the den by a minimum 50-foot buffer.

BIO-15 (*Timed Den Excavation*): If an American badger is denning on or within up to 50 feet of the site and it cannot be avoided, the den may be excavated outside of the natal season (generally March 15 – June 15) or if it is determined that there are no cubs in the den. Prior to den excavation a remote camera will be placed at the den entrance for a minimum of three consecutive nights to record the general time when the badger leaves the den. Once this time has been determined and it is confirmed the badger left the den to forage the den will be excavated by hand, with the assistance of machinery. Scopes should be used to survey sections of the den prior to excavation. Should any cubs be discovered during the excavation the work will stop and the crew will leave the site immediately so the female can rescue her cubs and relocate them.

Project-Related Mortality and/or Disturbance of California Legless Lizard and Northern California Legless Lizard

BIO-16 *(Avoidance):* The project's construction activities will occur, if feasible, where ground disturbance has previously occurred and avoid areas that contain loose soil and leaf litter.

BIO-17 (*Pre-construction Surveys*): If activities must occur in areas that contain loose soil and leaf litter within valley oak woodland and forest or riverine/valley oak riparian forest and woodland habitats a qualified biologist will conduct pre-construction surveys within 48 hours prior to beginning any project activities. Any loose substrate in which legless lizards could bury themselves will be gently raked with a hand tool (e.g., a garden rake) to a depth of two inches to locate any lizards that could be under the surface. Lizards that are detected will be allowed to leave the work area of their own volition or will be moved out of harm's way by a qualified biologist to suitable habitat at least 50 feet from the project work site.

Project-Related Mortality and/or Disturbance to Coast Horned Lizards

BIO-18 (*Pre-construction Survey*): Within 15 days prior to vegetation clearing or ground disturbing activities within the valley oak woodland and forest, riverine/valley oak riparian forest and woodland, and ruderal habitats a qualified biologist will conduct a pre-construction survey of the work area in these habitats. Surveys will not take place when daytime temperatures are below 60˚F or above 95˚F. If no suitable habitat or species observations are found, no further mitigation is required. Lizards that are detected will be allowed to leave the work area of their own volition or will be moved out of harm's way by a qualified biologist to suitable habitat at least 50 feet from the project work site.

Project-Related Mortality and/or Disturbance to Crotch's Bumble Bee

BIO-19 (*Flying Bumble Bee and Nest Surveys*): A qualified biologist (someone who is familiar with and can identify bumble bees) will conduct three flying bumble bee and nest surveys

during the peak flying periods (April, May to June, and July) prior to initial ground disturbing activities. The biologist will walk throughout the site and up to 100 feet outside of the site during the optimal time of the day to inspect for bumble bees and any nests. If an individual is observed, it will be followed until it can be determined if a nest is present within the survey boundary.

BIO-20 (*Identification and Protection Plan*): Bumble bee individuals need to be captured to be identified. If a bumble bee nest is observed, no ground disturbing activities will occur within 50 feet of the nest until a plan to identify the species using the nest and protect nesting and overwintering Crotch's bumble bee has been submitted to CDFW and approved in writing.

Project-Related Mortality and/or Disturbance to Monarch Butterfly

BIO-21 *(Avoidance):* Vegetation removal will not occur during the monarch breeding season (February 1 to August 31).

BIO-22 (*Pre-construction Surveys*): If vegetation removal will occur during the breeding season (February 1 to August 31), a pre-construction survey of the site will be conducted by a qualified biologist (someone who can identify the species and is familiar with the species' host plants) within 15 days prior to construction activities to determine if milkweeds (*Asclepias spp.*) plants are located within the site. If no milkweed plants are observed, no further mitigation is required.

BIO-23 (*Buffers*): If milkweeds are observed within the site during the breeding season (February 1 to August 31), an avoidance buffer will be placed around the area so as not to disturb the plant or its root system. The buffer will be left in place until a qualified biologist has determined the buffers are no longer warranted.

BIO-24 *(Monarch Egg and Larvae Survey):* If milkweeds are observed within the site during the breeding season (February 1 to August 31) and cannot be avoided, a qualified biologist will conduct a monarch egg and larvae survey to look for eggs and larvae on milkweeds within seven (7) days prior to their removal. If no eggs or larvae are observed the milkweed plants can be removed under the supervision of a qualified biologist and will be replanted at a 3:1 ratio.

BIO-25 (*Consultation with United States Fish and Wildlife Service if Listed*): In the event a milkweed plant with monarch eggs or larvae is detected during the pre-construction survey and cannot be avoided and this species is listed under the ESA prior to this observation, consultation with USFWS will be completed to avoid take.

Project-Related Mortality and/or Disturbance to Foothill yellow-legged Frog

BIO-26 (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog*[5], or current guidance for FYLF to determine if FYLF are within or adjacent to the riverine/valley oak riparian forest or valley oak woodland and forest habitats within project site. If no FYLFs

[5] (California Department of Fish and Wildlife, 2018)

are found during the pre-construction survey and no surface water is present in the project site, work may commence without further surveys.

BIO-27 (*Foothill Yellow-Legged Frog Consultation and Avoidance*): If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF.

BIO-28 (*Monitor*): If ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within FYLF habitat.

BIO-29 (*Foothill Yellow-Legged Frog Take Authorization*): If avoidance is not feasible the project will consult with the USFWS and CDFW to acquire take permits for FYLF prior to any project activities.

Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle

BIO-30 (*Pre-construction Survey and Avoidance Buffers*): Within seven (7) days prior to the start of construction activities within the riverine/ valley oak riparian forest and woodland, freshwater pond, wetland/wet meadow, or the valley oak woodland forest habitat within 330 feet of the creeks onsite, a qualified biologist (someone who is able to identify this species) will conduct a pre-construction survey for northwestern pond turtle within the site and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion*.[6] If no northwestern pond turtles are observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the surveys result in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own and the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).

BIO-31 (*Monitor*): If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities until the individual(s) have left the site.

BIO-32 (*Formal Consultation*): Should northwestern pond turtles get listed in this area and the project needs to move, an individual consultation for protection plans and/or relocation plans with the appropriate agency will be completed to avoid take.

[6] (United States Geological Survey, 2006)

Project-Related Mortality and/or Disturbance of Maternity Roosting Bats and Special Status Bats

BIO-33 (*Pre-Construction Surveys*): A pre-construction survey will be performed if construction activities fall between March 1 and September 30 (bat maternity season) to identify active bat roost locations in trees within 100 feet of the site prior to the start of construction. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations within seven days prior to construction.

BIO-34 (*Establish Buffers*): On discovery of any active maternity season bat roosts, a qualified biologist will determine appropriate construction setback distances (buffer zones) based on the biology of the species, conditions of the roost(s), and the level of project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or within 100 feet of the roost.

BIO-35 (*Passive Relocation*): On discovery of roosting bats outside of the bat maternity season (March 1 through September 30) and they cannot be avoided, the bats may be excluded from their roost after leaving for the night (i.e., one-way exclusion devices or other devices). Scopes should be used to survey sections of the roost after the bats have left to check no more individuals remain prior to exclusion. Following completion of passive relocation, a report will be prepared that documents the methods and results of these efforts.

Project-Related Mortality and/or Disturbance to Tehachapi Pocket Mouse

BIO-36 (*Pre-construction Survey*): A qualified biologist will conduct a pre-construction survey of suitable habitats within the site within 15 days prior to vegetation clearing or ground disturbing activities. Goals of this survey include a search for potential burrows within the site for Tehachapi pocket mouse. Environmentally sensitive areas will be flagged for avoidance. If no individuals or suitable habitat is observed, no further mitigation is required.

BIO-37 (*Den Avoidance*): If a potential Tehachapi pocket mice are burrowing on or within 50 feet of the project site, the project proponent will avoid the burrow by a minimum 50-foot buffer.

BIO-38 (*Camera Station*): If burrows with dimensions suitable for Tehachapi pocket mice are detected during pre-construction surveys and cannot be avoided through disturbance-free buffer areas, each potential burrow will be monitored with remote camera stations for a period of three consecutive nights. If there is no activity at the burrows, they can be deemed “inactive” or “unoccupied” and closed or excavated within 24 hours.

BIO-39 (*Trapping/Formal Consultation*): If potential Tehachapi pocket mice burrows are detected within 25 feet of a project site, trapping, according to the USFW Survey Protocol for determining the *Presence of San Joaquin Kangaroo Rats* (United States Fish and Wildlife Service, 2013), will be conducted to determine if Tehachapi pocket mouse are present. The biologist must possess the required collecting/handling permits. If this

species is captured and cannot be avoided within the project area, the biologist will stop work and contact CDFW for guidance on how to proceed and avoid take.

Project Related Impacts to Riparian Habitat and Natural Communities of Special Concern

BIO-40 ***(Avoidance)*:** The project will avoid areas of valley oak woodland and forest and valley oak riparian forest and woodland, when possible. If work occurs in these habitats oak tree removal will be avoided, and oak trees will be avoided by a minimum 90-foot buffer from the dripline, to avoid damaging their roots

BIO-41 ***(Revegetation Plan)*:** If tree removal within these natural communities or ground disturbance within 90 feet of oak trees cannot be avoided a revegetation plan will be prepared for approval by CDFW and implemented after project completion

Related Impacts to Regulated Waters, Wetlands, and Water Quality

BIO-42 **(*Permits*):** If the project intends to impact jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with state and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation.

Project-Related Impacts to Wildlife Movement Corridors and Native Wildlife Nursery Sites

BIO-43 **(*Operational Hours*):** When possible, construction activities within Brite Creek in the riverine/valley oak riparian forest and woodland habitat should be limited to a half hour after sunrise through a half hour before sunset to reduce potential impacts to wildlife movement corridors.

BIO-44 **(*Wildlife Access*):** Access within these areas should not be blocked outside of construction hours or during overnight hours or weekends. If construction must block both sides of a wildlife access route, an alternative route through the construction area should be identified by a qualified biologist and maintained throughout the construction schedule timeframe.

4.5 CULTURAL RESOURCES

Table 4-10: Cultural Resources Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

4.5.1 BASELINE CONDITIONS

A Phase I Survey Report was prepared for the Project by ASM Affiliates (ASM) and can be found as Appendix C. The Phase I survey, on November 14, 2024, included a review of the Project area for the presence of built environment features. The field methods employed also included intensive pedestrian examination of the ground surface for evidence of archaeological sites in the form of artifacts, surface features (such as bedrock mortars, historical mining equipment), and archaeological indicators (e.g., organically enriched midden soil, burnt animal bone); the identification and location of any discovered sites, should they be present; tabulation and recording of surface diagnostic artifacts; site sketch mapping; preliminary evaluation of site integrity; and site recording.

A total of seven foundations (identified as Feature 1 through Feature 7) associated with the former Golden Hills Country Club were identified within the western portion of the Project area. The country club was built in the early 1960s. The country club operated until the early 1990s; after which it was abandoned and subsequently burned down for a firefighter training exercise in 2016 (Tehachapi News 2016). All that remains of the former country club are foundations and other minor infrastructure, which are described in more detail below. No historic-era refuse, or any other built features were identified related to the former Golden Hills Country Club.

Feature 1 is the remains of the former main building of the Golden Hills Country Club. Feature 2 consists of the structural ruins of the former pool. Feature 3 represents the former tennis court. Feature 4 is a large concrete foundation of unknown use. Feature 5 is a smaller, rectangular concrete foundation directly east of Feature 4. Feature 6 is a small, 3 ft. square poured concrete pad directly south of Feature 4. Feature 7 represents the large parking lot area for the former clubhouse. No other archaeological resources of any kind were identified within the Project area.

ASM performed a California Register of Historical Resources (CRHR) eligibility evaluation for the newly recorded site, which consists of the remains of the former Golden Hills Country Club. Based on ASM's evaluation analysis, it is recommended as not CRHR eligible (Appendix C).

4.5.1.1 RECORDS SEARCH

A records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (CHRIS), located at California State University, Bakersfield was conducted. A response from the SSJVIC was received on August 19, 2024. The records search includes a

review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest, the California Historical Landmarks, the CRHR, the National Register of Historic Places (NRHP), and the California State Built Environment Resources Directory (BERD) listings were reviewed for the above referenced Area of Potential Effect (APE) and an additional ½-mile radius. The search confirmed there have been two previous cultural resource study conducted within the Project area and there have been six previous cultural resource studies conducted within the ½-mile radius. The search also identified that there are no discovered cultural resources within the Project APE, but there are six within a ½-mile radius of the Project APE. Due to the sensitive nature of cultural resources, archaeological site locations are not released. (Appendix C)

4.5.1.2 NATIVE AMERICAN OUTREACH

A request was sent to the Native American Heritage Commission (NAHC) as part of this archaeological survey report for a Sacred Lands File (SLF) search. The objective of the SLF search was to identify any known places of spiritual, sacred activity or traditional use or gathering areas that are present in or near the APE. The NAHC responded via letter on August 12, 2024. The SLF search did not identify the presence of tribal cultural resources within the Project APE. In addition, the NAHC's response letter included contact information for local Native American tribal representatives who may have knowledge or interest in sharing information about the APE and surrounding area. On August 23, 2024, each Native American representative listed was sent a nongovernmental outreach letter via email or certified mail notifying them of the Project and asking if they had any knowledge of the Project area or surrounding vicinity (see Section 4.18 Tribal Cultural Resources for the list of Native American representatives contacted). The letters included a description of the Project and a topographic map of the location. Follow-up emails were sent on December 4, 2024. The Morongo Band of Mission Indians responded that the Project is not located within the boundaries of the ancestral territory or traditional use area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. No other responses were received as a result of this outreach.

4.5.2 IMPACT ANALYSIS

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less than Significant Impact with Mitigation Incorporated. The Phase I survey fieldwork of the Project area was conducted on November 14, 2024, with parallel transects spaced at 15 m. intervals. A total of seven features associated with the former Golden Hills Country Club were identified within the western portion of the Project area. No other archaeological resources were identified within the Project area. ASM recommended the former Golden Hills Country Club not eligible for inclusion in the CRHR. However, in the improbable event that cultural resources are encountered during Project construction, implementation of mitigation measure CUL-1 outlined below would reduce impacts to less than significant.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant Impact with Mitigation Incorporated. There is no evidence or record that the proposed Project has the potential to be an unknown burial site, or the site of buried human remains. In the unlikely event of such a discovery, mitigation shall be implemented. With incorporation of mitigation

measure CUL-2 outlined below, impacts resulting from the discovery of remains interred on the Project site would be less than significant.

4.5.3 MITIGATION

CUL-1 *(Archaeological Remains)* Should archeological remains or artifacts be unearthed during any stage of project activities, work in the area of the discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist.

CUL-2 *(Human Remains*) In the event that human remains are discovered on the Project site, the Kern County Coroner must be notified of that discovery (Health and Safety Code Section 7050.5) and all activities in the immediate area if the find or in any nearby area reasonably suspected of overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the most likely descendent of the deceased Native American.

4.6 ENERGY

Table 4-11: Energy Impacts

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

4.6.1 BASELINE CONDITIONS

Southern California Edison (SCE) supplies electricity to the Project area. SCE obtains its power through hydroelectric, thermal (natural gas), wind, and solar generation purchases. SCE continually produces new electric generation and implements continuous improvements throughout its service areas to ensure the provision of services to users.

4.6.2 IMPACT ANALYSIS

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact. The Project would consume approximately 129,159 kilowatt-hours of electricity and 11,960 therms of natural gas annually at full buildout. All of the land-uses proposed on the site could consume approximately 73,872 gallons of gasoline annually. Current regulations for construction equipment, heavy-duty equipment, and earthmoving equipment used in construction contribute to reductions in energy as well as reduction in pollutant emissions. Operation of the buildings and lighting would be required to comply with Titles 20 and 24, with respect to mechanical equipment efficiency and building energy efficiency. The Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. There would be a less than significant impact.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The Project would comply with Building Energy Efficiency Standards included in Titles 20 and 24 of the California Code of Regulations, which requires new development to incorporate energy efficiency standards, including energy-efficient lighting and motor requirements, into Project designs. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

4.7 GEOLOGY AND SOILS

Table 4-12: Geology and Soils Impacts

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

4.7.1 BASELINE CONDITIONS

4.7.1.1 GEOLOGY AND SOILS

The Project is located in Kern County and lies within the Basin and Range Geomorphic Province. The Basin and Range Geomorphic Province is the westernmost part of the Great Basin. The province is characterized by interior drainage with lakes and playas, and the typical horst and graben structure (subparallel, fault-bounded ranges separated by down dropped basins). Death Valley, the lowest area in the United States (280 feet below sea level at Badwater), is one of these grabens. Another graben, Owens Valley, lies between

the bold eastern fault scarp of the Sierra Nevada and Inyo Mountains. The northern Basin and Range Province includes the Honey Lake Basin.[7]

4.7.1.2 FAULTS AND SEISMICITY

The Project is not located in an Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone is the Garlock fault, located approximately 10 miles southeast of the Project site.[8]

4.7.1.3 LIQUEFACTION

Liquefaction takes place when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes. According to the DOC Earthquake Zones of Required Investigation map, no portions of the Project are located in areas susceptible to liquefaction.[9]

4.7.1.4 SUBSIDENCE

There are two types of subsidence: land subsidence and hydro compaction subsidence. Land subsidence occurs when an extensive amount of ground water, oil, or natural gas is withdrawn from below the ground surface. This includes land subsidence resulting from groundwater overdraft. Hydro compaction subsidence occurs when a large land area settles due to over-saturation. According to the United States Geological Survey, the Project area is not located in a region that experiences severe subsidence.[10]

4.7.1.5 DAM AND LEVEE FAILURE

The nearest dam with an inundation map is the J.C. Jacobsen dam, located approximately 3.5 miles southwest of the Project site.[11] The associated inundation zone runs south downstream of the dam, which is further from the Project site.

4.7.2 IMPACT ANALYSIS

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Strong seismic ground shaking?

Less than Significant Impact. The Project site is not located in an Alquist-Priolo Earthquake Fault Zone. The closest Alquist-Priolo mapped earthquake fault to the Project site is Garlock fault, located approximately 10 miles southeast of the Project site. Due to the Project's proximity of the Garlock fault, the Project site is located in a region of high seismic activity, with the potential for large seismic events that could generate strong ground shaking., However, the design and construction of Project structures such as the District office, maintenance building, and community center would be constructed in conformance with California Building Code (CBC) Title 24, which identifies specific construction design requirements to reduce damage from strong seismic ground shaking and ensure structural stability

[7] (California Department of Conservation, 2002)
[8] (California Department of Conservation , 2022)
[9] (California Department of Conservation , 2022)
[10] (United States Geological Survey, 2023)
[11] (California Department of Water Resources, 2022)

during a seismic event. Compliance with applicable CBC requirements would reduce impacts related to rupture of a known earthquake fault and the risk of loss, injury, or death involving strong seismic ground shaking, and impacts would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction takes place when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes. According to the DOC Earthquake Zones of Required Investigation map, no portions of the Project are located in areas susceptible to liquefaction. Furthermore, the Project would be designed and constructed in conformance with CBC Title 24, which identifies specific construction design requirements to reduce damage from liquefaction. Therefore, the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Impacts would be less than significant.

iv. Landslides?

Less than Significant Impact. The topography of the site is rolling with elevations ranging from approximately 3,600 to 4,000 feet above mean sea level. With the change in grade throughout the site, there leaves the susceptibility for landslides and impacts from landslides. Whie landslides may be inevitable during a seismic event, mitigating the significance of impacts can be implemented. The CBC includes requirements to prevent and reduce impacts from landslides, such as setbacks from slopes, retaining walls, and engineering measures. While final design of the Project has not been resolved, the Project would be required to adhere to regulatory requirements such as the ones listed in the CBC. Implementation of regulatory requirements would ensure impacts would be less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Project construction and ground disturbing activities, including grading, have the potential to cause a loss of topsoil and soil erosion. During construction activities, short-term erosion impacts would be reduced by compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit, which would require the implementation of a SWPPP and the implementation of various best management practices (BMPs) to reduce erosion during construction activities. Compliance with the NPDES permit and implementation of BMPs during construction, such as straw wattles and/or silt fencing, would reduce impacts resulting from loss of topsoil. Compliance with these regulations would reduce impacts to soil erosion and a loss of topsoil to a less than significant level.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. Unstable soils may experience liquefaction, subsidence, lateral spreading, settlement, or landslides during seismic events. Liquefaction specifically refers to the loss of soil strength during seismic activity, subsidence refers to the downward sinking of the ground surface, lateral spreading involves horizontal movement of soil or rock layers, and settlement encompasses the vertical movement or subsidence of the ground. As discussed previously, the Project would not exacerbate or increase exposure to liquefaction hazards or result in exposure to landslide hazards. Project components would be designed and constructed in conformance with California Building Code (CBC) Title 24, which identifies specific construction design requirements to reduce damage from potential lateral spreading, subsidence, and collapse. Pursuant to compliance with applicable CBC requirements, the Project would

not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts would be less than significant impact.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than Significant Impact. Expansive soils have a high shrink/swell potential. Clay minerals in these soils expand when moisture content increases and shrink when moisture content decreases. As seen in Table 4-7, the soils within the Project site are primarily loam and sandy loam. As such, the Project would not be located on expansive soil. Additionally, Project components would be designed and constructed in conformance with CBC Title 24, which identifies specific construction design requirements to reduce damage from expansive soils. The Project would not create substantial direct or indirect risks to life or property due to expansive soils. Impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project would connect to the GHSC's existing sewer system along the Project's frontage. There would be no impact.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than Significant Impact. Paleontological resources are fossilized remains of flora and fauna and associated deposits. Most fossils are found in sedimentary rock. Sedimentary rock is formed by dirt (sand, silt, or clay) and debris that settles to the bottom of an ocean or lake and compresses for such a long time that it becomes hard as a rock. CEQA requires that a determination be made as to whether a project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature (CEQA Appendix G(v)(c)). If an impact is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) Section 15126.4(a)(1)). PRC Section 5097.5 (see above) also applies to paleontological resources.

The Project would comply with California Public Resources Code Section 5097.5 which pertains to the protection of paleontological resources. With compliance with said regulation, impacts would be less than significant.

4.8 GREENHOUSE GAS EMISSIONS

Table 4-13: Greenhouse Gas Emissions Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

4.8.1 BASELINE CONDITIONS

The site currently consists of passive recreation space.

4.8.2 THRESHOLDS

The EKAPCD has not yet adopted recommended significance thresholds for the evaluation of development projects subject to CEQA review. In addition, the Lead Agency has not yet adopted a Greenhouse Gas (GHG) reduction plan. In the absence of a recommended significance threshold and applicable GHG-reduction plan, this analysis relies on EKAPCD's GHG policy for the analysis of stationary source GHG emissions. Accordingly, project-generated emissions that would exceed 25,000 $MTCO_2e$/year would be considered to have a potentially significant impact on the environment that could interfere with AB-32 GHG-reduction goals.

4.8.3 IMPACT ANALYSIS

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

a and b) Less than Significant Impact. The Project would generate approximately 1,094 million metric tons of carbon dioxide equivalent ($MTCO_2e$). The Project would continue to not exceed established EKAPCD thresholds. The Project would be consistent with the Climate Change Scoping Plans, as depicted below in Table 4-14. Impacts would be less than significant.

Table 4-14: Summary of Project Consistency with Climate Change Scoping Plan

Action Item	Project Consistency
Cap-and-Trade Program	**Not Applicable.** The Cap-and-Trade Program applies to emissions associated with electricity generation, large industrial facilities, and fuels. This action item does not directly apply to the proposed project.
Light-Duty Vehicle Standards	**Not Applicable.** This is a statewide measure to reduce vehicle emissions standards. This action item does not directly apply to the proposed project.
Energy Efficiency	**Consistent.** The proposed project will comply with CALGREEN building standards. These standards include requirements to improve energy efficiency, as well as to reduce water use and solid waste generation.
Renewable Portfolios Standards	**Not Applicable.** This standard requires increasing amounts of electricity provided within the State to be derived from renewable sources. This action item does not directly apply to the proposed project.
Low Carbon Fuel Standard	**Not Applicable.** Establishes reduced carbon intensity of transportation fuels. This action item does not directly apply to the proposed project.
Regional Transportation-Related Greenhouse Gas Targets	**Not Applicable.** This is a Statewide measure and is not within the purview of this proposed project.
Vehicle Efficiency Measures	**Not Applicable.** Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use. This action item does not directly apply to the proposed project.
Goods Movement	**Not Applicable.** Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are yet to be implemented and will be voluntary, the proposed project would not interfere with their implementation.
Million Solar Roofs Program	**Consistent.** The Million Solar Roofs program sets a goal for increased implementation and use of solar photovoltaic systems. While the proposed project currently does not include solar energy generation, California's Building Energy Efficiency Standards (Title 24) require the building roof structure to be designed to support the future installation of solar panels.
Medium & Heavy-duty Vehicles	**Consistent.** On-road haul trucks and trailers associated with the proposed project would be subject to aerodynamic and hybridization requirements as established by the California Air Resources Board; no feature of the proposed project would interfere with implementation of these requirements and programs.
Industrial Emissions	**Not Applicable.** These measures are applicable to large industrial facilities (> 500,000 $MTCO_2e$/YR) and other intensive uses such as refineries. This action item does not directly apply to the proposed project.
Green Building Strategy	**Consistent.** The proposed project will include a variety of building, water, and solid waste efficiencies consistent with CALGREEN building standards.
High Global Warming Potential	**Not Applicable.** This action item includes various measures related to the manufacture, use, and sale of high global warming potential, including refrigerants, and perfluorocarbons in semiconductor manufacturing. Use of refrigerants in air conditioning equipment for other structures would comply with applicable regulatory requirements.
Recycling and Waste	**Consistent.** The proposed project would be required to recycle a minimum of 50 percent of waste from construction activities and warehouse operations per

Action Item	Project Consistency
	State and County requirements. Sustainable Forests Consistent. The proposed project would increase carbon sequestration by increasing on-site trees per the proposed project landscaping plan.
Water	**Consistent.** The proposed project would include use of low-flow fixtures and efficient landscaping per CALGREEN building standards.
Agriculture	**Not Applicable.** The proposed project is not an agricultural use. This action item does not directly apply to the proposed project.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Table 4-15: Hazards and Hazardous Materials Impacts

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

4.9.1 BASELINE CONDITIONS

4.9.1.1 HAZARDOUS MATERIALS

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List. The Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. DTSC's EnviroStor database provides DTSC's component of Cortese List data (DTSC, 2010). In addition to the EnviroStor database, the State Water Resources Control Board

(SWRCB) GeoTracker database provides information on regulated hazardous waste facilities in California, including underground storage tank (UST) cases and non-UST cleanup programs, including Spills-Leaks-Investigations-Cleanups sites, Department of Defense sites, and Land Disposal program. A search of the DTSC EnviroStor database and the SWRCB GeoTracker performed on December 13, 2024 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site.[12]

4.9.1.2 AIRPORTS

The nearest airport to the Project site is the Tehachapi Municipal Airport located approximately 2.3 miles southeast of the Project.

4.9.1.3 EMERGENCY RESPONSE PLAN

Kern County adopted a new Emergency Operations Plan (EOP) in March of 2022.[13] The purpose of the EOP is to provide the basis for a coordinated response before, during and after a disaster affecting Kern County or other jurisdictions in its Operational Area, as defined in the EOP. This plan establishes policies and an emergency management organization and assigns roles and responsibilities to ensure the effective management of emergency operations. The plan also identifies sources of external support which might be provided through mutual aid and specific statutory authorities by other jurisdictions, State and federal agencies, and the private sector.

4.9.1.4 SENSITIVE RECEPTORS

Common sensitive receptors typically consist of residences, schools, day care centers, hospitals, and nursing homes. The nearest sensitive receptors to the Project site are the single-family residences adjacently surrounding the Project site.

4.9.2 IMPACT ANALYSIS

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. Construction activities as a part of the Project may involve the use of hazardous materials used for construction equipment. These may include materials such as fuels, paints, solvents, as well as other potentially hazardous materials. Storage, transport, and use of these materials would comply with all local, State, and federal standards and regulations. While unlikely, there is a risk that a leak of a hazardous material could occur during construction. Standard construction BMPs included in SWPPP would reduce potential releases of fuels and other hazardous materials by controlling runoff leaving the Project site. Therefore, with the inclusion of the SWPPP, impacts would be less than significant.

[12] (State Water Resources Control Board, 2024); (Department of Toxic Substances Control, 2024)
[13] (Kern County Office of Emergency Services, 2022)

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. There are no schools within one-quarter mile of the Project site. The nearest school facility to the Project is Golden Hills Elementary School, located approximately one mile south. Therefore, there would be no impact.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Project site is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, there would be no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project site is not located within an airport land use plan, nor is it within two miles of a public or public use airport. As mentioned, the Project is located approximately 2.3 miles from the nearest airport, the Tehachapi Municipal Airport. Therefore, there would be no impact.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. During Project O&M, no full or partial road closures would be required for routine inspections and maintenance activities. These activities would occur periodically and would require one to two vehicles so they would not alter the traffic volumes on roads in the Project area.

Construction activities associated with the Project would not require any closure of traffic lanes. Construction activities would not necessitate a temporary Traffic Control Plan or any other similar plan to relieve congestion. The Project would not conflict with or impact any applicable emergency response plan or evacuation plan such as the Kern County EOP. Impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than Significant Impact. As discussed in Section 4.20 Wildfire, the Project is within a State Responsibility Area (SRA) and a high fire hazard severity zone. The Project would develop a Fire Protection Plan if required by the Kern County Fire Chief for approval (2021 Kern County Wildland-Urban Interface Code). The Fire Protection Plan would address water supply, access, fire resistance of buildings, fire protection systems and equipment, defensible space, and vegetation management. The Fire Protection Plan would also be consistent with nationally recognized standards. Therefore, with the implementation of the Fire Protection Plan, the Project would result in less than significant impacts.

4.10 HYDROLOGY AND WATER QUALITY

Table 4-16: Hydrology and Water Quality Impacts

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

4.10.1 BASELINE CONDITIONS

Kern County includes two hydrologic regions, the South Lahontan Hydrologic Region and the Tulare Lake Hydrologic Region. The Project is located within the South Lahontan Hydrologic Region, which encompasses the area from the drainage divide between the Walker River and Mono Lake Basin to the divide south of the Mojave River. The region is bordered on the east by the Nevada State line and on the west by the crest of the southern Sierra Nevada and San Gabriel Mountains. The region also includes all of Inyo County and parts of Mono, San Bernardino, Kern, and Los Angeles Counties. Prominent geographic features of the region are Owens Valley and Death Valley. The region contains the highest and lowest points in the lower

48 States – Mount Whitney (elevation 14,495 feet) and Death Valley (elevation 280 feet below mean sea level)".[14]

Although the South Lahontan Hydrologic Region contains various waterways, none are located within the confines of Kern County. Due to this, the Project area solely relies on groundwater. The District is the water purveyor for the Project site. The consummate purpose of the District is to provide quality water service to its customers. Water is supplied by fourteen District owned wells. All water is tested regularly to ensure water quality meets all regulatory standards.

The majority of the Project site is located within the confines of the Tehachapi Valley West Groundwater Basin (the remaining portion of the site is not located within any groundwater basin boundary). The Tehachapi Valley West Groundwater Basin is an adjudicated basin, meaning groundwater rights of all the overliers and appropriators are determined by the court. The Tehachapi Valley West Groundwater Basin has been adjudicated since 1971.[15] According to the California Department of Water Resources, the Tehachapi Valley West Groundwater Basin is located in Very Low Priority Basin.[16] The California Statewide Groundwater Elevation Program, a program developed to monitor groundwater elevation trends in groundwater basins, indicates that a basin prioritized as Low or Very Low have few people, limited irrigation, and little to no groundwater use.[17]

4.10.2 IMPACT ANALYSIS

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. During construction, Project grading and potential vegetation removal would disturb soils in the Project area. Unless measures are taken to prevent erosion of disturbed soils, rain events could wash loose soil into nearby waterways, causing sedimentation. Stormwater runoff could also carry pollutants like nutrients, heavy metals, pesticides and herbicides, toxic chemicals, oils and fuels, and lubricants. The primary stormwater pollutant at the construction site would be excess sediment. Excess sediment could be mobilized anywhere earthwork occurs. Additionally, removal of any existing vegetation along the creek banks would expose underlying soils that were previously not as susceptible to erosion. Contact with loose bare soil could entrain sediments into the runoff causing sedimentation of the water which could impact water quality in receiving waters downstream.

As previously described in Section 4.7 Geology and Soils, during construction activities, short-term erosion impacts would be reduced by compliance with the NPDES General Permit, which would require the implementation of a SWPPP and the implementation of various BMPs to reduce erosion during construction activities. Compliance with the NPDES permit and implementation of BMPs during construction would reduce impacts that could otherwise degrade water quality. Impacts would be less than significant.

Operation of the Project would involve continued recreational use of the Project area. It would not introduce new uses that discharge additional water pollutants relative to existing conditions. Therefore, compliance with existing regulatory requirements would ensure that the Project does not violate water

[14] (Kern County Planning Department, 2004)
[15] (Elliot, 2023)
[16] (California Department of Water Resources, 2025)
[17] (California Department of Water Resources, 2013)

quality standards or waste discharge requirements and would not create substantial runoff water or otherwise degrade water quality. Impacts would be less than significant

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. Water for the Project would be provided by the District, which is the water purveyor for the area. The District is not at full capacity and has available capacity to serve new connections such as the Project. As identified previously, the Project overlies the Tehachapi Valley West Groundwater Basin, which is Low Priority Basin, meaning it is not overdrafted and groundwater use is minimal. The Project would consume water via landscape irrigation and the presumed restrooms/kitchens at the proposed District office and community center. Based on the Project type, it is not anticipated that water consumption would be significant. Furthermore, the Project would add minimal impervious areas to the site. The majority of the Project site surface would be permeable, which would allow stormwater to infiltrate the underlying groundwater basin. As mentioned in Section 4.4 Biological Resources, on average, the Project site receives approximately 12 inches of precipitation in the form of rain yearly and 14 inches of precipitation in the form of snow yearly. Overall, the Project would not result in the substantial depletion of groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management. Impacts would be less than significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or off-site;

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows?

Less than Significant Impact. An unnamed creek and Brite Creek flow through the Project site. Project activities would not alter said creeks, nor would they be significantly impacted by construction or operation. The goal of the Nature Park Master Plan is to provide active and passive recreational facilities while also maintaining the natural environment as much as possible. Construction or modification of Project components would alter the existing drainage pattern of the site through the addition of paved areas. However, compliance with NPDES requirements and implementation of SWPPP BMPs would prevent erosion or siltation on or off the Project site. These requirements require the Project proponent to demonstrate adequate stormwater management features and facilities to treat and capture stormwater onsite. Therefore, the Project would not substantially alter the existing drainage patterns of the site or area in a manner that would result in substantial erosion or siltation, in runoff that leads to flooding, in runoff that exceeds stormwater drainage capacity, or in a manner that would impede or redirect flood flows. Impacts would be less than significant.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundations?

Less than Significant Impact. The Project is located within Flood Hazard Zone A, as seen in Figure 4-3 however upon further analysis, the topography of the site paints a different picture. Analysis of the hydrology of the Project site shows that the 100-year floodplain would not encroach upon the proposed building site. A Letter of Map Revision (LOMR) will be proposed and submitted for review by the County of Kern and approval by FEMA. During operation of the Project, there would be no release of pollutants. In order to minimize erosion and run-off during construction activities, a SWPPP would be implemented, and the contractor would comply with all Cal/OSHA regulations regarding regular maintenance and inspection of equipment, spill prevention, and spill remediation in order to reduce the potential for incidental release of pollutants or hazardous substances onsite. Therefore, the Project is not located in an actual 100-year floodplain and the measures listed above would diminish any potential impacts to a less than significant level.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Project would be adequately supplied with water as the underlying groundwater basin is not in a state of extreme overdraft. Furthermore, as previously described in Section 4.7 Geology and Soils, during construction activities, short-term erosion impacts would be reduced by compliance with the NPDES General Permit, which would require the implementation of a SWPPP and the implementation of various BMPs to reduce erosion during construction activities. Compliance with the NPDES permit and implementation of BMPs during construction would reduce impacts that could otherwise degrade water quality. Impacts would be less than significant.

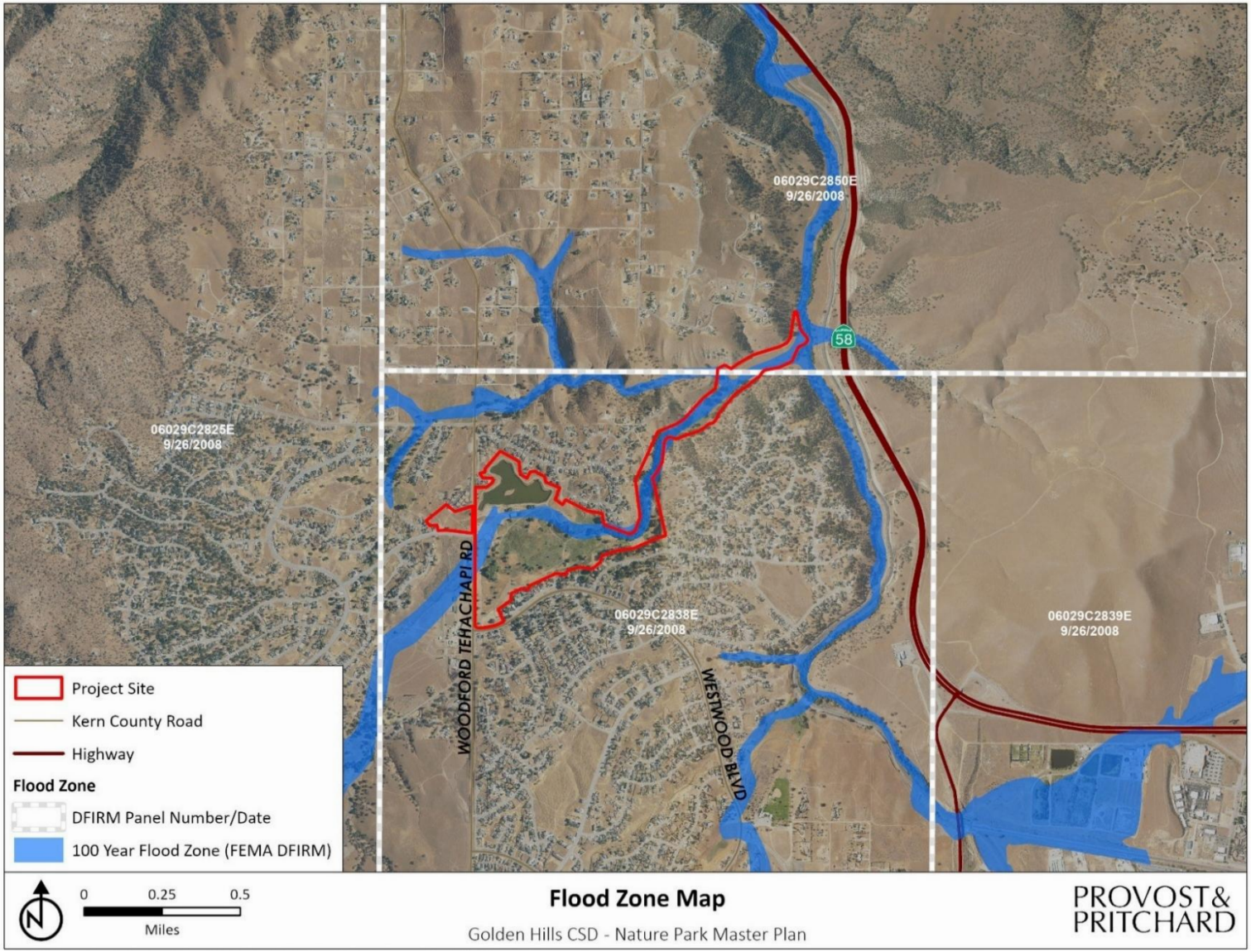


Figure 4-3: Flood Zone Map (as currently depicted)

4.11 LAND USE AND PLANNING

Table 4-17: Land Use and Planning Impacts

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

4.11.1 BASELINE CONDITIONS

Kern County is the land use authority for the Project site. According to the Kern County General Plan, the Project site is located in the Greater Tehachapi Area Specific Plan and is primarily planned for Parks and Recreation and Resource Reserve with small areas planned for General Commercial.[18] According to Kern County's official zoning map, the Project site is primarily zoned RF but also contains areas zoned for A-1, C-2 PD SC, R-2 PD. See Figure 2-4 and Figure 2-5 for the General Plan land use designations and zoning designations, respectively.

4.11.2 IMPACT ANALYSIS

a) Would the project physically divide an established community?

No Impact. The Project does not propose to close down any existing road, demolish sidewalks, or otherwise create a barrier between existing communities. There would be no impact.

b) Would the project cause a significant environmental conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact. The Project contains a land use designation of Parks and Recreation, Resource Reserve, and General Commercial, and various zone districts which include RF, A-1, C-2 PD SC, and R-2 PD. According to the Draft Environmental Impact Report for the Greater Tehachapi Area Specific Plan, the purpose of the Parks and Recreation land use designation is to provide a wide variety of facilities to serve the many recreational interests of County residents. Permitted uses shall include, but are not limited to, public and private parks containing facilities for day use, hiking, camping, walking, picnicking, riding, and other recreational activities.[19] The Resource Reserve land use designation requires a minimum parcel size of 20 acres for land that does not contain a Williamson Act Contract/Farmland Security Zone Contract and permits recreational activities These activities and uses are consistent with the RF zone district. The remaining area is zoned C-2 and the community center and government office uses are permitted in this zone. Therefore, impacts would be less than significant.

[18] (Kern County, 2023)
[19] (Kern County Planning and Community Development Department, 2010)

4.12 MINERAL RESOURCES

Table 4-18: Mineral Resources Impacts

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

4.12.1 BASELINE CONDITIONS

Mineral and petroleum resources are basic to Kern County's economy. Kern has the distinction of producing more oil than any other county in California. In addition, borax, cement production, and construction aggregates constitute major economic mineral resources.[20] The General Plan Land Use Map designates a total of approximately 292,000 acres within the Planning area as 8.4 (Mineral and Petroleum). Areas within this land use designation are minimum five-acre parcels that contain producing, or potentially productive, petroleum fields and mineral deposits. According to the General Plan Land Use Map, the Project site is not designated 8.4 (Mineral and Petroleum).[21] Furthermore, The Project site is not located in a Mineral Resource Zone where known mineral resources of value to the region and residents of the state exist.[22]

4.12.2 IMPACT ANALYSIS

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. As mentioned above, the Project site is not located in a Mineral Resource Zone where known mineral resources of value to the region and residents of the state exist. There would be no impact.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The Project site is not delineated on a local general plan, specific plan, or other land use plan as a locally important mineral resource recovery site. There would be no impact.

[20] (Kern County Planning Department, 2004)
[21] (Kern County, 2023)
[22] (Kern County Planning Department, 2004)

4.13 NOISE

Table 4-19: Noise Impacts

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

4.13.1 BASELINE CONDITIONS

The Project is located in the unincorporated community of Golden Hills in Kern County. Golden Hills is a rural mountain community within Kern County. The Project site contains the existing Golden Hills Nature Park, and the surrounding lands are developed with single-family residences (see Figure 2-2). Ambient noise, or background noise, in the Project area derives from vehicles traveling along the adjacent roadways and highway.

4.13.2 IMPACT ANALYSIS

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact with Mitigation Incorporated. According to the Kern County General Plan, exterior noise levels of 65 dB CNEL (Community Noise Exposure Level) are generally considered to be acceptable for residential land uses.[23] Operation of the Project would be passive in nature; however, there would be noise generated from people using the site. It is not anticipated that noise would be significant due to the existing ambient noise in the area.

Project construction would generate temporary noise, mostly from trucks and the construction activity itself. Table 4-20 below describes the typical construction noise levels of various construction equipment.

[23] (Kern County, 2009)

Table 4-20: Typical Construction Noise Levels

Equipment	50 feet from Source (dBA L_{eq})	100 feet from Source (dBA L_{eq})	200 feet from Source (dBA L_{eq})	300 feet from Source (dBA L_{eq})
Air Compressor	80	74	68	64
Backhoe	80	74	68	64
Concrete Mixer	85	79	73	69
Grader	85	79	73	69
Jack Hammer	88	82	76	72
Loader	80	74	68	64
Paver	85	79	73	69
Roller	85	79	73	69
Saw	76	70	64	60
Scraper	85	79	73	69
Truck	84	78	72	68

Source: Noise level at 50 feet from (John A. Volpe National Transportation Systems Center, 2018)
Note: Noise Levels at 100 feet, 200 feet, and 300 feet were extrapolated using a 6 dBA attenuation rate per doubling of distance. Each noise level assumes the piece of equipment is operating at full power for the expected duration to complete the construction activity. The duration varies widely between each piece of equipment. Noise levels also depend on the model and year of the equipment used.

There are existing residences that are located adjacent to the Project. While construction would be temporary and inconstant, even with attenuation rates, noise generated from construction equipment could exceed the allowed 65 dB CNEL, as outlined in Kern County's General Plan. To ensure these Project-related increases in ambient noise would not exceed applicable noise and land use standards, the noise reducing BMPs pursuant to Mitigation Measures NOI-1 will be implemented. With the inclusion of said mitigation, impacts would be less than significant with mitigation incorporated

b) Would the project result in generation of excessive ground borne vibration or ground borne noise levels?

Less than Significant Impact. Operation of the Project would not include any activities that would generate significant levels of ground borne vibration or ground borne noise. Therefore, it is not anticipated that Project operation would expose the nearest sensitive receptor to vibration levels that would result in annoyance. For this reason, the following analysis of the Project's vibration impacts evaluates only the effects of onsite construction activities.

There are no federal or State standards that address construction noise or vibration. Additionally, Kern County does not have regulations that define acceptable levels of vibration. However, the Federal Transit Administration (FTA) publication concerning noise and vibration impact assessment from transit activities has vibration standards suggestions. Although the FTA guidelines are to be applied to transit activities and construction, they may be reasonably applied to the assessment of the potential for annoyance or structural damage resulting from other activities. To prevent vibration annoyance in residences, a level of 80 VdB (vibration velocity level in dB) or less is suggested when there are fewer than 70 vibration events per day. A level of 100 VdB or less is suggested by the FTA guidelines to prevent damage to fragile buildings. Table 4-21 describes the typical construction equipment vibration levels. While these construction-related activities would result in ground borne vibration, such ground borne noise or vibration, would attenuate rapidly from the source and would not be generally perceptible outside of the construction-related areas. In addition, there would not be any vibrational impacts from operation and maintenance activities.

Table 4-21:Typical Construction Equipment Vibration Sources Levels

Typical Construction Equipment Vibration Sources Levels		
Equipment	PPV at 25 ft, in/sec	Approximate Lv* at 25 ft
Large bulldozer	0.089	87
Caisson drilling	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
*RMS velocity in decibels, VdB re 1 micro-in/sec Source: (John A. Volpe National Transportation Systems Center, 2018)		

Construction-related activities in general can have the potential to create ground borne vibrations. However, based on the soil types found in the Project site, it is unlikely that any blasting or pile-driving would be required in connection with construction of the Project. Therefore, the potential for ground borne vibrations to occur as part of construction-related activities of the Project would not be significant. Additionally, the operation of the Project would not contain any activities that would create excessive ground borne vibrations. The Project would not result in the generation of excessive ground borne vibration or ground borne noise levels. Therefore, impacts would be less than significant. No mitigation measures are required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project site is not located within the vicinity of a private airstrip, airport land use plan, or within two miles of a public or public use airport. As mentioned in Section 0

Hazards and Hazardous Materials, the nearest airport, the Tehachapi Municipal Airport, is located approximately 2.3 miles southeast of the Project. Therefore, there would be no impact.

4.13.3 MITIGATION

NOI-1 The District shall ensure the construction contractor implement the following construction noise reducing measures:

- The construction contractor shall ensure that all noise producing construction activities, including warming-up or servicing equipment and any preparation for construction, shall be limited to the hours between 7:00 a.m. and 7:00 p.m. The construction contractor shall locate onsite equipment staging areas to maximize the distance between construction-related noise sources and noise sensitive receptors nearest the project site during construction.

- The construction contractor shall ensure that all equipment shall have sound control devices that are no less effective than those provided on the original equipment. Further, pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof. In lieu of or in the absence of manufacturers' recommendations, the Director of Public Works shall have the authority to prescribe such means of accomplishing maximum noise attenuation as deemed to be in the public interest, considering the available technology and economic feasibility.

4.14 POPULATION AND HOUSING

Table 4-22: Population and Housing Impacts

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

4.14.1 BASELINE CONDITIONS

According to the U.S Census Bureau, as of July 1, 2023, Kern County has an estimated population of 913,820 people. Since the 2020 Census, it is estimated that Kern County grew approximately 0.5% from 909,235.[24] Additionally, it is estimated that Kern County currently has 309,653 housing units supporting its population.[25]

4.14.2 IMPACT ANALYSIS

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The Project does not propose to construct new homes, businesses, or extend roads or other population-accommodating capacity to existing infrastructure, thus it would not induce unplanned population growth. There would be no impact.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. There are no persons living at the Project site, or housing located on the Project site, thus the Project would not displace persons or housing, necessitating the construction of replacement housing elsewhere. There would be no impact.

[24] (United States Census Bureau, 2023)
[25] Ibid.

4.15 PUBLIC SERVICES

Table 4-23: Public Services

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

4.15.1 BASELINE CONDITIONS

Fire Protection: The Project site would be served by the Kern County Fire Department (KCFD). The closest KCFD station to the Project is Kern County Fire Station 13 located approximately 1.2 miles south of the Project site.

Police Protection: Police protection is provided by the Kern County Sheriff's Office. The closest Kern County Sheriff station to the Project is located approximately 700 feet south.

Schools: The nearest school facility to the Project is Golden Hills Elementary School, located approximately one mile south.

Parks: The nearest park to the Project site is the site itself, which is the Golden Hills Nature Park. The site is a former golf course.

Landfills: The nearest landfill to the Project site is the Tehachapi Landfill, located approximately eight miles southeast of the Project site.

4.15.2 IMPACT ANALYSIS

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire Protection:

ii. Police Protection:

Less than Significant Impact. Fire protection services would continue to be provided by the Kern County Fire Department, and police protection services would continue to be provided by the Kern County Sheriff's Office. The Project site is located in the unincorporated community Golden Hills which is considered rural. The site is an existing nature park that is currently served by fire and police protective services. The Project would not necessitate an increase in fire or police protection service beyond what already exists. Therefore, impacts involving fire and police protection services would be less than significant.

iii. Schools:

No Impact. As discussed in Section 4.14 Population and Housing, the Project would not include the construction of housing and would not generate population growth. Since the Project would not introduce new students to the local school districts, the Project would not require new or altered school facilities. There would be no impact.

iv. Parks:

No Impact. The Project involves the expansion and development of recreational facilities and amenities. However, as discussed in Section 4.14 Population and Housing, the Project would not induce population, and consequently would not increase demand for other existing parks/recreational facilities. Since the Project would not require other new or physically altered parks, there would be no impact.

v. Other public facilities:

No Impact. As discussed in Section 4.14 Population and Housing, the Project would not include the construction of housing and would not generate population growth. Implementation of the Project would not introduce new residents to the area, thereby resulting in an increased need for new or altered public facilities, such as libraries. The Project would not result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts. There would be no impact.

4.16 RECREATION

Table 4-24: Recreation Impacts

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

4.16.1 BASELINE CONDITIONS

The Project is located in Golden Hills, an unincorporated community of Kern County. There are currently two recreational areas within the community of Golden Hills: Meadowbrook Park and the Nature Park. The Project site consists of the existing Nature Park, a passive park that provides opportunities for walking, running, bicycling, horseback riding, and bird watching. The site contains minor improvements such as the picnic and park benches, informational signage, stormwater management facilities, and fencing. Meadowbrook Park is the only active recreational facility in Golden Hills. Meadowbrook Park is a community park and consists of two playgrounds, exercise equipment, swings, a large pavilion, a dog park, bike pump track, a softball field, restrooms, and open grassy areas.

4.16.2 IMPACT ANALYSIS

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The Project proposes to add additional recreational facilities to the existing Nature Park that would serve local residents. Since the Project would increase the amount of recreational facilities and equipment in the area, the Project could not cause or accelerate the substantial physical deterioration of existing recreational facilities. There would be no impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Project proposes to construct recreational facilities, whose impacts are discussed elsewhere in this Initial Study. There are no impacts caused specifically by the operation of recreational facilities.

4.17 TRANSPORTATION

Table 4-25: Transportation Impacts

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

4.17.1 BASELINE CONDITIONS

The Project is located in the unincorporated community of Golden Hills. Golden Hills is a rural community in Kern County, approximately one mile west of the City of Tehachapi. The Project site would be accessed through local roadways from Woodford-Tehachapi Road or SR 58.

4.17.2 IMPACT ANALYSIS

a) Would the project conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. Traffic impacts during Project construction would be primarily associated with worker vehicles and construction equipment and material deliveries. During Project construction, it is expected that vehicles would continue to utilize the surrounding street system for access. The increased number of vehicles on adjacent roadways would be minimal during the temporary construction period and would cease once construction is complete. Project construction would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

The Project would include trip generating uses. Access would be proposed consistent with Kern County Public Works Standards. Project operation would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?

Less than Significant Impact. The Project would result in the development of recreational and open space amenities with active transportation facilities, including walking trails, walking/running paths, horse trails, a pavilion, a District office, community center, and maintenance building. These amenities would provide recreational options for pedestrians and bicyclists within the unincorporated community of Golden Hills. A project is presumed to have a less than significant VMT impact if it is in a low VMT zone, described as

an area having a VMT per employee of 85% or less of the Countywide average. The Project site is a nature park, and the Project includes upgrades to the to the site. The California Statewide Travel Demand Model defines the Project area as having a VMT per employee of 7.39, whereas the Countywide average is 11.17. With 85% of 11.17 being 9.50, the Project is located in a low VMT zone. The Project would thus be consistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts would be less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. The Project proposes to construct park improvements to the existing Golden Hills Nature Park. This includes access roads onsite to connect the proposed facilities. All proposed roads onsite would be built in compliance with Kern County standards. Impacts would be less than significant.

d) Would the project result in inadequate emergency access?

Less than Significant Impact. The Project would construct two access points and a parking lot and all buildings would comply with Kern County standards and the California Building and Fire Codes. Compliance with Kern County standards and the California Building and Fire Codes would ensure impacts would be less than significant.

4.18 TRIBAL CULTURAL RESOURCES

Table 4-26: Tribal Cultural Resources Impacts

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

4.18.1 BASELINE CONDITIONS

The Project area falls within the ethnographic territory of the Mountain Kawaiisu, as opposed to the Desert Kawaiisu who occupied desert areas east of Tehachapi. While Zigmond (1986) places the Project area within the core tribal area for the Kawaiisu with the range of seasonal trips covering significant portions of the Mojave Desert, other research has suggested that Kawaiisu intermarried with Panamint Shoshone and thus had permanent groups in desert areas. The Mountain Kawaiisu would winter in the Tehachapi area, generally in small hamlets of around six houses.

The Kawaiisu were foragers, with food sources derived principally from gathering. The exact plant species exploited was dependent on seasonal availability as well as precise geographical/environmental location. In the higher montane portions of their region (e.g., toward the Tehachapis), acorn-bearing oak and pinyon nuts were staples. In the lower-lying more desertic zones, mesquite, yucca, and a variety of other edible plants were emphasized. Hunting also contributed additional protein to the Kawaiisu diet; and principally included small game, such as hares, rabbits, and rodents.

Kawaiisu social and political organization was based on the family group. The ethnographic record suggests that related family groups lived in close proximity to one another, establishing informal bands and cooperating in subsistence efforts. Chiefs, or headmen, were recognized as leaders but had authority that

was not comparable to western systems of hierarchy. Rather, it was their wealth that afforded them positions of perceived authority (Garfinkel and Williams 2011; Kroeber 1925).

Religious beliefs and practices were based on shamanism. This is predicated upon perceived direct and personal interactions between an individual and the supernatural world, with this interaction founded on entering an altered state of consciousness.

There are multiple known villages in the general vicinity of the Project area area. Two villages, Tehechita and Teheshti-va'a-di, were located along Brite Creek, about two-thirds of a mile southwest of the Project area. The name Tehachapi is derived from the village name Tehechita. At the eastern end of the Tehachapi Valley, in the Sand Canyon area, were the villages of Ma'a'puts and Tomo Kahni. Tomo Kahni is perhaps the most well-known of these villages and is currently protected within Tomo Kahni State Historic Park (Garfinkel et al. 2011).

4.18.1.1 RECORDS SEARCH

A records search from the SSJVIC of the CHRIS, located at California State University, Bakersfield, was conducted for the Project and a response was received from the SSJVIC on August 19, 2024. The records search includes a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest, the California Historical Landmarks, the CRHR, the NRHP, and the BERD listings were reviewed for the above referenced APE and an additional ½-mile radius. The search confirmed there have been two previous cultural resource study conducted within the Project area and there have been six previous cultural resource studies conducted within the ½-mile radius. The search also identified that there are no discovered cultural resource within the Project APE, but there are six within a ½-mile radius of the Project APE. Due to the sensitive nature of cultural resources, archaeological site locations are not released. (Appendix C)

4.18.1.2 NATIVE AMERICAN OUTREACH

The NAHC supplied a list of Native American representatives to contact for information or knowledge of cultural resources in the Project area and the surrounding area. The following Native American organizations/individuals were contacted from the list provided by NAHC below:

1. Chairperson Julio Quair of the Chumash Council of Bakersfield
2. Chairman Gabe Frausto of the Coastal Band of the Chumash Nation
3. Chairperson Robert Robinson of the Kern Valley Indian Community
4. Chairperson Delia Dominguez of the Kitanemuk & Yowlumne Tejon Indians
5. Chairperson Robert Martin of the Morongo Band of Mission Indians
6. Chairperson Violet Walker of the Northern Chumash Tribal Council
7. Acting Chairman Manfred Scott of the Quechan Tribe of the Fort Yuma Reservation
8. Chairperson Donna Yocum of the San Fernando Band of Mission Indians
9. Senior Manager of Cultural Resources Management Alexandra McCleary of the San Manuel Band of Mission Indians
10. Co-Chairperson Mark Cochrane of the Serrano Nation of Mission Indians
11. CRM Scheduler Candice Garza of the Tejon Indian Tribe
12. Chairperson Neil Peyron of the Tule River Indian Tribe

The outreach letters were sent to all the Native American representatives on the contact list on August 23, 2024. The letters included a description of the Project and a topographic map of the location. Follow-up emails were sent on December 4, 2024. The Morongo Band of Mission Indians responded that the Project is not located within the boundaries of the ancestral territory or traditional use area of the Cahuilla and

Serrano people of the Morongo Band of Mission Indians. No other responses were received as a result of this outreach.

Public Resources Code Section 21080.3.1, et seq. (codification of AB 52, 2013-14) requires that a lead agency, within 14 days of determining that it would undertake a project, must notify in writing any California Native American Tribe traditionally and culturally affiliated with the geographic area of the project if that Tribe has previously requested notification about projects in that geographic area. The notice must briefly describe the project and inquire whether the Tribe wishes to initiate request formal consultation. Tribes have 30 days from receipt of notification to request formal consultation. The lead agency then has 30 days to initiate the consultation, which then continues until the parties come to an agreement regarding necessary mitigation or agree that no mitigation is needed, or one or both parties determine that negotiation occurred in good faith, but no agreement would be made. Currently, no tribes have requested to be notified pursuant to AB 52.

4.18.2 IMPACT ASESSMENT

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

vi. Listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Less than Significant Impact. No requests for tribal consultation for the Project have been received. In addition, the NAHC SLF results confirmed there were no recorded tribal cultural resources in the Project area. In the unlikely event that an archaeological resource is uncovered during construction, tribal in relation or not, all construction would cease, and a qualified archaeologist would be contacted to assess the resource. The Project would adhere to all applicable federal, State, and local requirements in regard to tribal cultural resources. This has been memorialized as CUL-1. Therefore, with the inclusion of CUL-1, the Project would have a less than significant impact with mitigation incorporated.

vii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact. No requests for tribal consultation for the Project have been received. In addition, the NAHC SLF results confirmed there were no recorded tribal cultural resources in the Project area. While it is unlikely that human remains would be uncovered during construction activities associated with this Project, discovery of human remains onsite would result in the ceasing of all construction activities and the contacting of the Kern County Coroner. If the Coroner determined that the remains are that of tribal descent, they would contact the NAHC to determine the most likely descendant. The Project would be required to comply with all applicable federal, State, and local requirements in relation to the uncovering of human remains. With the inclusion of CUL-2, impacts would be less than significant.

4.18.3 MITIGATION

See CUL-1 and CUL-2.

4.19 UTILITIES AND SERVICE SYSTEMS

Table 4-27: Utilities and Service Systems Impacts

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

4.19.1 BASELINE CONDITIONS

Water: The District is the water service provider for the Project site and its vicinity. The District provides water via 14 District owned wells. Water is monitored by the District to ensure high quality water quality levels are maintained.

Wastewater: Properties within the District are primarily reliant on the Golden Hills Sanitation Company's (GHSC) sewer systems for wastewater treatment and disposal.

Stormwater: Many lots within the District have drainage easements. The District does not maintain these easements; property owners are responsible for their maintenance.

Solid waste: Sollid waste services in the Project area is provided by J Torres Co., Inc., which maintains an agreement with County of Kern Waste Management to provide said services.

Gas and Electric: Gas services are provided by Southern California Gas, while electrical services in the Project area are provided by Southern California Edison.

Telecommunications: Telecommunication services are provided by the standard group of companies that can be found throughout the country. They include, but are not limited to AT&T, Verizon, T-Mobile, Spectrum, and Mint.

4.19.2 IMPACT ANALYSIS

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. The Project site is capable of being served by water, wastewater, stormwater, electric, gas, and telecommunication facilities. The Project would require minor relocations or improvements of utilities, such as stormwater collection and drainage improvements. However, these improvements would occur within the footprint of existing onsite development and are included in the environmental analysis within this document. As discussed in Section 4.10 Hydrology and Water Quality, the Project would not increase water demand such that off-site improvements would be necessary. The new restrooms within the proposed District office and kitchen in the community facility would connect to the GHSC's existing sewer system. The Project would not exceed existing wastewater infrastructure capacity necessitating offsite improvements. The Project would not require relocation of utilities which would create significant environmental effects. Impacts would be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. As discussed in Section 4.10 Hydrology and Water Quality, water for the Project would be provided by the District. The District is not at full capacity and has available capacity to serve new connections such as the Project. As identified previously, the Project overlies the Tehachapi Valley West Groundwater Basin, which is Low Priority Basin, meaning it is not over drafted and groundwater use is minimal. The Project would consume water via landscape irrigation and the presumed restrooms and kitchens at the proposed District facilities. Based on the Project type, it is not anticipated that water consumption would be significant. Furthermore, the Project would add minimal impervious areas to the site. The majority of the Project site surface would be permeable, which would allow stormwater to infiltrate the underlying groundwater basin. Impacts would be less than significant.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact. The District has enough capacity in its wastewater treatment plant to accommodate the additional demand from the Project. Therefore, impacts would be less than significant.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. Solid waste generated from the Project site during construction and operation would first be transported to the J. Torres Co. drop off facility located approximately 1.9 miles south of the Project site. Then, once it has been sorted, it would be transported to its final destination at the Tehachapi Landfill, which is another 8 miles east of the J. Torres drop-off facility. Construction contractors would be required to comply with CalGreen Construction and Demolition Debris Recycling Requirements, which require the diversion of 65 percent of construction waste. This means that at least 65 percent of the nonhazardous construction waste must be recycled or reused. In addition, waste

generated from construction activities would be temporary would cease once the Project is built out. Operational solid waste generation would be minimal, given the Project's existing use as a recreational and open space park and due to the fact that there are no permanent or temporary habitable structures being proposed. Therefore, the Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Furthermore, the Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.20 WILDFIRE

Table 4-28: Wildfire Impacts

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

4.20.1 BASELINE CONDITIONS

As per maps provided by the Office of the State Fire Marshal, the Project site is located within a high fire hazard severity zone (see Figure 4-4).[26] The Project site is also located in an area that has been designated as a State Responsibility Area (SRA) by the California Board of Forestry and Fire Protection's State Responsibility Area Viewer.[27]

4.20.2 IMPACT ANALYSIS

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads,

[26] (ArcGIS, 2023)
[27] (California Department of Forestry and Fire Protection, 2023)

fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant Impact. The Project would be located within an SRA and a high fire hazard severity zone. The Project site is characterized by dry vegetation that could exacerbate wildfire risks if a fire were to occur. Since some of the Project would be constructed within Wildland Urban Interface areas, the Project would develop a Fire Protection Plan if required by the Kern County Fire Chief for approval (Kern County Wildland-Urban Interface Code). The Project site is located along an existing major thoroughfare and trip generation would not impair emergency response or evacuation plans. The Fire Protection Plan would address water supply, access, fire resistance of buildings, fire protection systems and equipment, defensible space, and vegetation management. The Fire Protection Plan would also be consistent with nationally recognized standards. The Fire Protection Plan would be used to reduce risks to people and buildings in and around the Project site. Impacts would be less than significant.

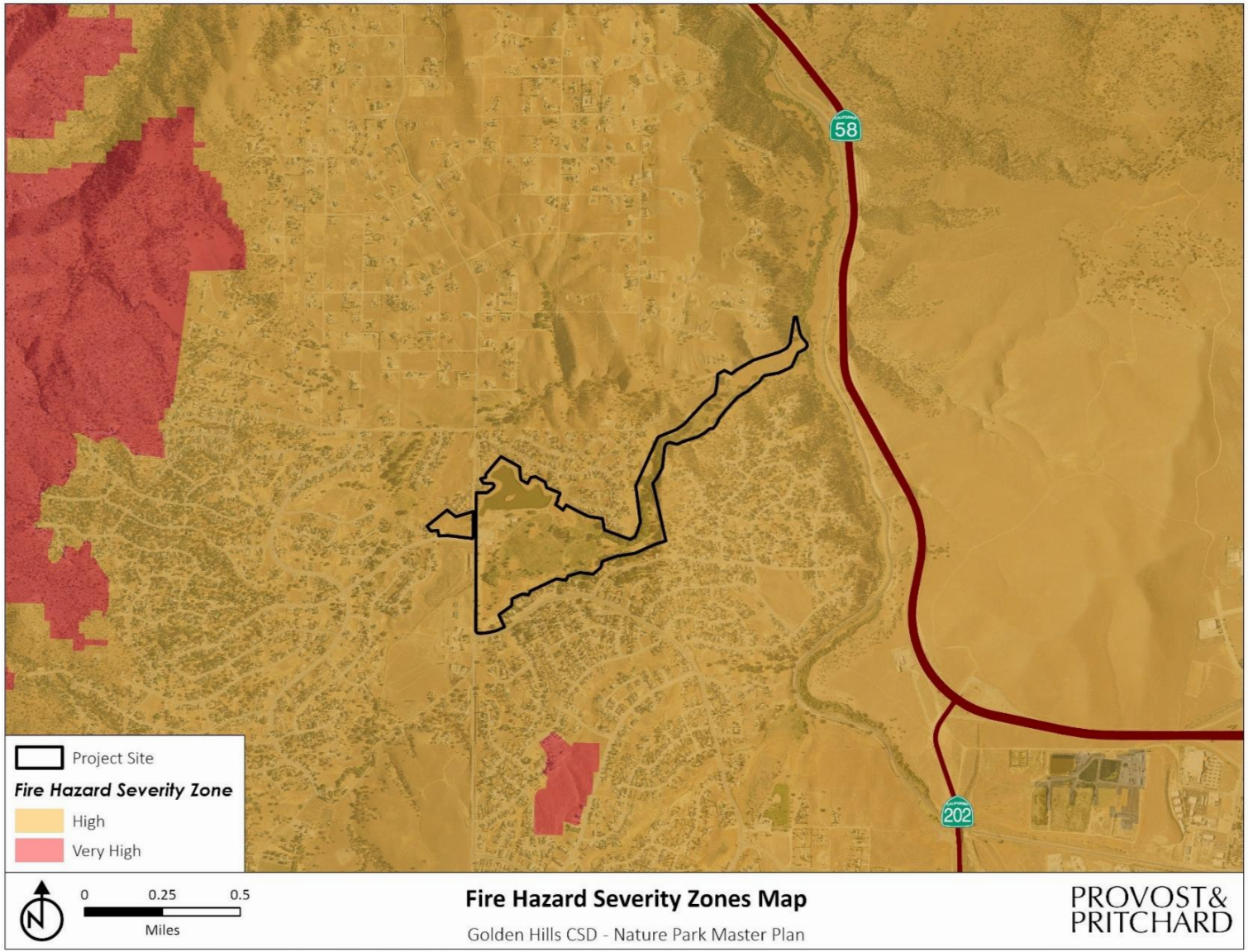


Figure 4-4: Fire Hazard Severity Zones Map

4.21 CEQA MANDATORY FINDINGS OF SIGNIFICANCE

Table 4-29: CEQA Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

4.21.1 STATEMENT OF FINDINGS

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. The analysis conducted in this IS/MND results in a determination that the Project, with incorporation of mitigation measures, would have a less than significant effect on the environment. The potential for impacts to agricultural resources. biological resources, cultural resources, and tribal cultural resources from the construction and operation of the Project would be less than significant with the incorporation of the mitigation measures discussed in Chapter 5 Mitigation, Monitoring, and Reporting Program. Accordingly, the Project would involve no potential for significant impacts through the degradation of the quality of the environment, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or example of a major period of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant with Mitigation Incorporated. CEQA Guidelines Section 15064(i) States that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. The Project would carry out the Golden Hills Nature Park Master Plan by construction of a District office, community center, maintenance building, and recreational facilities. The Project is not expected to result in direct or indirect population growth. Therefore, implementation of the Project would not result in significant cumulative impacts and all potential impacts would be reduced to less than significant through the implementation of mitigation measures and basic regulatory requirements incorporated into future Project design.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. The Project would carry out the Golden Hills Nature Park Master Plan by construction of a District office, community center, maintenance building, and recreational facilities. The Project in and of itself would not create a significant hazard to the public or the environment. Construction-related impacts could occur temporarily as a result of Project construction. However, implementation of basic regulatory requirements identified in this IS/MND would ensure that impacts are less than significant. Therefore, the Project would not have any direct or indirect adverse impacts on humans. This impact would be less than significant.

CHAPTER 5 MITIGATION, MONITORING, AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND). The MMRP lists mitigation measures recommended in the IS/MND for the Project and identifies monitoring and reporting requirements.

Table 5-1: Mitigation, Monitoring, and Reporting Program presents the mitigation measures identified for the Project. Each mitigation measure is numbered with a symbol indicating the topical section to which it pertains, a hyphen, and the impact number. For example, AIR-2 would be the second mitigation measure identified in the Air Quality analysis of the IS/MND.

The first column of Table 5-1: Mitigation, Monitoring, and Reporting Program identifies the mitigation measure. The second column, entitled "When Monitoring is to Occur," identifies the time the mitigation measure should be initiated. The third column, "Frequency of Monitoring," identifies the frequency of the monitoring of the mitigation measure. The fourth column, "Agency Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last columns will be used by the Lead and Responsible Agencies to ensure that individual mitigation measures have been complied with and monitored

Table 5-1: Mitigation, Monitoring, and Reporting Program

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Agricultural and Forestry Resources						
See **BIO-39** and **BIO-40** in Section 4.4.2.						
Biological Resources						
General Project-Related Impacts						
BIO-1	(***WEAP Training***): Prior to initiating construction activities (including staging and mobilization), all personnel associated with project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them.	Prior to the start of any construction activities	As needed for any new construction personnel during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-2	*(**Best Management Practices**):* The project proponent will require that all workers employ the following best management practices (BMPs) in order to avoid and minimize potential impacts to special status species: • Vehicles will observe a 15-mph speed limit while on unpaved access routes • All open trenches, holes, sumps, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped	Prior to the start of any construction activities	During Construction	GHCSD	Report	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	• Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited. • The presence of any special status species will be reported to the project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.					
Project-Related Impacts to Special Plant Species						
BIO-3	(***Botanical Surveys***): Prior to project activities occurring within valley oak woodland and forest or wetland/wet meadow habitats of the site, a qualified botanist/biologist will conduct focused botanical surveys during the appropriate blooming seasons for calico monkeyflower (March – May), pale-yellow layia (April – June), Palmer's mariposa-lily (May – July), and Piute Mountains navarretia (April – July) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site.	During appropriate blooming seasons	Once, as determined by qualified biologist during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-4	(***Avoidance Buffers***): If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area to avoid disturbing the plants and their root systems.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-5	(***Formal Consultation***): If rare plant individuals or populations are detected within project work areas during the focused botanical surveys, and the plants cannot be avoided, the project proponent will initiate consultation with CNPS to determine next steps for relocation.	Prior to the start of construction activities	Once, Prior to ground disturbing activities and the start of construction	GHCSD with assistance of a qualified biological subconsultant	Report	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Project-Related Mortality and/or Nest Abandonment of Migratory Birds, Raptors, and Special Status Birds						
BIO-6	(***Avoidance***): The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.	September 16 to January 31	Once, as determined by qualified biologist during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-7	(***Pre-construction Surveys***): If activities must occur within the nesting bird season (February 1 to September 15), a qualified biologist (someone familiar with these species and nesting birds) will conduct a single pre-construction survey for tricolored blackbird colonies on the site and up to 300 feet outside of the site within five (5) calendar days prior to the start of construction. The survey would also include inspecting for nesting migratory birds within the site and up to 100 feet outside of the site and for nesting raptors within the site and up to 500 feet outside of the site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-8	(***Avoidance Buffers***): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. For tricolored blackbirds a qualified biologist will determine appropriate avoidance buffer distances based in accordance with the *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields* (California Department of Fish and Wildlife 2015), conditions of the nest(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance to Burrowing Owl						
BIO-9	(***Pre-construction Take Avoidance Survey***): A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction take avoidance survey for BUOW and suitable burrows, in accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (2012), within seven (7) days prior to the start of	Within seven days prior to the start of construction	Once, as determined by qualified biologist prior to	GHCSD with assistance of a qualified biological subconsultant	Report	

Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	construction activities. The survey will include the proposed work area and surrounding lands up to 500 feet. If no BUOW individuals or active burrows are observed, no further mitigation is required.		construction activities			
BIO-10	(***Avoidance***): If an active BUOW burrow is detected, avoidance buffers will be implemented. A qualified biologist will determine appropriate avoidance buffer distances based on CDFW's 2012 *Staff Report on Burrowing Owl Mitigation*, the biology of BUOW, conditions of the burrow(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged and all BUOW have left the project area.	Upon discovery of BUOW burrow	Once, as determined by qualified biologist during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-11	(***Incidental Take Permit*** and ***Passive Relocation***): If an active BUOW burrow is detected within the proposed work area and cannot be avoided, it is recommended the project obtain an Incidental Take Permit (ITP) in order to implement protection plans and/or relocation plans in consultation with CDFW and/or USFWS and protect the project from "take" of this species.	Upon discovery of BUOW burrow	Once, as determined by qualified biologist during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance to American Badger						
BIO-12	(***Pre-construction Take Avoidance Survey***): A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction survey of project areas within seven (7) days prior to vegetation clearing or ground disturbing activities within the valley oak woodland and forest habitat. The goal of this survey is to search for potentially active badger dens.	Seven days prior to vegetation clearing or ground disturbing activities	Once, as determined by qualified biologist during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-13	(***Remote Cameras***): If potential American badger dens are detected during the pre-construction survey, each potential den will be monitored with a remote camera for a period of at least three consecutive nights. If there is no activity recorded at the den location, the den can be deemed "inactive" or "unoccupied" and closed or excavated the same day as determining the den inactive.	Upon discovery of potential American Badger dens	Once, as determined by qualified biologist during construction activities	GHCSCD with assistance of a qualified biological subconsultant	Report	

Level of Disturbance

Location	Time of Year	Low	Med	High
Nesting sites	April 1-Aug 15	200 meters	500 meters	500 meters
Nesting sites	Aug 16-Oct 15	200 meters	200 meters	500 meters
Nesting sites	Oct 16-Mar 31	50 meters	100 meters	500 meters

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
BIO-14	(***Den Avoidance***): If an American badger is denning on or within 50 feet of the site, the project proponent will avoid the den by a minimum 50-foot buffer.	Upon discovery of denning	Once, as determined by qualified biologist during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-15	(***Timed Den Excavation***): If an American badger is denning on or within up to 50 feet of the site and it cannot be avoided, the den may be excavated outside of the natal season (generally March 15 – June 15) or if it is determined that there are no cubs in the den. Prior to den excavation a remote camera will be placed at the den entrance for a minimum of three consecutive nights to record the general time when the badger leaves the den. Once this time has been determined and it is confirmed the badger left the den to forage the den will be excavated by hand, with the assistance of machinery. Scopes should be used to survey sections of the den prior to excavation. Should any cubs be discovered during the excavation the work will stop and the crew will leave the site immediately so the female can rescue her cubs and relocate them.	March 15 to June 15	Once, as determined by qualified biologist during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance of California Legless Lizard and Northern California Legless Lizard						
BIO-16	*(**Avoidance**):* The project's construction activities will occur, if feasible, where ground disturbance has previously occurred and avoid areas that contain loose soil and leaf litter.	During construction activities and operation	Once, as determined by qualified biologist during construction activities	KDWCD with assistance of a qualified biological subconsultant	Report	
BIO-17	(***Pre-construction Surveys***): If activities must occur in areas that contain loose soil and leaf litter within valley oak woodland and forest or riverine/valley oak riparian forest and woodland habitats a qualified biologist will conduct pre-construction surveys within 48 hours prior to beginning any project activities. Any loose substrate in which legless lizards could bury themselves will be gently raked with a hand tool (e.g., a garden rake) to a depth of two inches to locate any lizards that could be under the surface. Lizards that are detected will be allowed to leave the work area of their own volition or will be moved out of harm's way by a qualified biologist to suitable habitat at least 50 feet from the project work site.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Project-Related Mortality and/or Disturbance to Coast Horned Lizards						
BIO-18	(***Pre-construction Survey***): Within 15 days prior to vegetation clearing or ground disturbing activities within the valley oak woodland and forest, riverine/valley oak riparian forest and woodland, and ruderal habitats a qualified biologist will conduct a pre-construction survey of the work area in these habitats. Surveys will not take place when daytime temperatures are below 60˚F or above 95˚F. If no suitable habitat or species observations are found, no further mitigation is required. Lizards that are detected will be allowed to leave the work area of their own volition or will be moved out of harm's way by a qualified biologist to suitable habitat at least 50 feet from the project work site.	Within 15 days prior to vegetation clearing or ground disturbing activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance to Crotch's Bumble Bee						
BIO-19	(***Flying Bumble Bee and Nest Surveys***): A qualified biologist (someone who is familiar with and can identify bumble bees) will conduct three flying bumble bee and nest surveys during the peak flying periods (April, May to June, and July) prior to initial ground disturbing activities. The biologist will walk throughout the site and up to 100 feet outside of the site during the optimal time of the day to inspect for bumble bees and any nests. If an individual is observed, it will be followed until it can be determined if a nest is present within the survey boundary.	During the peak flying periods (April, May to June, and July) prior to initial ground disturbing activities.	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-20	(***Identification and Protection Plan***): Bumble bee individuals need to be captured to be identified. If a bumble bee nest is observed, no ground disturbing activities will occur within 50 feet of the nest until a plan to identify the species using the nest and protect nesting and overwintering Crotch's bumble bee has been submitted to CDFW and approved in writing.	Upon bumble nest observation	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance to Monarch Butterfly						
BIO-21	(***Pre-construction Surveys***): A survey of the project site will be conducted by a qualified biologist (someone who can identify the species and is familiar with the species' host plants) within 15 days prior to construction activities to determine if milkweeds plants are located within the site during the breeding season (February 1 to August 31). If no milkweed plants are observed, no further mitigation is required.	15 days prior to construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-22	(***Avoidance***): If milkweeds are observed within the site during the breeding season (February 1 to August 31), an avoidance buffer will be placed around the area so as not to disturb the plant or its root system.	Upon discovery of milkweeds	Once, as determined by qualified biologist	GHCSD with assistance of a qualified	Report	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	The buffer will be left in place until a qualified biologist has determined the buffers are no longer warranted.	during breeding season (February 1 to August 31)	prior to construction activities	biological subconsultant		
BIO-23	(***Consultation with United States Fish and Wildlife Service if Listed***): In the event a milkweed plant is detected during the pre-construction survey and cannot be avoided and this species is listed under the ESA prior to this observation, consultation with USFWS will be completed to avoid take.	Upon discovery of milkweeds plant	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance to Foothill yellow-legged Frog						
BIO-24	(***Pre-construction Take Avoidance Survey***): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog*[28], or current guidance for FYLF to determine if FYLF are within or adjacent to the riverine/valley oak riparian forest or valley oak woodland and forest habitats within project site. If no FYLFs are found during the pre-construction survey and no surface water is present in the project site, work may commence without further surveys.	Prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-25	(***Foothill Yellow-Legged Frog Consultation and Avoidance***): If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF.	Upon discovery of FYLF	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-26	(***Monitor***): If ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-	Between November 1 and March 31	Daily during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	

[28] (California Department of Fish and Wildlife, 2018)

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within FYLF habitat.					
BIO-27	(***Foothill Yellow-Legged Frog Take Authorization***): If avoidance is not feasible the project will consult with the USFWS and CDFW to acquire take permits for FYLF prior to any project activities.	Prior to construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance to Northwestern Pond Turtle						
BIO-28	(***Pre-construction Survey and Avoidance Buffers***): Within seven (7) days prior to the start of construction activities within the riverine/ valley oak riparian forest and woodland, freshwater pond, wetland/wet meadow, basin, or the valley oak woodland forest habitat within 330 feet of the creeks onsite, a qualified biologist (someone who is able to identify this species) will conduct a pre-construction survey for northwestern pond turtle within the site and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion*.[29] If no northwestern pond turtles are observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the surveys result in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own and the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual.	Within seven (7) days prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-29	(***Monitor***): If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities until the individual(s) have left the site.	Upon discovery of northwestern pond turtle	Daily during all vegetation clearing and ground disturbing activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-30	(***Formal Consultation***): Should northwestern pond turtles get listed in this area and the project needs to move an individual consultation for	When/if northwestern	During construction activities	GHCSD with assistance of a qualified	Report	

[29] (United States Geological Survey, 2006)

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	protection plans and/or relocation plans with the appropriate agency will be completed to avoid take.	pond turtles get listed		biological subconsultant		
Project-Related Mortality and/or Disturbance of Maternity Roosting Bats and Special Status Bats						
BIO-31	(***Pre-Construction Surveys***): A pre-construction survey will be performed if construction activities fall between March 1 and September 30 (bat maternity season) to identify active bat roost locations in trees within 100 feet of the site prior to the start of construction. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations within seven days prior to construction.	Within seven (7) days prior to the start of construction activities	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-32	(***Establish Buffers***): On discovery of any active maternity season bat roosts, a qualified biologist will determine appropriate construction setback distances (buffer zones) based on the biology of the species, conditions of the roost(s), and the level of project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or within 100 feet of the roost.	Upon discovery of any active maternity season bat roosts	Daily during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-33	(***Passive Relocation***): On discovery of roosting bats outside of the bat maternity season (March 1 through September 30) and they cannot be avoided, the bats may be excluded from their roost after leaving for the night (i.e., one-way exclusion devices or other devices). Scopes should be used to survey sections of the roost after the bats have left to check no more individuals remain prior to exclusion. Following completion of passive relocation, a report will be prepared that documents the methods and results of these efforts.	Upon discovery of roosting bats outside of bat maternity season (March 1 through September 30) and	Daily during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
Project-Related Mortality and/or Disturbance to Tehachapi Pocket Mouse						
BIO-34	(***Pre-construction Survey***): A qualified biologist will conduct a pre-construction survey of suitable habitats within the site within 15 days prior to vegetation clearing or ground disturbing activities. Goals of this survey include a search for potential burrows within the site for Tehachapi pocket mouse. Environmentally sensitive areas will be flagged	Within 15 days prior to the start of construction activities	Once, as determined by qualified biologist prior to	GHCSD with assistance of a qualified biological subconsultant	Report	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
	for avoidance. If no individuals or suitable habitat is observed, no further mitigation is required.		construction activities			
BIO-35	(***Den Avoidance***): If a potential Tehachapi pocket mice are burrowing on or within 50 feet of the project site, the project proponent will avoid the burrow by a minimum 50-foot buffer.	Upon discovery of potential Tehachapi pocket mice	Daily during construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-36	(***Camera Station***): If burrows with dimensions suitable for Tehachapi pocket mice are detected during pre-construction surveys and cannot be avoided through disturbance-free buffer areas, each potential burrow will be monitored with remote camera stations for a period of three consecutive nights. If there is no activity at the burrows, they can be deemed "inactive" or "unoccupied" and closed or excavated within 24 hours.	During pre-construction surveys	Once, as determined by qualified biologist prior to construction activities	GHCSD with assistance of a qualified biological subconsultant	Report	
BIO-37	(***Trapping/Formal Consultation***): If potential Tehachapi pocket mice burrows are detected within 25 feet of a project site, trapping, according to the USFW Survey Protocol for determining the *Presence of San Joaquin Kangaroo Rats* (United States Fish and Wildlife Service, 2013), will be conducted to determine if Tehachapi pocket mouse are present. The biologist must possess the required collecting/handling permits. If this species is captured and cannot be avoided within the project area, the biologist will stop work and contact CDFW for guidance on how to proceed and avoid take.	Upon discovery of potential Tehachapi pocket mice burrows within 25 feet of a project site	Daily, during construction activities	GHCSD	Report	
Project-Related Impacts to Regulated Waters, Wetlands, and Water Quality						
BIO-38	(***Permits***): If the project intends to impact jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with state and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation.	During construction activities	Daily, during construction activities	GHCSD	Report	
Project-Related Impacts to Riparian Habitat and Natural Communities of Special Concern						
BIO-39	(***Avoidance***): The project will avoid areas of valley oak woodland and forest and valley oak riparian forest and woodland, when possible. If work occurs in these habitats oak tree removal will be avoided, and oak trees will be avoided by a minimum 90-foot buffer from the dripline, to avoid damaging their roots.	During construction activities	Daily, during construction activities	GHCSD	Report	

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
BIO-40	(***Revegetation Plan***): If tree removal within these natural communities or ground disturbance within 90 feet of oak trees cannot be avoided a revegetation plan will be prepared for approval by CDFW and implemented after project completion.	During construction activities	During construction activities	GHCSD	Report	
Project-Related Impacts to Wildlife Movement Corridors and Native Wildlife Nursery Sites						
BIO-41	(***Operational Hours***): When possible, construction activities within Tehachapi Creek and Brite Creek in the riverine/valley oak riparian forest and woodland habitat should be limited to a half hour after sunrise through a half hour before sunset to reduce potential impacts to wildlife movement corridors.	During construction activities	Daily, during construction activities	GHCSD	Report	
BIO-42	(***Wildlife Access***): Access within these areas should not be blocked outside of construction hours or during overnight hours or weekends. If construction must block both sides of a wildlife access route, an alternative route through the construction area should be identified by a qualified biologist and maintained throughout the construction schedule timeframe.	During construction activities	Daily, during construction activities	GHCSD	Report	
Cultural Resources						
CUL-1	(***Archaeological Remains***) Should archeological remains or artifacts be unearthed during any stage of project activities, work in the area of the discovery shall cease until the area is evaluated by a qualified archaeologist. If mitigation is warranted, the project proponent shall abide by recommendations of the archaeologist.	Upon discovery of human remains	Daily, during construction activities	GHCSD	Report	
CUL-2	(***Human Remains***) In the event that human remains are discovered on the Project site, the Kern County Coroner must be notified of that discovery (Health and Safety Code Section 7050.5) and all activities in the immediate area if the find or in any nearby area reasonably suspected of overlie adjacent human remains must cease until appropriate and lawful measures have been implemented. If the Coroner determines that the remains are not recent, but rather of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours to permit the NAHC to determine the most likely descendent of the deceased Native American.	Upon discovery of human remains	Daily, during construction activities	GHCSD	Report	
Greenhouse Gas Emissions						
	None					

Mitigation, Monitoring, and Reporting Program						
Item	Mitigation Measure	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
Noise						
NOI-1	The District shall ensure the construction contractor implement the following construction noise reducing measures: • The construction contractor shall ensure that all noise producing construction activities, including warming-up or servicing equipment and any preparation for construction, shall be limited to the hours between 7:00 a.m. and 7:00 p.m. The construction contractor shall locate onsite equipment staging areas to maximize the distance between construction-related noise sources and noise sensitive receptors nearest the project site during construction. • The construction contractor shall ensure that all equipment shall have sound control devices that are no less effective than those provided on the original equipment. Further, pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof. In lieu of or in the absence of manufacturers' recommendations, the Director of Public Works shall have the authority to prescribe such means of accomplishing maximum noise attenuation as deemed to be in the public interest, considering the available technology and economic feasibility.	During construction activities	Daily during construction activities	GHCSD		
NOI-2	The District shall ensure that equipment and trucks used for construction of the Project utilize the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds).	During construction activities	Daily during construction activities	GHCSD		
Tribal Cultural Resources						
See **CUL-1** and **CUL-2** in Section 4.5.3.						

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APPENDICES

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Nature Park Master Plan - Construction Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Nature Park Master Plan - Construction
Construction Start Date	1/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	6.30
Precipitation (days)	24.6
Location	35.148589573425255, -118.49452767764528
County	Kern-Mojave Desert
City	Unincorporated
Air District	Kern County APCD
Air Basin	Mojave Desert
TAZ	2908
EDFZ	9
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	9.30	1000sqft	0.21	9,300	0.00	—	—	—
Library	19.0	1000sqft	0.44	19,000	0.00	—	—	—

Automobile Care Center	9.50	1000sqft	0.22	9,500	0.00	—	—	—
Parking Lot	2.00	Acre	2.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.25	10.3	12.5	0.02	0.36	0.15	0.51	0.33	0.04	0.37	—	2,460	2,460	0.10	0.04	0.78	2,476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	93.8	13.1	15.1	0.03	0.58	7.16	7.74	0.53	3.44	3.98	—	2,772	2,772	0.11	0.04	0.02	2,782
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.57	6.78	8.16	0.02	0.24	0.22	0.47	0.22	0.08	0.30	—	1,598	1,598	0.06	0.03	0.21	1,607
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.47	1.24	1.49	< 0.005	0.04	0.04	0.08	0.04	0.01	0.06	—	265	265	0.01	< 0.005	0.04	266

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.25	10.3	12.5	0.02	0.36	0.15	0.51	0.33	0.04	0.37	—	2,460	2,460	0.10	0.04	0.78	2,476
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.47	13.1	15.1	0.03	0.58	7.16	7.74	0.53	3.44	3.98	—	2,772	2,772	0.11	0.04	0.02	2,782
2027	93.8	5.78	8.72	0.01	0.23	0.12	0.35	0.21	0.03	0.24	—	1,354	1,354	0.05	0.02	0.01	1,360
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.83	6.78	8.16	0.02	0.24	0.22	0.47	0.22	0.08	0.30	—	1,598	1,598	0.06	0.03	0.21	1,607
2027	2.57	0.05	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.55	9.55	< 0.005	< 0.005	< 0.005	9.59
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.15	1.24	1.49	< 0.005	0.04	0.04	0.08	0.04	0.01	0.06	—	265	265	0.01	< 0.005	0.04	266
2027	0.47	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.58	1.58	< 0.005	< 0.005	< 0.005	1.59

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	12.9	14.6	0.02	0.51	—	0.51	0.47	—	0.47	—	2,494	2,494	0.10	0.02	—	2,503

Demolition	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.5	20.5	< 0.005	< 0.005	—	20.6
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.39	3.39	< 0.005	< 0.005	—	3.41
Demolition	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.6	93.6	< 0.005	< 0.005	0.01	94.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.2	67.2	< 0.005	0.01	< 0.005	70.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.79	0.79	< 0.005	< 0.005	< 0.005	0.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.84	10.8	0.03	0.42	—	0.42	0.39	—	0.39	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.3	22.3	< 0.005	< 0.005	—	22.4
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.70	3.70	< 0.005	< 0.005	—	3.71
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.28	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.1	56.1	< 0.005	< 0.005	0.01	56.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	12.9	14.0	0.02	0.58	—	0.58	0.53	—	0.53	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.4	40.4	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.37	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	74.9	74.9	< 0.005	< 0.005	0.01	75.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.1	11.8	0.02	0.36	—	0.36	0.33	—	0.33	—	2,201	2,201	0.09	0.02	—	2,208

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.09	7.09	0.01	0.22	—	0.22	0.20	—	0.20	—	1,327	1,327	0.05	0.01	—	1,331
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.11	1.29	< 0.005	0.04	—	0.04	0.04	—	0.04	—	220	220	0.01	< 0.005	—	220
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.72	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	118	118	0.01	< 0.005	0.43	120
Vendor	0.01	0.17	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	141	141	< 0.005	0.02	0.35	148
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.52	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	105	105	< 0.005	< 0.005	0.01	106
Vendor	0.01	0.18	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	141	141	< 0.005	0.02	0.01	147
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.35	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	65.0	65.0	< 0.005	< 0.005	0.11	66.0
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	85.1	85.1	< 0.005	0.01	0.09	88.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.01	14.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	5.88	8.19	0.01	0.25	—	0.25	0.23	—	0.23	—	1,244	1,244	0.05	0.01	—	1,248
Paving	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.6	31.6	< 0.005	< 0.005	—	31.7
Paving	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.24	5.24	< 0.005	< 0.005	—	5.26
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.56	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.94	2.94	< 0.005	< 0.005	0.01	2.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	5.74	8.20	0.01	0.23	—	0.23	0.21	—	0.21	—	1,244	1,244	0.05	0.01	—	1,248

Paving	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.87	4.87	< 0.005	< 0.005	—	4.89
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.01	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	93.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	2.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61

Architect Coatings	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.5	20.5	< 0.005	< 0.005	< 0.005	20.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	1/5/2026	5.00	3.00	—
Site Preparation	Site Preparation	1/30/2026	2/3/2026	5.00	3.00	—
Grading	Grading	2/4/2026	2/12/2026	5.00	6.00	—
Building Construction	Building Construction	2/13/2026	12/18/2026	5.00	220	—
Paving	Paving	12/19/2026	1/2/2027	5.00	10.0	—
Architectural Coating	Architectural Coating	1/3/2027	1/17/2027	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Tractors/Loaders/Back	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	11.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.37	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	11.0	LDA,LDT1,LDT2
Grading	Vendor	—	7.37	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	14.0	11.0	LDA,LDT1,LDT2
Building Construction	Vendor	6.20	7.37	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.37	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.80	11.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.37	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Demolition	—	—	—	—
Demolition	Worker	12.5	11.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.37	HHDT,MHDT
Demolition	Hauling	1.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	56,700	18,900	5,227

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	10.0	—
Site Preparation	—	—	4.50	0.00	—
Grading	—	—	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	2.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Office Building	0.00	0%
Library	0.00	0%
Automobile Care Center	0.00	0%
Parking Lot	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	30.5	annual days of extreme heat
Extreme Precipitation	1.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	12.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	91.1
AQ-PM	4.90
AQ-DPM	37.2
Drinking Water	67.0
Lead Risk Housing	18.5
Pesticides	5.59
Toxic Releases	18.2
Traffic	12.0
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00

Haz Waste Facilities/Generators	69.4
Impaired Water Bodies	0.00
Solid Waste	22.1
Sensitive Population	—
Asthma	71.7
Cardio-vascular	87.0
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	43.1
Housing	54.6
Linguistic	18.1
Poverty	65.8
Unemployment	37.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	38.86821506
Employed	61.27293725
Median HI	40.75452329
Education	—
Bachelor's or higher	30.92518927
High school enrollment	100
Preschool enrollment	22.25073784
Transportation	—
Auto Access	77.83908636
Active commuting	8.045682022

Social	—
2-parent households	8.789939689
Voting	69.34428333
Neighborhood	—
Alcohol availability	74.34877454
Park access	26.78044399
Retail density	23.17464391
Supermarket access	15.9373797
Tree canopy	47.29885795
Housing	—
Homeownership	48.33825228
Housing habitability	37.67483639
Low-inc homeowner severe housing cost burden	59.19414859
Low-inc renter severe housing cost burden	28.33311947
Uncrowded housing	61.41408957
Health Outcomes	—
Insured adults	61.15744899
Arthritis	0.0
Asthma ER Admissions	43.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	35.8
Cognitively Disabled	33.5
Physically Disabled	25.6

Heart Attack ER Admissions	2.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	1.9
SLR Inundation Area	0.0
Children	37.8
Elderly	53.1
English Speaking	59.8
Foreign-born	8.8
Outdoor Workers	60.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	87.8
Traffic Density	18.0
Traffic Access	0.0
Other Indices	—
Hardship	47.7
Other Decision Support	—
2016 Voting	64.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	33.0
Healthy Places Index Score for Project Location (b)	40.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Demolition reduced to 3 days due to minimal work (removal of foundations)

Nature Park Master Plan - Operations Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Nature Park Master Plan - Operations
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	6.30
Precipitation (days)	24.6
Location	35.148589573425255, -118.49452767764528
County	Kern-Mojave Desert
City	Unincorporated
Air District	Kern County APCD
Air Basin	Mojave Desert
TAZ	2908
EDFZ	9
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	9.30	1000sqft	0.21	9,300	0.00	—	—	—
Library	19.0	1000sqft	0.44	19,000	0.00	—	—	—

City Park	177	Acre	177	0.00	131,551	516,622	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.2	6.23	41.4	0.07	0.11	5.48	5.59	0.10	1.39	1.50	26.6	8,175	8,201	3.19	0.49	24.6	8,453
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.70	6.70	36.5	0.07	0.11	5.48	5.59	0.10	1.39	1.50	26.6	7,659	7,686	3.24	0.51	0.73	7,920
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.03	5.41	31.0	0.06	0.09	4.27	4.36	0.09	1.09	1.17	26.6	6,326	6,352	3.14	0.41	8.47	6,562
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.46	0.99	5.66	0.01	0.02	0.78	0.79	0.02	0.20	0.21	4.40	1,047	1,052	0.52	0.07	1.40	1,086

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	10.2	5.90	39.9	0.07	0.08	5.48	5.56	0.08	1.39	1.47	—	7,362	7,362	0.44	0.48	24.5	7,540
Area	1.06	0.01	1.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.06	5.06	< 0.005	< 0.005	—	5.08
Energy	0.02	0.32	0.27	< 0.005	0.02	—	0.02	0.02	—	0.02	—	737	737	0.07	< 0.005	—	740
Water	—	—	—	—	—	—	—	—	—	—	4.31	70.5	74.8	0.45	0.01	—	89.4
Waste	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	78.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	11.2	6.23	41.4	0.07	0.11	5.48	5.59	0.10	1.39	1.50	26.6	8,175	8,201	3.19	0.49	24.6	8,453
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.82	6.38	36.2	0.07	0.08	5.48	5.56	0.08	1.39	1.47	—	6,852	6,852	0.50	0.50	0.64	7,013
Area	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.32	0.27	< 0.005	0.02	—	0.02	0.02	—	0.02	—	737	737	0.07	< 0.005	—	740
Water	—	—	—	—	—	—	—	—	—	—	4.31	70.5	74.8	0.45	0.01	—	89.4
Waste	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	78.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	9.70	6.70	36.5	0.07	0.11	5.48	5.59	0.10	1.39	1.50	26.6	7,659	7,686	3.24	0.51	0.73	7,920
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.05	5.08	30.2	0.05	0.07	4.27	4.33	0.06	1.09	1.15	—	5,515	5,515	0.40	0.39	8.38	5,651
Area	0.96	0.01	0.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.50	2.50	< 0.005	< 0.005	—	2.51
Energy	0.02	0.32	0.27	< 0.005	0.02	—	0.02	0.02	—	0.02	—	737	737	0.07	< 0.005	—	740
Water	—	—	—	—	—	—	—	—	—	—	4.31	70.5	74.8	0.45	0.01	—	89.4
Waste	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	78.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Total	8.03	5.41	31.0	0.06	0.09	4.27	4.36	0.09	1.09	1.17	26.6	6,326	6,352	3.14	0.41	8.47	6,562
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.29	0.93	5.50	0.01	0.01	0.78	0.79	0.01	0.20	0.21	—	913	913	0.07	0.07	1.39	936
Area	0.18	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.41	0.41	< 0.005	< 0.005	—	0.41

Energy	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	122	122	0.01	< 0.005	—	123
Water	—	—	—	—	—	—	—	—	—	—	0.71	11.7	12.4	0.07	< 0.005	—	14.8
Waste	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	1.46	0.99	5.66	0.01	0.02	0.78	0.79	0.02	0.20	0.21	4.40	1,047	1,052	0.52	0.07	1.40	1,086

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.46	0.27	1.81	< 0.005	< 0.005	0.25	0.25	< 0.005	0.06	0.07	—	333	333	0.02	0.02	1.11	342
Library	7.74	4.49	30.3	0.05	0.06	4.17	4.23	0.06	1.06	1.12	—	5,602	5,602	0.34	0.36	18.7	5,738
City Park	1.97	1.14	7.72	0.01	0.02	1.06	1.08	0.02	0.27	0.29	—	1,426	1,426	0.09	0.09	4.75	1,461
Total	10.2	5.90	39.9	0.07	0.08	5.48	5.56	0.08	1.39	1.47	—	7,362	7,362	0.44	0.48	24.5	7,540
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.40	0.29	1.64	< 0.005	< 0.005	0.25	0.25	< 0.005	0.06	0.07	—	310	310	0.02	0.02	0.03	318
Library	6.71	4.86	27.6	0.05	0.06	4.17	4.23	0.06	1.06	1.12	—	5,214	5,214	0.38	0.38	0.48	5,336
City Park	1.71	1.24	7.02	0.01	0.02	1.06	1.08	0.02	0.27	0.29	—	1,327	1,327	0.10	0.10	0.12	1,359
Total	8.82	6.38	36.2	0.07	0.08	5.48	5.56	0.08	1.39	1.47	—	6,852	6,852	0.50	0.50	0.64	7,013

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.06	0.04	0.24	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	39.6	39.6	< 0.005	< 0.005	0.06	40.6
Library	1.07	0.77	4.56	0.01	0.01	0.64	0.65	0.01	0.16	0.17	—	756	756	0.05	0.05	1.15	775
City Park	0.17	0.12	0.71	< 0.005	< 0.005	0.10	0.10	< 0.005	0.03	0.03	—	117	117	0.01	0.01	0.18	120
Total	1.29	0.93	5.50	0.01	0.01	0.78	0.79	0.01	0.20	0.21	—	913	913	0.07	0.07	1.39	936

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	170	170	0.02	< 0.005	—	171
Library	—	—	—	—	—	—	—	—	—	—	—	184	184	0.02	< 0.005	—	185
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	354	354	0.03	< 0.005	—	356
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	170	170	0.02	< 0.005	—	171
Library	—	—	—	—	—	—	—	—	—	—	—	184	184	0.02	< 0.005	—	185
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	354	354	0.03	< 0.005	—	356

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	28.2	28.2	< 0.005	< 0.005	—	28.3
Library	—	—	—	—	—	—	—	—	—	—	—	30.4	30.4	< 0.005	< 0.005	—	30.6
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	58.6	58.6	0.01	< 0.005	—	58.9

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	110	110	0.01	< 0.005	—	110
Library	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	274	274	0.02	< 0.005	—	274
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.32	0.27	< 0.005	0.02	—	0.02	0.02	—	0.02	—	383	383	0.03	< 0.005	—	384
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	110	110	0.01	< 0.005	—	110
Library	0.01	0.23	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	274	274	0.02	< 0.005	—	274
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.32	0.27	< 0.005	0.02	—	0.02	0.02	—	0.02	—	383	383	0.03	< 0.005	—	384
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.1	18.1	< 0.005	< 0.005	—	18.2
Library	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.3	45.3	< 0.005	< 0.005	—	45.4
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.5	63.5	0.01	< 0.005	—	63.6

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.20	0.01	1.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.06	5.06	< 0.005	< 0.005	—	5.08
Total	1.06	0.01	1.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.06	5.06	< 0.005	< 0.005	—	5.08
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.41	0.41	< 0.005	< 0.005	—	0.41
Total	0.18	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.41	0.41	< 0.005	< 0.005	—	0.41

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	3.17	9.03	12.2	0.33	0.01	—	22.7
Library	—	—	—	—	—	—	—	—	—	—	1.14	3.25	4.39	0.12	< 0.005	—	8.15
City Park	—	—	—	—	—	—	—	—	—	—	0.00	58.2	58.2	0.01	< 0.005	—	58.6
Total	—	—	—	—	—	—	—	—	—	—	4.31	70.5	74.8	0.45	0.01	—	89.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	3.17	9.03	12.2	0.33	0.01	—	22.7
Library	—	—	—	—	—	—	—	—	—	—	1.14	3.25	4.39	0.12	< 0.005	—	8.15
City Park	—	—	—	—	—	—	—	—	—	—	0.00	58.2	58.2	0.01	< 0.005	—	58.6
Total	—	—	—	—	—	—	—	—	—	—	4.31	70.5	74.8	0.45	0.01	—	89.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.52	1.49	2.02	0.05	< 0.005	—	3.75
Library	—	—	—	—	—	—	—	—	—	—	0.19	0.54	0.73	0.02	< 0.005	—	1.35
City Park	—	—	—	—	—	—	—	—	—	—	0.00	9.64	9.64	< 0.005	< 0.005	—	9.70
Total	—	—	—	—	—	—	—	—	—	—	0.71	11.7	12.4	0.07	< 0.005	—	14.8

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	4.66	0.00	4.66	0.47	0.00	—	16.3
Library	—	—	—	—	—	—	—	—	—	—	9.43	0.00	9.43	0.94	0.00	—	33.0
City Park	—	—	—	—	—	—	—	—	—	—	8.20	0.00	8.20	0.82	0.00	—	28.7
Total	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	78.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	4.66	0.00	4.66	0.47	0.00	—	16.3
Library	—	—	—	—	—	—	—	—	—	—	9.43	0.00	9.43	0.94	0.00	—	33.0
City Park	—	—	—	—	—	—	—	—	—	—	8.20	0.00	8.20	0.82	0.00	—	28.7
Total	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	78.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.77	0.00	0.77	0.08	0.00	—	2.70
Library	—	—	—	—	—	—	—	—	—	—	1.56	0.00	1.56	0.16	0.00	—	5.46
City Park	—	—	—	—	—	—	—	—	—	—	1.36	0.00	1.36	0.14	0.00	—	4.75
Total	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	90.6	20.6	6.51	25,027	348	78.9	25.0	96,087
Library	1,369	1,522	800	477,950	5,256	5,842	3,070	1,835,003
City Park	138	347	387	74,254	530	1,331	1,487	285,084

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

0	0.00	42,450	14,150	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	179,482	346	0.0330	0.0040	341,773
Library	193,598	346	0.0330	0.0040	854,113
City Park	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	1,652,924	0.00
Library	594,489	0.00
City Park	0.00	14,484,700

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

General Office Building	8.65	—
Library	17.5	—
City Park	15.2	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Library	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Library	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Library	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Library	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	30.5	annual days of extreme heat
Extreme Precipitation	1.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	12.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	91.1

AQ-PM	4.90
AQ-DPM	37.2
Drinking Water	67.0
Lead Risk Housing	18.5
Pesticides	5.59
Toxic Releases	18.2
Traffic	12.0
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	69.4
Impaired Water Bodies	0.00
Solid Waste	22.1
Sensitive Population	—
Asthma	71.7
Cardio-vascular	87.0
Low Birth Weights	26.9
Socioeconomic Factor Indicators	—
Education	43.1
Housing	54.6
Linguistic	18.1
Poverty	65.8
Unemployment	37.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	38.86821506
Employed	61.27293725
Median HI	40.75452329
Education	—
Bachelor's or higher	30.92518927
High school enrollment	100
Preschool enrollment	22.25073784
Transportation	—
Auto Access	77.83908636
Active commuting	8.045682022
Social	—
2-parent households	8.789939689
Voting	69.34428333
Neighborhood	—
Alcohol availability	74.34877454
Park access	26.78044399
Retail density	23.17464391
Supermarket access	15.9373797
Tree canopy	47.29885795
Housing	—
Homeownership	48.33825228
Housing habitability	37.67483639
Low-inc homeowner severe housing cost burden	59.19414859
Low-inc renter severe housing cost burden	28.33311947
Uncrowded housing	61.41408957
Health Outcomes	—
Insured adults	61.15744899
Arthritis	0.0

Asthma ER Admissions	43.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	35.8
Cognitively Disabled	33.5
Physically Disabled	25.6
Heart Attack ER Admissions	2.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	1.9
SLR Inundation Area	0.0
Children	37.8
Elderly	53.1
English Speaking	59.8
Foreign-born	8.8

Outdoor Workers	60.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	87.8
Traffic Density	18.0
Traffic Access	0.0
Other Indices	—
Hardship	47.7
Other Decision Support	—
2016 Voting	64.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	33.0
Healthy Places Index Score for Project Location (b)	40.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Demolition reduced to 3 days due to minimal work (removal of foundations)
Land Use	Landscape areas adjusted per master plan

Appendix B: Biological Resources Evaluation

GOLDEN HILLS COMMUNITY SERVICES DISTRICT

NATURE PARK MASTER PLAN PROJECT BIOLOGICAL EVALUATION

KERN COUNTY
JULY 2025

PREPARED FOR:
Golden Hills Community Services District
Kern County

PREPARED BY:
Provost & Pritchard Consulting Group
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ACRONYMS AND ABBREVIATIONS

BUOW ..... Burrowing Owl
CDFW ..... California Department of Fish and Wildlife
CEQA ..... California Environmental Quality Act
CESA ..... California Endangered Species Act
CFR ..... Code of Federal Regulations
CNDDB ..... California Natural Diversity Database
CNPS ..... California Native Plant Society
County ..... Kern County
CWA ..... Clean Water Act
EPA ..... Environmental Protection Agency
ESA ..... Endangered Species Act
°F ..... degrees Fahrenheit
FYLF ..... Foothill Yellow-legged Frog
GHCSD ..... Golden Hills Community Services District
HCP ..... Habitat Conservation Plan
IPaC ..... United States Fish and Wildlife Service's Information for Planning and Consultation system
ITP ..... Incidental Take Permit
MBTA ..... Migratory Bird Treaty Act
NCCP ..... Natural Community Conservation Plan
NEPA ..... National Environmental Policy Act
NMFS ..... National Marine Fisheries Service
NPDES ..... National Pollutant Discharge Elimination System
NRCS ..... Natural Resources Conservation Service
Project ..... Golden Hills Nature Park Master Plan Project
Provost & Pritchard ..... Provost & Pritchard Consulting Group
RWQCB ..... Regional Water Quality Control Board
SWANCC ..... Solid Waste Agency of Northern Cook County v. USACE decision
SWPPP ..... Storm Water Pollution Prevention Plan
SWRCB ..... State Water Resources Control Board
USACE ..... United States Army Corps of Engineers
USC ..... United States Code
USFWS ..... United States Fish and Wildlife Service
USGS ..... United States Geological Survey

WDR ..... Waste Discharge Requirements

WEAP ..... Worker Environmental Awareness Program

WOTUS ..... Waters of the United States

1 INTRODUCTION

This Biological Evaluation, prepared by Provost & Pritchard Consulting Group (Provost & Pritchard) in compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), includes descriptions of the biological resources present or with potential to occur within the proposed Golden Hills Community Services District (GHCSD) Nature Park Master Plan Project (or "project") site, potential project-related impacts or effects to those resources, and mitigation measures to reduce these impacts and effects to a less-than-significant level under CEQA and NEPA.

1.1 PROJECT DESCRIPTION

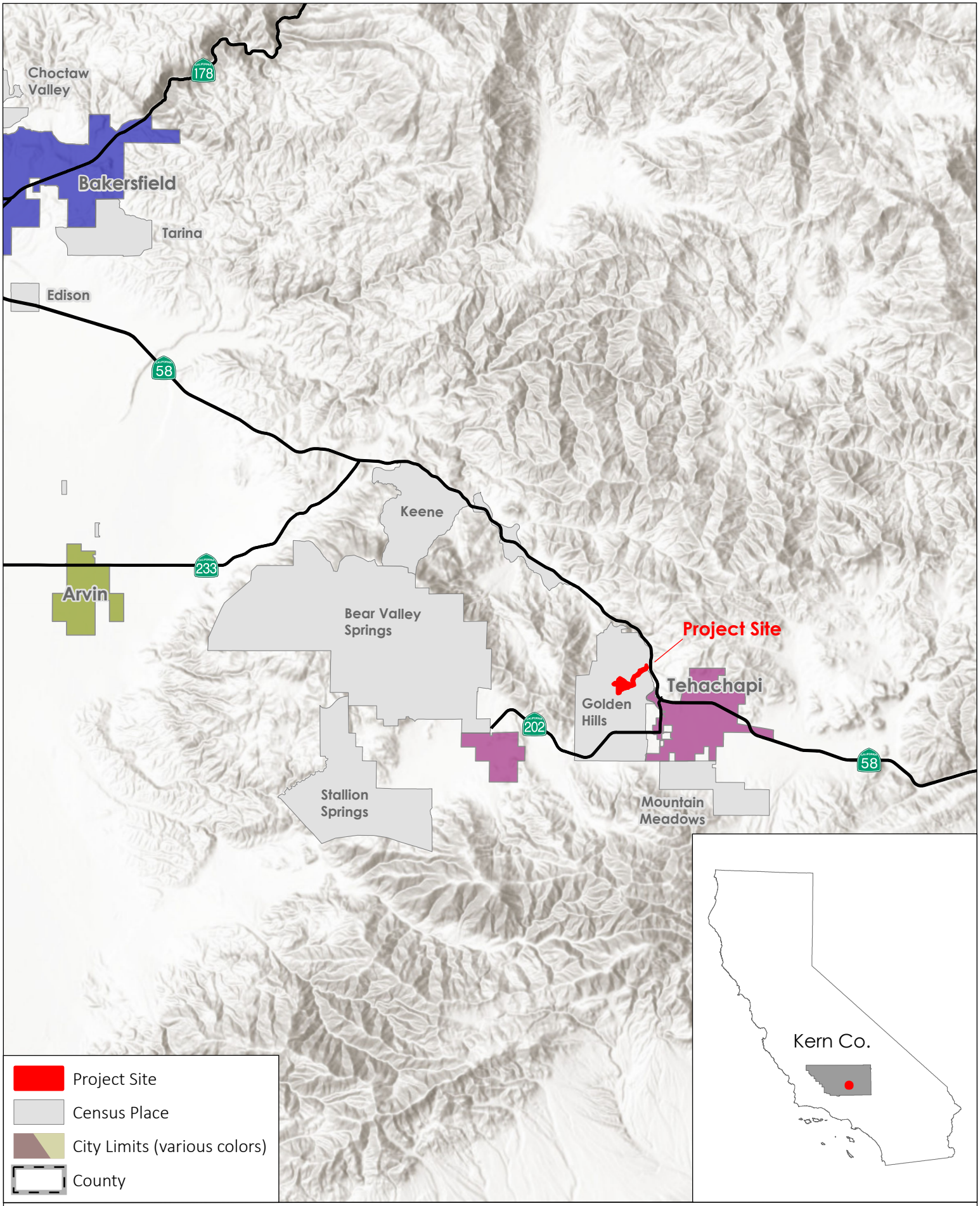
The project site (or "site") is located in the Tehachapi Mountains of the Transverse Ranges, within the census-designated place of Golden Hills, which is northwest of the City of Tehachapi and southeast of the City of Bakersfield and in the center of Kern County (County), California (see Figure 1). Within the community of Golden Hills, the project site is located north of Westwood Boulevard, west of California State Route 58, east and west of Woodford – Tehachapi Road, and south of Sycamore Drive (see Figure 2). The project site includes approximately 135 acres, which includes a paved parking lot, dirt roads/trails, Brite Creek, and various wetted meadow areas. Surrounding lands include natural landscapes with sparse residential housing and infrastructure.

GHCSD proposes to adopt and carry out the Nature Park Master Plan, which seeks to redevelop an existing golf course with a new community center, District office, and outdoor recreational facilities. Recreational areas will be built out in about five phases, with each phase described below:

- Phase 1
    - Approximately 2-acre Passive Area Parking Lot and approximately 5,000 square foot Pavilion, located at the northeast corner of Westwood Boulevard and Woodford-Tehachapi Road.
    - Approximately 2 miles of horse trails, connecting to the parking lot and through the Nature Park property.
- Phase 2
    - Approximately 5,600 square foot pavilion near Bald Mountain Drive
- Phase 3
    - Community Center and District Office
    - 0.67-acre Dog Park
    - Two multi-use courts
    - 2,500 square foot pavilion
    - 3,000 square foot playground area
- Phase 4
    - Two multi-use fields on approximately 8.1 acres
- Phase 5
    - Access roads connecting the passive area parking lot from Phase 1 to 3

1.2 REPORT OBJECTIVES

Construction activities such as those proposed by the project could potentially damage biological resources or habitats that are critical for sensitive plant and wildlife species. In cases such as these, development may be regulated by state or federal agencies, and/or addressed by local regulatory agencies.



Regional Vicinity Map

Golden Hills CSD - Nature Park Master Plan

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Fig. 1 Page 1-2



0 500 1,000
Feet

Aerial Map

Golden Hills CSD - Nature Park Master Plan

PROVOST& PRITCHARD

Fig. 2 Page 1-3

This report addresses issues related to the following:

- The presence of sensitive biological resources onsite, or with the potential to occur on the site.
- The federal, state, and local regulations regarding these resources.
- Mitigation measures that may be required to reduce the magnitude of anticipated impacts and/or comply with permit requirements of state and federal resource agencies.

Therefore, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources.
- Make reasonable inferences about the biological resources that could occur on the site based on habitat suitability and the proximity of the site to a species' known range.
- Summarize all state and federal natural resource protection laws that may be relevant to implementation of the project.
- Identify and discuss project impacts and effects to biological resources likely to occur onsite within the context of CEQA, NEPA, and other state and federal laws.
- Identify and prescribe a set of avoidance and minimization measures that would reduce impacts to a less-than-significant level (as identified by CEQA) and avoid and minimize effects (as identified by NEPA) and are generally consistent with recommendations of the resource agencies for affected biological resources.

1.3 STUDY METHODOLOGY

A reconnaissance-level field survey of the site was conducted on August 8, 2024, by Provost & Pritchard biologists, Shaylea Stark and Kira McCall. The survey consisted of walking and driving throughout the site while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Habitats were also assessed to help with determining if they could be suitable for various rare or protected plant and animal species. Representative photographs of the site were taken and are presented in Appendix A.

Ms. Stark then utilized the results of the field survey to conduct an analysis of potential project-related impacts to biological resources based on the resources known to occur or with the potential to occur within the site. Sources of information used in preparation of this analysis included: California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB; see Appendix B for the species list) and California Wildlife Habitat Relationships database; California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; Jepson Herbarium's online database (i.e., Jepson eFlora); United States Fish and Wildlife Service's (USFWS) Environmental Conservation Online System, Information for Planning and Consultation (IPaC; see Appendix C for the species list) system, and National Wetlands Inventory; iNaturalist; NatureServe Explorer's online database; United States Department of Agriculture Natural Resources Conservation Service's (NRCS) Web Soil Survey (see Appendix D for the Web Soil Survey Report); California Herps website; and various manuals, reports, and references related to plants and animals of the Tehachapi Mountains.

The reconnaissance-level field survey, conducted on August 8, 2024, included the appropriate level of detail to assess the significance of potential impacts or effects to sensitive biological resources resulting from implementing the project. Furthermore, the field survey was sufficient to generally describe those features of the project that could be subject to the jurisdiction of federal and/or state agencies, such as the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB) and the State Water Resources Control Board (SWRCB).

One focused survey for tricolored blackbird (*Agelaius tricolor*) was conducted on May 28, 2025. The focused survey was conducted within a 200-foot buffer around Tom Sawyer Lake, using binoculars and listening for calls. The results of the focused survey can be found in Appendix F at the end of this document. No other focused surveys for special status species were conducted.

2 EXISTING CONDITIONS

2.1 REGIONAL SETTINGS

2.1.1 TOPOGRAPHY

The site is located within the southwest corner of Section 7 and Section 18, Township 32 South, Range 33 East, and the northeast corner of Section 13, Township 32 South, and Range 32 East of the *Tehachapi North* U.S. Geological Survey (USGS) 7.5-minute quadrangle and the topography of the site is rolling with elevations ranging from approximately 3,600 to 4,000 feet above mean sea level (see Figure 3).

2.1.2 CLIMATE

The site experiences warm, arid summers and cold winters. In the summer, average high temperatures range between 80- and 86-degrees Fahrenheit (°F), and rarely exceed 95 °F, and the humidity is generally low. Winter temperatures are often below 50 °F during the day and rarely exceed 55 °F. On average, the City of Tehachapi receives approximately 12 inches of precipitation in the form of rain yearly, most of which occurs between October and April, and 14 inches of precipitation in the form of snow yearly, most of which occurs between December and January (Weather Spark 2024). The project site would be expected to receive similar amounts of precipitation.

2.1.3 HYDROLOGY

The nearest surface water to the project is Brite Creek which flows through the project site. Brite Creek begins in the upland areas and is fed by stormwater or snowmelt runoff which flows through the project site and turns into Tehachapi Creek. Tehachapi Creek runs south to north, but is located entirely outside of project boundary. Tehachapi Creek then flows into Caliente Creek which continues downhill until it connects to the Arvin Edison Canal which flows into the Kern River.

2.1.4 SOILS

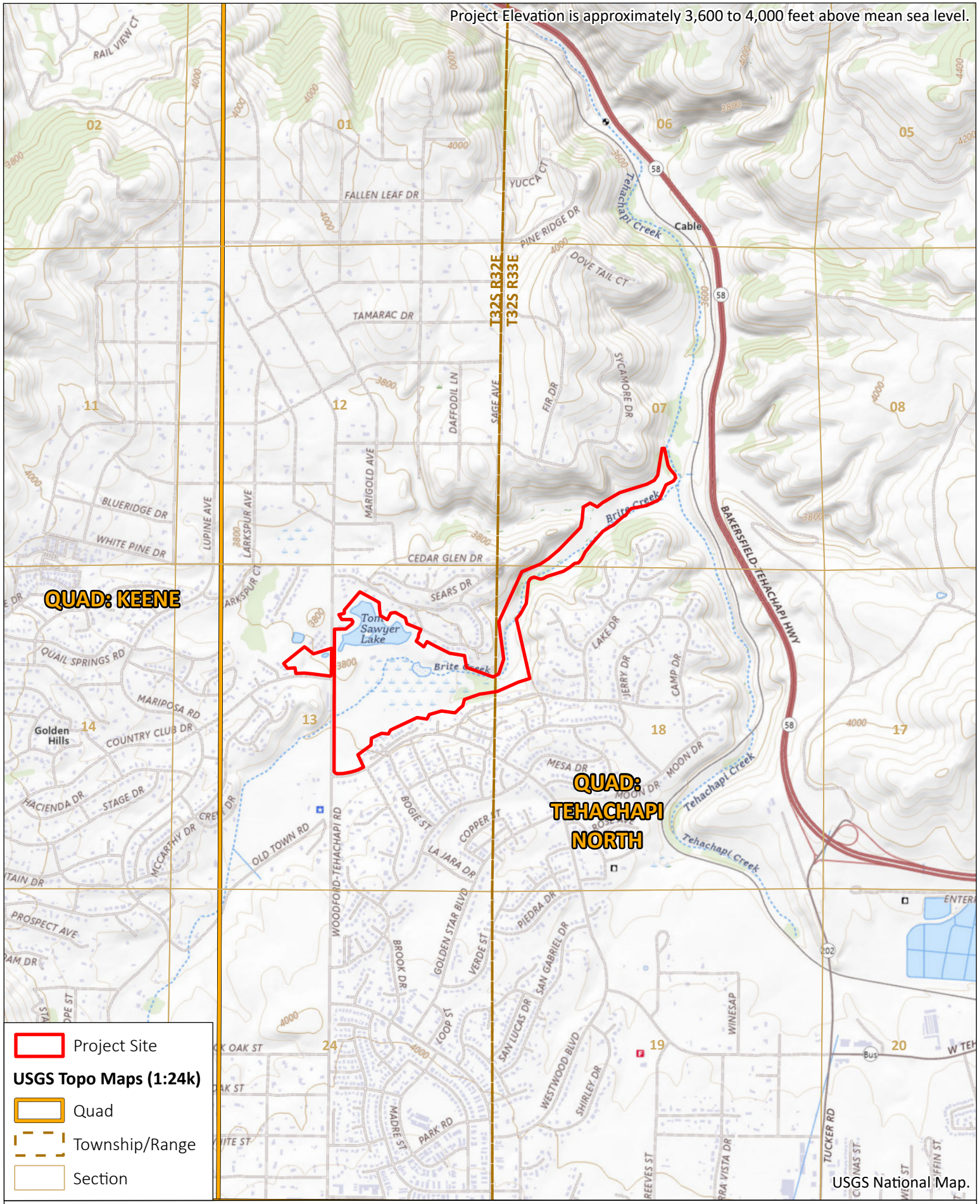
Five soil mapping units representing four soil types were identified within the site and are listed in Table 1 (see Appendix D for the Web Soil Survey Report). The soils are displayed with their core properties in the table below, according to the Major Land Resource Area of California. All four soils types are primarily used for watershed, recreation, range, and wildlife.

Table 1: List of Soils Located on the Site and Their Basic Properties

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Arujo-Friant-Tunis	9 to 15 percent slopes	3.8%	Nonhydric	Well drained	Moderately high	Medium runoff
Steuber	Sandy loam, 0 to 2 percent slopes	55.2%	Nonhydric	Well drained	Moderately rapid	Medium runoff
	Sandy loam, 2 to 5 percent slopes	14.3%	Nonhydric	Well drained	Moderately rapid	Medium runoff
Tehachapi	Sandy loam, 2 to 15 percent slopes	12.9%	Nonhydric	Well drained	Moderately rapid	Medium runoff

Soil	Soil Map Unit	Percent of Site	Hydric Soil Category	Drainage	Permeability	Runoff
Xerorthents	Loamy, very steep	5.8%	Nonhydric	Well drained	Moderately slow	Medium runoff
Water	-	8.0%	-	-	-	-

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions, hydrophytic vegetation can be supported. None of the major soil mapping units located on the site were identified as hydric.



0 750 1,500
Feet

Topographic Map

Golden Hills CSD - Nature Park Master Plan

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Fig. 3 Page 2-3

2.2 BIOTIC HABITATS

Five biotic habitats were observed within the site and included valley oak woodland and forest, riverine/valley oak riparian forest, freshwater pond, wetland/wet meadow, and ruderal (see Figure 4). These habitats and their constituent plant and animal species are described in more detail in the following sections.

2.2.1 VALLEY OAK WOODLAND AND FOREST

The site is primarily composed of valley oak woodland and forest habitat, which is dominated by widely spaced blue oak (*Quercus doulasii*) and valley oak (*Quercus lobata*) trees and annual grasslands. Additional vegetation in this habitat included shortpod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), yellow flower tarweed (*Holocarpha virgata*), great brome (*Bromus diandrus*), camphorweed (*Heterotheca subaxillaris*), wild oat (*Avena fatua*), prostrate spurge (*Euphorbia maculate*), silver lupine (*Lupinus albifrons*), doveweed (*Croton setiger*), brownplume wirelettuce (*Stephanomeria pauciflora*), kelch-grass (*Schismus barbatus*), redberry juniper (*Juniperus pinchotii*), narrowleaf milkweed (*Asclepias fascicularis*), big sagebrush (*Artemisia tridentata*), prairie tea (*Croton monanthogynus*), California brickellbush (*Brickellia californica*), yellow star thistle (*Centaurea solstitialis*), prickly lettuce (Lactuca serriola), curlycup gumweed (*Grindelia squarrosa*), sacred datura (*Datura wrightii*), rubber rabbitbrush (*Ericameria nauseosa*), Spanish clover (*Acmispon americanus*), tall annual willowherb (*Epilobium brachycarpum*), gray goldenrod (*Solidago nemoralis*), western aster (*Symphyotrichum ascendens*), stinknet (*Oncosiphon piluliferum*), tumbling saltweed (*Atriplex rosea*), common mallow (*Malva neglecta*), beardless wildrye (*Leymus triticoides*), cheatgrass (*Bromus tectorum*), desert saltgrass (*Distichlis spicata*), plumleaf crab apple (*Malus prunifolia*), peppercress (*Lepidium draba*), triangle orache (*Atriplex prostrata*), annual sunflower (*Helianthus annuus*), and chaparral yucca (*Hesperoyucca whipplei*).

The survey of this habitat resulted in the identification of numerus bird species including red-shouldered hawk (*Buteo lineatus*), oak titmouse (*Baeolophus inornatus*), acorn woodpecker (*Melanerpes formicivorus*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), Bewick's wren (*Thryomanes bewickii*), and bushtit (*Psaltriparus minimus*). California ground squirrel (*Otospermophilus beecheyi*), California mule deer (*Odocoileus hemionus*), and a western fence lizard (*Sceloporus occidentalis*) were also observed.

The valley oak woodland and forest habitat within the site provides expansive high-quality habitat to a variety of wildlife, year-round, and it is prevalent in the vicinity of the site. This habitat likely serves foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

2.2.2 RIVERINE/VALLEY OAK RIPARIAN FOREST AND WOODLAND

The riverine/valley oak riparian forest and woodland habitat includes Brite Creek and its associated riparian vegetation along the banks. Brite Creek contained ponded water in some sections but was mainly dry at the time of the biological survey. Vegetation within this habitat included curly dock (*Rumex crispus*), narrow leaf willow (*Salix exigua*), red willow (*Salix laevigata*), seep monkey flower (*Erythranthe guttata*), stinging nettle (*Urtica dioica*), California mugwort (*Artemisia douglasiana*), clasping bellflower (*Triodanis perfoliate*), woods bluegrass (*Poa nemoralis*), Fremont cottonwood (*Populus fremontii*), silverscale saltbush (*Atriplex argentea*), tall annual willowherb (*Epilobium brachycarpum*), Arroyo willow (*Salix lasiolepis*), wood bluegrass (*Poa nemoralis*), California wildrose (*Rosa californica*), watercress (*Nasturtium officinale*), greater periwinkle (*Vinca major*), annual rabbitsfoot grass, stinging nettle (*Urtica dioica*), bird's-foot trefoil (*Lotus corniculatus*), bulbous canarygrass (*Phalaris aquatica*), salt heliotrope (*Heliotropium curassavicum*), and bulbous bluegrass (*Poa bulbosa*).

The survey of the riverine/valley oak riparian forest and woodland habitat resulted in the observation of white-breasted nuthatch (*Sitta carolinensis*), California quail (*Callipepla californica*), house wren

(*Troglodytes aedon*), Cooper's hawk (*Accipiter cooperii*), yellow-rumped warbler (*Setophaga coronata*), California ground squirrel, and desert woodrat (*Neotoma lepida*) nests. Within Brite Creek, Pacific tree frog (*Pseudacris regilla*) larvae, frogs, and froglets were observed.

The riverine/valley oak riparian forest and woodland habitat within the site provides expansive high-quality habitat to a variety of wildlife, year-round. The creek would be used by various amphibian species, and the site serves foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night. The riparian trees and vegetation could provide cover for wildlife movement through the site.

2.2.3 FRESHWATER POND

Tom Sawyer Lake and Supply Lake are categorized within the freshwater pond habitat. Vegetation in this section of the site included California bulrush (*Schoenoplectus californicus*) and hardstem tule (*Schoenoplectus acutus*). The survey of this habitat did not result in any new wildlife observations.

The freshwater pond habitat within the site provides high-quality habitat to a variety of wildlife, year-round. This habitat could be used by various amphibian species, foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night. The focused survey for tricolored blackbirds within this area resulted in no observations of the species. However, nesting habitat was prevalent within the tule stands around and within Tom Sawyer Lake and was being utilized by red-winged blackbirds (*Agelaius phoeniceus*) at the time of the survey.

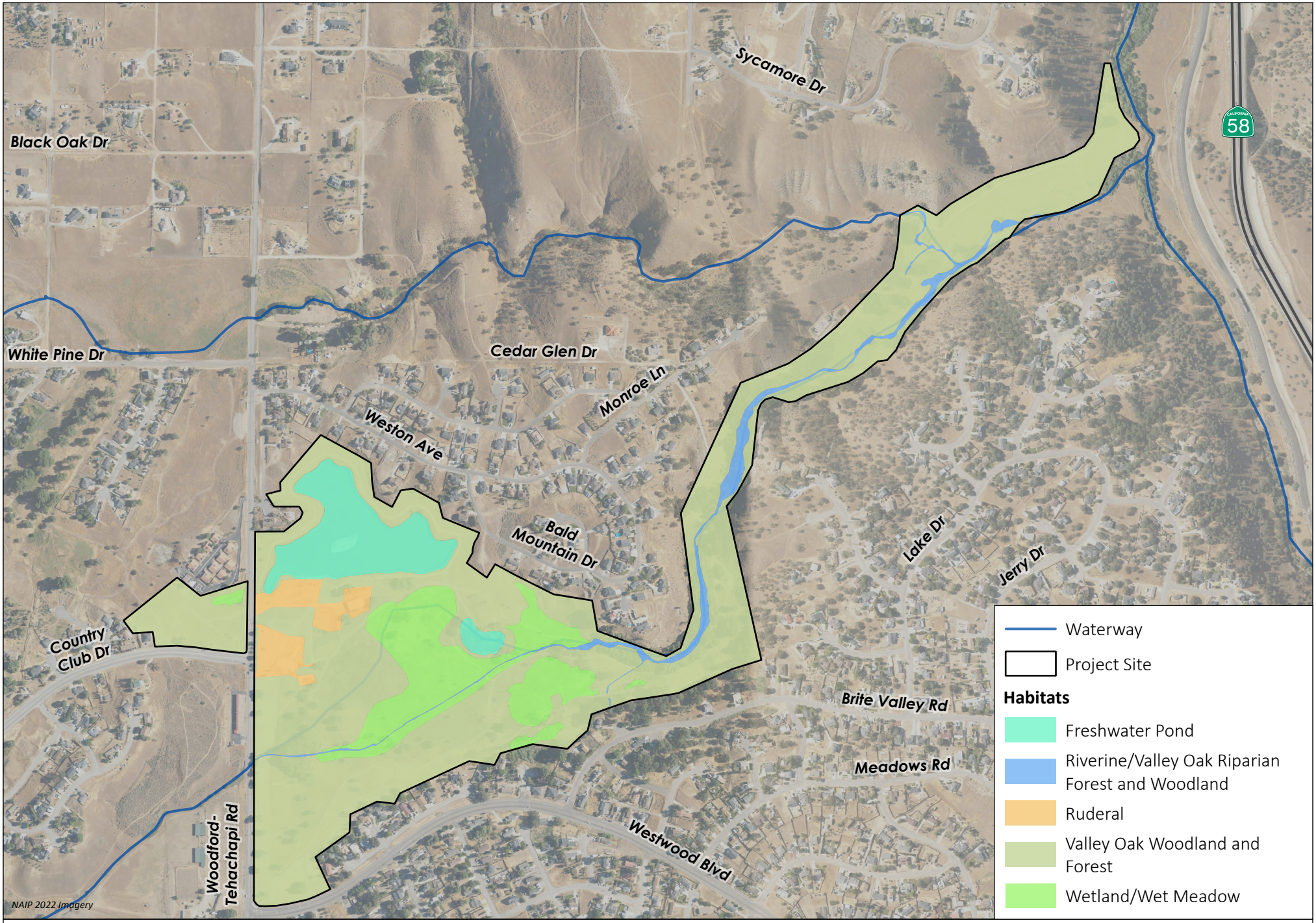
2.2.4 WETLAND/WET MEADOW

The wetland/wet meadow habitat of the site contained areas of moist soil with surrounding dirt walking trails. Vegetation in this habitat included fringed willowherb (*Epilobium ciliatum*), hardstem tule, common marigold (*Calendula officinalis*), white sagebrush (*Artemisia ludoviciana*), annual rabbitsfoot grass, narrowleaf cattail (*Typha angustifolia*), nettle-leaved goosefoot (*Chenopodiastrum murale*), yerba mansa (*Anemopsis californica*), desert saltgrass, California mugwort (*Artemisia douglasiana*), sharp club rush (*Schoenoplectus americanus*), salt heliotrope, bird's-foot trefoil (*Lotus corniculatus*), and water fern (*Azolla filiculoides*). The survey of this habitat did not result in any new wildlife observations.

The wetland/wet meadow habitat within the site provides high-quality habitat to a variety of wildlife. This habitat could be used by various amphibian species, foraging birds, including raptors, during the day, as well as bats, coyotes, and other nocturnal animals at night.

2.2.5 RUDERAL

The ruderal habitat of the site contained a paved parking lot, a facility, and hard packed dirt roads/trails throughout the site. Vegetation in this section of the site included invasive grasses and ornamental juniper trees within planters in the parking lot. The survey of this habitat did not result in any new species observations.



0 500 1,000
Feet

Habitats Map

Golden Hills CSD - Nature Park Master Plan

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Fig. 4 Page 2-6

12/6/2024 G:\Golden Hills CSD-1041\104124002-Nature Park Master Plan\400 GIS\Map\GoldenHIllsCSD_Nature_Park_Master_Plan\GoldenHIllsCSD_Nature_Park_Master_Plan.aprx

2.3 NATURAL COMMUNITIES OF SPECIAL CONCERN AND RIPARIAN HABITAT

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW has classified and mapped all natural communities in California. Just as the special status plant and animal species (see Section 3.6), these natural communities of special concern can be found within the CNDDB. While there are no recorded observations of natural community of special concern identified by the CNDDB, valley oak woodland and forest and valley oak riparian forest and woodland were observed during the field survey.

Riparian habitat is composed of plant communities that occur along the banks, and sometimes over the banks, of most waterways and is an important habitat for numerous wildlife species. CDFW has jurisdiction over most riparian habitat in California. The riverine/valley oak riparian forest and woodland habitat contained riparian habitat associated with Brite Creek and Tom Sawyer Lake. Various wetlands/ wet meadows occurred within the project site and contained riparian habitat as well.

2.4 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of "critical habitat" when it lists species as threatened or endangered. Critical habitat is a specific geographic area that contains features essential for the conservation of a threatened or endangered species, which may require special management and protection. According to the IPaC, designated critical habitat is absent from the site and vicinity.

2.5 WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation. The valley oak woodland and forest habitat of the site and surrounding areas consists of expansive open grasslands. Numerous game trails and abundant wildlife were observed during the field survey throughout the valley oak woodland and forest habitat, including mule deer. Brite Creek flowing through the riverine/ valley oak riparian forest and woodland habitat within the site could be used as a corridor for terrestrial and aquatic wildlife.

Native wildlife nursery sites are areas where a species or group of similar species raise their young in a concentrated place, such as maternity bat roosts. The valley oak woodland and forest habitat contained trees with natural cavities within the site which may support tree-roosting species of bats, like pallid bats (*Antrozous pallidus*). Brite Creek was being used as wildlife nursery site for amphibian species such as Pacific tree frogs which were observed during the survey.

2.6 SPECIAL STATUS PLANTS AND ANIMALS

California contains several rare plant and animal species. In this context, "rare" is defined as a species known to have low populations or limited distributions. Conversion of habitats to accommodate human population growth in turn reduces the already-limited suitable habitat for rare species. This results in rare and sensitive species becoming increasingly more vulnerable to extirpation. State and federal regulations have provided the CDFW and USFWS with mechanisms for conserving and protecting the diversity of plant and animal species native to California. Numerous native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Other formal designations include "candidate" for listing or "species of special concern" by CDFW. The CNPS has its list of native plants considered rare, threatened, or endangered. Collectively these animals and plants are referred to as "special status species."

A query of the CNDDB for occurrences of special status plant and animal species was conducted for the *Tehachapi North* USGS 7.5-minute quadrangle that contains the site, and for the eight surrounding USGS quadrangles: *Cummings Mountain*, *Emerald Mountain*, *Keene*, *Loraine*, *Monolith*, *Oiler Peak*, *Tehachapi Northeast*, and *Tehachapi South*. A query of the IPaC was also completed for the site. These species, and their potential to occur within the site, are listed in Table 2 and Table 3, below. Other special status species that did not show up in the CNDDB query, but have the potential to occur in the vicinity, are also included in Table 3. Species lists obtained from CNDDB and IPaC are available in Appendix B and Appendix C, respectively. All relevant sources of information, as discussed in the Study Methodology section of this report, as well as field observations, were used to determine if any special status species have the potential to occur within the site.

Table 2: List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
Aromatic canyon gooseberry (*Ribes menziesii* var. *ixoderme*)	CNPS 1B	Occurs in chaparral and cismontane woodland communities at elevations between 2,000 and 3,900 feet. Blooms in April.	**Unlikely.** The site lacked suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 10 miles north of the site in 1964.
Baja navarretia (*Navarretia peninsularis*)	CNPS 1B	Found in open, wet areas within lower montane coniferous forest, chaparral, pinyon and juniper woodland, meadows, and seeps at elevations between 4,500 and 7,600 feet. Blooms June – August.	**Absent.** The site is outside of the elevational range for this species.
Bakersfield cactus (*Opuntia basilaris* var. *treleasei*)	FE, CE, CNPS 1B	Found in coarse or cobbly well-drained granitic sand within grasslands at elevations between 350 and 500 feet. Blooms March – April.	**Absent.** The site is outside of the elevational range for this species.
Calico monkeyflower (*Diplacus pictus*)	CNPS 1B	Found in the Sierra Nevada foothills and the Tehachapi mountains in bare, sunny, shrubby areas, around granite outcrops within foothill woodland communities at elevations between 450 and 4,100 feet. Blooms March – May.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southeast of the site in 1884.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CNPS 1B	Found on alkaline and saline soils in vernal pools and playas in grassland at elevations below 4,500 feet. Blooms April – May.	**Unlikely.** The site lacked suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 0.5 miles southeast of the site in 1905 but is listed as possibly extirpated.
Grey-leaved violet (*Viola pinetorum* ssp. *grisea*)	CNPS 1B	Found in the Sierra Nevada range as well as areas of interior Southern California. Grows in subalpine forested areas, meadows, and seeps at	**Absent.** The site is outside of the elevational range for this species.

Species	Status*	Habitat	Occurrence within the Site
		elevations between 6,400 and 12,200 feet. Blooms June – July.	
Kern buckwheat (*Eriogonum kennedyi* var. *pinicola*)	CNPS 1B	Occurs within chaparral, pinyon, and juniper woodland communities. Can be found in open places on barren, clay, or gravelly soil. Grows at elevations between 5,300 and 6,200 feet. Blooms May – June.	**Absent.** The site is outside of the elevational range for this species.
Latimer's woodland-gilia (*Saltugilia latimeri*)	CNPS 1B	Found in chaparral, Mojavean desert scrub, pinyon, and juniper woodland communities on rocky or sandy substrate, and sometimes in washes. Also, can be associated with limestone. Grows at elevations between 750 and 7,200 feet. Blooms March – June.	**Unlikely.** The site is outside of the current known range of this species. The nearest recorded observation of this species within the vicinity was approximately 12 miles southeast of the site in 2014.
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found within openings of foothill woodland, often yellow-pine forest, and chaparral at elevations between 1,000 and 4,300 feet. Blooms April – May.	**Unlikely.** The site offers foothill woodland habitat and oak woodland habitat, which is often associated with this species, but the site is outside of the known spatial distribution of the species. The nearest recorded observation of this species in the vicinity was approximately 9.5 miles southwest of the site in 1935.
Mt. Pinos onion (*Allium howellii* var. *clokeyi*)	CNPS 1B	Generally found in the Transverse Ranges and Coastal Ranges growing at elevations between 4,200 and 6,100 feet. Associated with a variety of habitats including Great Basin scrub, pinyon and juniper woodlands, and meadows and seeps. Blooms May – June.	**Absent.** The site is outside of the elevational range for this species.
Pale-yellow layia (*Layia heterotricha*)	CNPS 1B	Found in the Coastal Ranges, the Transverse Ranges, and occasionally on the San Joaquin Valley floor in a variety of habitats including juniper woodlands, coastal scrublands, and foothill grasslands. Grows at elevations between 650 and 5,900 feet. Blooms April – June.	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southeast of the site in 1933.
Palmer's mariposa-lily (*Calochortus palmeri* var. *palmeri*)	CNPS 1B	Found throughout southwestern California, primarily in wetland habitats, but occasionally in non-wetland habitats, including woodlands and shrublands. Grows at elevations between	**Possible.** The site contained suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles southeast of the site in 1889.

Species	Status*	Habitat	Occurrence within the Site
		3,900 and 7,300 feet. Blooms May – July.	
Piute cypress (*Hesperocyparis nevadensis*)	CNPS 1B	Found in closed-cone coniferous forest, chaparral, cismontane woodland, pinyon, and juniper woodland habitats. Found at elevations between 2,400 and 5,900 feet.	**Unlikely.** The site is outside of the current known spatial range of this species. The nearest recorded observation of this species within the vicinity was approximately 14 miles northeast of the site in 1980.
Piute Mountains jewel flower (*Streptanthus cordatus* var. *piutensis*)	CNPS 1B	Occurs in broad-leafed upland forests, closed-cone coniferous forest, as well as pinyon and juniper woodlands. Can be found along road banks and cliffs. Grows in metamorphic, red clay soils. Occurs at elevations between 3,900 and 6,200 feet. Blooms June – July.	**Unlikely.** While there were clay soils onsite, the habitats were unsuitable for this species. The nearest recorded observation of this species within the vicinity was approximately 14.5 miles northeast of the site in 2012.
Piute Mountains navarretia (*Navarretia setiloba*)	CNPS 1B	Occurs in the Sierra Nevada foothills, San Joaquin Valley, and the Transverse Ranges in woodlands and grasslands in red, clay soils or gravelly loam at elevations between 1,600 and 6,900 feet. Blooms April – July.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 12 miles northwest of the site in 2015.
Piute Mountains triteleia (*Triteleia piutensis*)	CNPS 1B	Found in openings in pinyon and juniper woodlands on fine, volcanic soil throughout scattered boulders or heavy clay soil with volcanic hardpan at elevations between 5,100 and 5,500 feet. Blooms May – June.	**Absent.** The site is outside of the elevation range for this species.
Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*)	CNPS 2B	Occurs in Great Basin scrub, Sonoran Desert scrub, and desert dunes. Found in sandy flats and dunes and sandy areas around clay slicks w/ greasewood (*Sarcobatus)*, saltbushes (*Atriplex)*, and horsebrush (*Tetradymia)*, at elevations between 2,300 and 5,300 feet. Blooms March – August.	**Unlikely.** While there were sandy soils onsite, the habitats were unsuitable for this species. The nearest recorded observation of this species within the vicinity was approximately 4.5 miles northwest of the site in 1909.
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT, CE, CNPS 1B	Found in the San Joaquin Valley and the Sierra Nevada foothills in bare, dark, clay soils in valley and foothill grassland and cismontane woodland communities at elevations between 300 and 3,000 feet. Blooms March – May.	**Absent.** The site is below the elevation range for this species.

Species	Status*	Habitat	Occurrence within the Site
Southern Sierra monadella (*Monardella linoides ssp. anemonoides*)	CNPS 1B	Occurs in chaparral and montane forests in the southern Sierra Navada. Found at elevations between 720 and 7,850 feet. Blooms June-August.	**Unlikely.** The site lacked suitable habitat for this species. The nearest recorded observation of this species within the vicinity was approximately 2 miles south of the site in 1895.
Spanish Needle onion (*Allium shevockii*)	CNPS 1B	Found in pinyon and juniper woodlands and upper montane coniferous forests. Occurs in soil pockets on rock outcrops and talus slopes. The bulbs mostly occur on margins of outcrops at elevations between 7,215 and 11,480 feet. Blooms June-July.	**Absent.** The site is outside of the elevation range for this species.
Tehachapi monardella (*Monardella linoides* ssp. *oblonga*)	CNPS 1B	Found on dry slopes and in granitic soils within montane coniferous forest and pinyon-juniper woodland habitats at elevations between 4,700 and 8,700 feet. Blooms June – August.	**Absent.** The site is outside of the elevation range for this species.
Tejon poppy (*Eschscholzia lemmonii* ssp. *kernensis*)	CNPS 1B	Occurs in the grasslands of the southern portion of the San Joaquin Valley and the foothills of the Transverse Ranges at elevations between 650 and 3,300 feet. Blooms March – May.	**Absent.** The site is outside of the elevation range for this species.

Table 3: List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status*	Habitat	Occurrence within the Site
American badger (*Taxidea taxus*)	CSSC	Prefers drier open stages of shrub, forest, and herbaceous habitats with friable soils to burrow, but can be found within numerous habitats throughout California, including the margins of agricultural lands. Needs a sufficient prey base of burrowing rodents.	**Possible.** The site contained suitable habitat for this species to forage and den. The nearest recorded observation of this species within the vicinity was approximately 13 miles southeast of the site in 1925.
Bendire's thrasher (*Toxostoma bendirei*)	CSSC	This migratory species is found in the spring and summer in the Mojave Desert. Inhabits flat areas of Joshua tree woodland and Mojavean dessert scrub. Nests in cholla, yucca, palo verde, thorny shrubs, or small trees usually 0.5 to 20 feet above ground.	**Absent.** The site is outside of the current range for this species.
Burrowing owl (*Athene cunicularia*)	CSSC, CC	Resides in open, dry grasslands, deserts, scrublands, and other areas with low growing vegetation. Nests and roosts	**Possible.** The site contained habitat for this species to forage and burrow. The nearest recorded observation of this species within

Species	Status*	Habitat	Occurrence within the Site
		underground in existing burrows created by mammals, most often by ground squirrels, and human-made structures.	the vicinity was approximately 14 miles southeast of the site in 2009.
California condor (*Gymnogyps californianus*)	FE, CE, CFP	Typically nests in cavities in canyon or cliff faces but has also been recorded nesting in giant sequoias in Tulare County. Requires vast expanses of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages for carrion up to 100 miles from their roost/nest sites.	**Unlikely.** The site lacked suitable nesting habitat. This species could fly over or forage on the site. There are no recorded observations of this species on CNDDB within the regional vicinity of the project.
California legless lizard (*Anniella* sp.)	CSSC	Inhabits a variety of habitats which contain moist, loose soils and plant cover. Often can be found under objects such as rocks, boards, driftwood, and logs.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 0.5 mile north of the site in 1955.
Coast horned lizard (*Phrynosoma blainvillii*)	CSSC	Found in grasslands, coniferous forests, woodlands, and chaparral, primarily in open areas with patches of loose, sandy soil and low-lying vegetation in valleys, foothills, and semi-arid mountains. Frequently found near ant hills and along dirt roads in lowlands along sandy washes with scattered shrubs.	**Possible.** The site contained suitable habitat and sandy soils where this species could occur. The nearest recorded observation of this species within the vicinity was approximately 6.5 miles southeast of the site in 2010.
Crotch's bumble bee (*Bombus crotchii*)	CCE	Occurs throughout coastal California, as well as east to the Sierra Nevada-Cascade crest, and south into Mexico. Food plant genera include snapdragons, scorpionweeds, primroses, poppies, and buckwheats.	**Possible.** The valley oak woodland and forest and riverine/valley oak riparian forest and woodland habitats were suitable for foraging for this species. The valley oak woodland and forest habitat contained cavities in dead trees and small mammal burrows where this species could nest and overwinter. The nearest recorded observation of this species was on iNaturalist, 3.5 miles east of the site in 2024.
Desert tortoise (*Gopherus agassizii*)	FT, CT	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Requires friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	**Absent.** The site lacked suitable habitat for this species.
Foothill yellow-legged frog – south Sierra	FE, CE	Frequents rocky streams and rivers with rocky substrate and	**Possible.** The site contained suitable habitat along Brite Creek. The

Species	Status*	Habitat	Occurrence within the Site
Distinct Population Segment (*Rana boylii*)		open, sunny banks in forests, chaparral, and woodlands. Occasionally found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.	nearest recorded observation of this species within the vicinity was approximately 1 mile north of the site in 1959 but is listed as extirpated.
Fisher- Southern Sierra Nevada-ESU (*Pekania pannanti*)	FE, CT	Can be found in intermediate to large-tree stages of coniferous forests with high percent canopy closure, generally within the low-medium elevational areas of the southern Sierra Nevada.	**Absent.** The site is outside of the current known range for this species.
Golden eagle (*Aquila chrysaetod*)	CFP	This species typically nests on cliff ledges or large trees, rarely on the ground. They prefer an expanse of open terrain and are found over tundra, prairie, rangeland, desert, and grassland habitats.	**Unlikely.** The site lacked suitable nesting habitat. This species could fly over or forage on the site. The nearest recorded observation of this species within the vicinity was approximately 5.5 miles southeast of the site in 1949.
Le Conte's thrasher (*Toxostoma lecontei*)	CSSC	Primarily resides in desert habitats in the Mojave and Sonoran deserts, including open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub. Nests 2-8 feet above the ground in dense, spiny shrub or densely branched cacti.	**Absent.** The site lacked suitable desert habitat for this species.
Monarch butterfly (*Danaus plexippus*)	FPT	Roosts in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Larval host plants consist of milkweeds. Winter roost sites extend along the Pacific Coast from northern Mendocino to Baja California, Mexico.	**Possible.** The valley oak woodland and forest and riverine/valley oak riparian forest and woodland habitats were suitable for foraging for this species. Monarchs could travel through the site during the breeding season. While it could travel through the site, roosting habitat was absent. There are no recorded observations of this species on the CNDDB within the regional vicinity of the project.
Northern California legless lizard (*Anniella pulchra*)	CSSC	Found primarily underground, burrowing in loose, sandy soil. Forages in loose soil and leaf litter during the day. Occasionally observed on the surface at dusk and night.	**Possible.** The site contained suitable habitat and soils for this species. The nearest recorded observation of this species within the vicinity was approximately 13 miles southeast of the site in 2019.
Northwestern pond turtle (*Actinemys marmorata*)	FPT, CSSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams, and irrigation ditches with riparian vegetation. Requires adequate basking sites and sandy banks or grassy open fields to deposit eggs.	**Possible.** The site contained suitable habitat along Brite Creek and Tom Sawyer Lake. However, there are no recorded observations of this species on CNDDB within the regional vicinity of the project.

Species	Status*	Habitat	Occurrence within the Site
Pallid bat (*Antrozous pallidus*)	CSSC	Found in grasslands, chaparral, and woodlands, where it feeds on ground- and vegetation-dwelling arthropods, and occasionally takes insects in flight. Prefers to roost in rock crevices, but may also use tree cavities, caves, bridges, and other human-made structures.	**Possible.** The site contained oak trees where this species could roost, and pallid bats could forage over all habitats within the site. There are no recorded observations of this species on CNDDB within the regional vicinity of the project.
Southern California legless lizard (*Anniella stebbinsi*)	CSSC	Found in broadleaved upland forests, chaparral coastal dunes, and coastal scrub. The disjunct northern populations occur in sandy soils in the Piute and Tehachapi mountains at elevations of 1,300–2,950 feet. They prefer soils with a high moisture content.	**Unlikely.** The site is outside of the current known spatial range and elevational range for this species. The nearest recorded observation of this species within the vicinity was approximately 9.5 miles northeast of the site in 2018.
Southern rubber boa (*Charina umbratical*)	CT	Found in the vicinity of streams or wet meadows. Requires loose, moist soil for burrowing and seeks cover in rotting logs, rock outcrops, and under surface litter. Occurs in the San Bernardino and San Jacinto mountains at elevations roughly between 5,000 and 8,200 feet.	**Unlikely.** While the site contained suitable habitat, the site is below the elevational range for this species. The nearest recorded observation of this species within the vicinity was approximately 1.5 miles south of the site in 1999.
Swainson's hawk (*Buteo swainsoni*)	CT	Nests in large trees in open areas adjacent to grasslands, grain or alfalfa fields, or livestock pastures suitable for supporting rodent populations.	**Unlikely.** Suitable foraging habitats are absent from the site and vicinity, and it would be unlikely that this species would nest on or adjacent to the site. This species could fly over or forage on the site. The nearest recorded observation of this species within the vicinity was approximately 12 miles northwest of the site in 2016.
Tehachapi pocket mouse (*Perognathus alticola inexpectatus*)	CSSC	Inhabits arid annual grassland and desert shrub communities, but also found in fallow grain fields and in fields with Russian thistle. Burrows for cover and nesting and will hibernate or estivate during extreme weather. Forages on open ground and under shrubs.	**Possible.** The site contained valley oak woodland and forest habitat which was vegetated with annual grasslands and shrubs with small mammal burrows that this species could use. The nearest recorded observation of this species within the vicinity was approximately 3 miles southeast of the site in 1972.
Tehachapi slender salamander (*Batrachoseps stebbinsi*)	CT	Inhabits north-facing moist canyons and ravines in oak and mixed woodlands in arid to semi-arid locations. Found under rocks, logs, bark, and other debris in moist areas, especially in areas with a lot of leaf-litter,	**Unlikely.** The site does not overlap the locations of the currently known populations of this species. The nearest recorded observation of this species within the vicinity was approximately 1 mile north of the site in 1979.

Species	Status*	Habitat	Occurrence within the Site
		often near talus slopes. Found in scattered populations in the Caliente Creek drainage at the juncture of the Sierra Nevada and the Tehachapi Mountains, and in isolated canyons on the northern slopes of the Tehachapi Mountains from Tejon Canyon to Fort Tejon at elevations between 2,000 - 4,600 feet.	
Tricolored blackbird (*Agelaius tricolor*)	CT, CSSC	Nests colonially near fresh water in dense cattails or tules, or in thickets of riparian shrubs. Forages in grassland and cropland. Large colonies are often found foraging in dairy farm feed fields.	**Absent.** The site contained suitable habitats in the form of freshwater pond (i.e., Tom Sawyer Lake). While this species was observed in this lake in 2008, a focused survey for this species on May 28, 2025, resulted in no observations of this species during the breeding season.
Tulare grasshopper mouse (*Onychomys torridus tularensis*)	CSSC	Typically inhabits arid shrubland communities in hot, arid grassland and shrubland associations.	**Absent.** The site lacked suitable habitat for this species.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs in the Central Valley and adjacent foothills from Tehama County south through Merced and Mariposa Counties with two scattered populations in Madera and Fresno Counties. Adults are active from March to June.	**Absent.** The site is outside of the known populations of this species and no elderberry shrubs were observed during the survey.

***EXPLANATION OF OCCURRENCE DESIGNATIONS AND STATUS CODES**

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site and precluded from occurring there due to absence of suitable habitat.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CCE	California Endangered (Candidate)
FPT	Federally Threatened (Proposed)	CT	California Threatened
		CFP	California Fully Protected
		CSSC	California Species of Special Concern
		CC	California Candidate

CNPS LISTING

1B Plants rare, threatened, or endangered in California and elsewhere.

3 IMPACTS AND MITIGATION

3.1 SIGNIFICANCE CRITERIA

3.1.1 CEQA

General plans, area plans, and specific projects are subject to the provisions of CEQA. The purpose of CEQA is to assess the impacts of proposed projects on the environment prior to project implementation. Impacts to biological resources are just one type of environmental impact assessed under CEQA and vary from project to project in terms of scope and magnitude. Projects requiring removal of vegetation may result in the mortality or displacement of animals associated with this vegetation. Animals adapted to humans, roads, buildings, and pets may replace those species formerly occurring on a site. Plants and animals that are rare may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. Such impacts may be considered either "significant" or "less than significant" under CEQA. According to *CEQA Statute and Guidelines* (AEP 2023), "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (CWA) (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a "mandatory finding of significance" if the project has the potential to:

> "Substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory."

3.1.2 NEPA

Federal projects are subject to the provisions of NEPA. The purpose of NEPA is to assess the effects of a proposed action on the human environment, assess the significance of those effects, and recommend measures that if implemented would mitigate those effects. As used in NEPA, a determination that certain

effects on the human environment are "significant" requires considerations of both context and intensity (40 Code of Federal Regulations (CFR) 1508.27).

For the purposes of assessing effects of an action on biological resources, the relevant context is often local. The analysis may, however, require a comparison of the action area's biological resources with the biological resources of an entire region. Project activities must have a federal nexus and discuss federally listed species, and/or designated critical habitat that may be affected in the action area.

Federal agencies are required to determine whether their actions may affect listed or proposed species and designated critical habitat. The primary role of this document is to provide agencies conclusion and the rationale to support those conclusions regarding the effects of any proposed actions of the project on protected resources. Document content and recommended elements are identified in 50 CFR 402.12(f).

Under Section 7 of the Endangered Species Act, federal agencies must consult with NOAA Fisheries or the USFWS, depending on the species, through an informal or formal consultation when any action the agency carries out, funds, or authorizes may affect either a species listed as threatened or endangered under the Act, or any critical habitat designated for it.

Once resources are assessed an Endangered Species Act Section 7 finding needs to be made regarding proposed or listed species and/or designated critical habitat that may be present in the project area. This report will provide the necessary information for the lead federal agency to make a determination on affects. This finding may result in one of the following determinations:

- *"*No effect*"* - means there will be no impacts, positive or negative, to listed or proposed resources. Generally, this means no listed resources will be exposed to action and its environmental consequences. Concurrence from the Service is not required.

- *"*May affect, but not likely to adversely affect" means that all effects are beneficial, insignificant, or discountable. Beneficial effects have contemporaneous positive effects without any adverse effects to the species or habitat. Insignificant effects relate to the size of the impact and include those effects that are undetectable, not measurable, or cannot be evaluated. Discountable effects are those extremely unlikely to occur. These determinations require written concurrence from the Service.

- *"*May affect, likely to adversely affect" means that listed resources are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 KERN COUNTY GENERAL PLAN

The Kern County General Plan (Kern County 2009) contains the following relevant goals and policies related to the project:

3.2.1.1.1 THREATENED AND ENDANGERED SPECIES

Policy 27: Threatened or endangered plant and wildlife species should be protected in accordance with State and federal laws.

Policy 28: The County should work closely with State and federal agencies to assure that discretionary projects avoid or minimize impacts to fish, wildlife, and botanical resources.

Policy 29: The County will seek cooperative efforts with local, State, and federal agencies to protect listed threatened and endangered plant and wildlife species through the use of conservation plans and other methods promoting management and conservation of habitat lands.

Policy 30: The County will promote public awareness of endangered species laws to help educate property owners and the development community of local, State, and federal programs concerning endangered species conservation issues.

Policy 31: Under the provisions of the California Environmental Quality Act, the County, as lead agency, will solicit comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service when an environmental document (Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report) is prepared.

Policy 32: Riparian areas will be managed in accordance with United States Army Corps of Engineers, and the California Department of Fish and Game rules and regulations to enhance the drainage, flood control, biological, recreational, and other beneficial uses while acknowledging existing land use patterns.

3.2.1.1.2 SURFACE WATER AND GROUNDWATER

Policy 33: Water-related infrastructure shall be provided in an efficient and cost-effective manner.

Policy 34: Ensure that water quality standards are met for existing users and future development.

Policy 37: Ensure maintenance and repair of existing water systems.

Policy 40: Encourage utilization of community water systems rather than the reliance on individual wells.

Implementation Measure Y

i. Require water-conserving design and equipment in new construction.
ii. Encouraging water-conserving landscaping and irrigation methods.
iii. Encouraging the retrofitting of existing development with water conserving devices.

Policy 44: Discretionary projects shall analyze watershed impacts and mitigate for construction-related and urban pollutants, as well as alterations of flow patterns and introduction of impervious surfaces as required by the California Environmental Quality Act, to prevent the degradation of the watershed to the extent practical.

3.2.1.1.3 OAK TREE CONSERVATION

Policy 65: Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments.

Policy 66: Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.

Implementation Measure KK

The following applies to discretionary development projects (General Plan Amendment, zone change, conditional use permit, tract maps, parcel maps, precise development plan) that contains oak woodlands, which are defined as development parcels having canopy cover by oak trees of at least ten percent (10%), as determined from base line aerial photography or by site survey performed by a licensed or certified arborist or botanist. If this study is used in an Environmental Impact Report, then a Registered Professional Forester (RPF) shall perform the necessary analysis.

a) Development parcels containing oak woodlands are subject to a minimum canopy coverage retention standard of thirty percent (30%). The consultant shall include recommendations regarding thinning and diseased tree removal in conjunction with the discretionary project.
b) Use of aerial photography and a dot grid system shall be considered adequate in determining the required canopy coverage standard.
c) Adjustments below thirty percent (30%) minimum canopy standard may be made based on a report to assess the management of oak woodlands.
d) Discretionary development, within areas designated as meeting the minimum canopy standard, shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.

Implementation Measure LL

The following applies to development of parcels having oak tree canopy cover of less than ten percent (10%) but containing individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height.

a) Such trees shall be identified on plot plans.
b) Discretionary development shall avoid the area beneath and within the trees unaltered driplines unless approved by a licensed or certified arborist or botanist.
c) Specified tree removal related to the discretionary action may be granted by the decision-making body upon showing that a hardship exists based on substantial evidence in the record.

3.2.2 THREATENED AND ENDANGERED SPECIES

Permits may be required from CDFW and/or USFWS if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the California Endangered Species Act (CESA) and/or Endangered Species Act (ESA), respectively. Take is defined by CESA as, "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). Take is more broadly defined by the ESA to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). CDFW and USFWS are responsible agencies under CEQA and NEPA. Both agencies review CEQA and NEPA documents in order to determine the adequacy of the treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.3 DESIGNATED CRITICAL HABITAT

When species are listed as threatened or endangered, the USFWS often designates areas of "critical habitat" as defined by section 3(5)(A) of the ESA. Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat is a tool that supports the continued conservation of imperiled species by guiding cooperation with the federal government. Designations only affect federal agency actions or federally funded or permitted activities. Critical habitat does not prevent activities that occur within the designated area. Only activities that involve a federal permit, license, or funding and are likely to destroy or adversely modify critical habitat will be affected.

3.2.4 MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA: 16 USC 703-712) prohibits killing, possessing, or trading in any bird species covered in one of four international conventions to which the United States is a party, except in accordance with regulations prescribed by the Secretary of the Interior. The name of the act is misleading, as it covers almost all bird's native to the United States, even those that are non-migratory. The MBTA encompasses whole birds, parts of birds, and bird nests and eggs. Additionally, California Fish and Game Code makes it unlawful to take or possess any non-game birds covered by the MBTA (Section 3513), as well as any other native non-game birds (Section 3800).

3.2.5 BIRDS OF PREY

Birds of prey are protected in California under provisions of California Fish and Game Code (Section 3503.5), which states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks and eagles) or Strigiformes (owls), as well as their nests and eggs. The bald eagle and golden eagle are afforded additional protection under the Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs, or take feathers or nests, without a permit issued by the U.S. Secretary of the Interior.

3.2.6 NESTING BIRDS

In California, protection is afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that 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 adopted pursuant thereto." Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of "take" by the CDFW.

3.2.7 WETLANDS AND OTHER "JURISDICTIONAL WATERS"

The definition of "waters of the United States" (WOTUS) often changes from one presidential administration to the next and can also be affected by the outcomes of court cases involving federal jurisdiction of waters. The current definition (i.e. "Conforming Rule") was adopted under the Biden Administration in early 2023 and was subsequently revised in September 2023 to incorporate the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett* v. *Environmental Protection Agency* (EPA). The Conforming Rule has adopted much of the same WOTUS designations as the pre-2015 rules but has incorporated the most recent science and court case rulings. The extent of jurisdiction has been defined in the CFR but is also subject to interpretation by the federal courts. Jurisdictional waters generally include the following categories:

1) *Traditional Navigable Waters, the territorial seas, or interstate waters (not including interstate wetlands);*
2) *Impoundments of waters of the United States;*
3) *Tributaries of:*
    a. *Traditional Navigable Waters, territorial seas, or interstate waters (not including interstate wetlands); or*
    b. *Impoundments of water of the United States when the tributaries meet the relatively permanent standard.*
4) *Wetlands:*
    a. *Adjacent to Traditional Navigable Waters, the territorial seas, or interstate waters;*
    b. *Adjacent to and with a continuous surface connection to relatively permanent impoundments of waters of the United States*
    c. *Adjacent to and with a continuous surface connection to relatively permanent jurisdictional tributaries.*
5) *Intrastate lakes and ponds not identified in items 1 through 4 of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in items 1 or 3 above.*

Exclusions under the new definition include the following:

1) *Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA;*
2) *Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with USEPA;*
3) *Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;*
4) *Artificially irrigated areas that would revert to dry land if the irrigation ceased;*

5) *Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;*
6) *Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;*
7) *Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and*
8) *Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.*

The Conforming Rule has incorporated the best available science, relevant supreme court cases, public comment, technical expertise, and experience gained from more than 45 years of implementing the pre-2015 "waters of the United States" framework to inform jurisdictional limits. One significant court case involves the U.S. Supreme Court in its *2001 Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC)* decision. It was determined that channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds.

Similarly, in its 2006 consolidated *Carabell/Rapanos* decision, the United States Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered a jurisdictional water. The Supreme Court heard *Sackett* v. *United States EPA* in May 2023, to determine governing standards of a significant nexus between waters of the United States and adjacent wetlands. The court decided that adjacent wetlands would be protected under the CWA, only if it maintained a continuous surface water connection with a federal water body. This decision has limited protection for networks of wetlands connected to navigable waters through subsurface flow. The final decision was enacted in September 2023.

The USACE regulates the filling or grading of waters of the United States. under the authority of Section 404 of the CWA. The extent of jurisdiction within drainage channels is defined by "ordinary high-water marks" on opposing channel banks. All activities that involve the discharge of dredge or fill material into waters of the United States are subject to the permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that results in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards.

Under the Porter-Cologne Water Quality Control Act of 1969, the SWRCB has regulatory authority to protect the water quality of all surface water and groundwater in California ("waters of the state"). Nine RWQCBs oversee water quality at the local and regional level. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the state through the issuance of various permits and orders. Discharges into Waters of the State that are also WOTUS require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 CWA permit. Discharges into all Waters of the State, even those that are not also WOTUS, require waste discharge requirements (WDRs), or waivers of WDRs, from the RWQCB. The RWQCB also administers the Construction Storm Water Program and the federal National Pollutant Discharge Elimination System (NPDES) program. Projects that disturb one acre or more of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm

Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a WOTUS may require an NPDES permit.

CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1601 and 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use any material from their bed or bank, or deposits debris within them require a notification of a Lake or Streambed Alteration. If CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates that certain avoidance and minimization measures will be implemented to protect the habitat values of the lake or drainage in question and the plant, fish, and wildlife species that may be present within these resources.

3.3 POTENTIALLY SIGNIFICANT PROJECT-RELATED IMPACTS AND MITIGATION

Species protected by California Fish and Game Code, CDFW, USFWS, CEQA, or NEPA that have the potential to be impacted by project activities include: calico monkeyflower, pale-yellow layia, Palmer's mariposa-lily, Piute Mountains navarretia, American badger, burrowing owl (BUOW), California legless lizard, coast horned lizard, Crotch's bumble bee, foothill yellow-legged frog (FYLF), monarch butterfly, northern California legless lizard, northwestern pond turtle, pallid bat, and Tehachapi pocket mouse. Other sensitive resources that have the potential to be impacted by the project include nesting migratory birds, jurisdictional waters, wildlife movement corridors, and native wildlife nursery sites. Corresponding mitigation measures are described below.

3.3.1 GENERAL PROJECT-RELATED IMPACTS

The project has the potential to impact a number of sensitive resources, as described in more detail in the following sections. Impacts to these resources would be a violation of state and federal laws or considered a potentially significant impact under CEQA and NEPA. Implementation of the following measures will help reduce potential impacts to these resources to a less than significant level under CEQA and NEPA and will help with complying with state and federal laws protecting these resources:

> Mitigation Measure BIO-1a (*WEAP Training*): Prior to initiating construction activities (including staging and mobilization), all personnel associated with project construction will attend a mandatory Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in identifying special status resources that may occur in the site. The specifics of this program will include identification of the sensitive species and suitable habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. This training will discuss special status species, describe the laws and regulations in place to provide protection of these species, identify the penalties for violation of applicable environmental laws and regulations, and include a list of required protective measures to avoid "take." A fact sheet summarizing this information, along with photographs or illustrations of sensitive species with potential to occur on the site, will also be prepared for distribution to all contractors, their employees, and all other personnel involved with construction of the project. All trainees will sign a form documenting that they have attended WEAP training and understand the information presented to them.
>
> Mitigation Measure BIO-1b: The project proponent will require that all workers employ the following best management practices in order to avoid and minimize potential impacts to special status species:

- Vehicles will observe a 15-mph speed limit while on unpaved access routes.
- All open trenches, holes, sumps, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope will have an escape ramp of earth or a non-slip material with a less than 1:1 slope or these will be covered with barrier material such that animals are unable to dig or squeeze under the barrier and become entrapped.
- Workers will inspect areas beneath parked vehicles, equipment, and materials prior to mobilization. If special status species are detected, the individual will either be allowed to leave of its own volition or will be captured by the qualified biologist (must possess appropriate collecting/handling permits) and relocated out of harm's way to the nearest suitable habitat beyond the influence of the project work area. "Take" of a state or federal special status (rare, California Species of Special Concern, threatened, or endangered) species is prohibited.
- The presence of any special status species will be reported to the project's qualified biologist, who will submit the occurrence to the CNDDB. If necessary, the biologist will report the occurrence to CDFW and/or USFWS.

3.3.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES

The following special status plant species were identified to potentially occur within the site: calico monkeyflower, pale-yellow layia, Palmer's mariposa-lily, and Piute Mountains navarretia. Calico monkeyflower, pale-yellow layia, and Piute Mountains navarretia may occur within the valley oak woodland and forest and Palmer's mariposa-lily may occur within the wetland/wet meadow habitats of the site. Projects that adversely affect special status plants or result in the mortality of special status plants would be considered a significant impact under CEQA and NEPA and may be a violation of state and/or federal laws.

Implementation of the following measures will reduce potential impacts to special status plants to a less than significant level under CEQA and NEPA and will help the project comply with state and federal laws protecting these plant species.

Mitigation Measure BIO-2a (*Botanical Surveys*): Prior to project activities occurring within valley oak woodland and forest or wetland/wet meadow habitats of the site, a qualified botanist/biologist will conduct focused botanical surveys during the appropriate blooming seasons for calico monkeyflower (March – May), (pale-yellow layia (April – June), Palmer's mariposa-lily (May – July), and Piute Mountains navarretia (April – July) according to CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (2018) for all appropriate habitats for these species within the site.

Mitigation Measure BIO-2b (*Avoidance Buffers*): If special status plants are identified during a survey, an avoidance buffer and, if necessary, use of exclusion fencing, will be placed around the area to avoid disturbing the plants and their root systems.

Mitigation Measure BIO-2c (*Formal Consultation*): If rare plant individuals or populations are detected within project work areas during the focused botanical surveys, and the plants cannot be avoided, the project proponent will initiate consultation with CNPS to determine next steps for relocation.

3.3.3 PROJECT-RELATED MORTALITY AND/OR NEST ABANDONMENT OF MIGRATORY BIRDS, RAPTORS, AND SPECIAL STATUS BIRDS

The site and adjacent areas contain suitable nesting and foraging habitat for a variety of protected bird species, such as migratory birds, raptors, and special status birds. It is anticipated that during the nesting bird season, protected birds could nest on the ground or in shrubs and trees within, and adjacent to, the site and forage within the site. Protected birds located within or adjacent to the site during construction have the potential to be injured or killed by project-related activities. In addition to the direct "take" of protected birds within the site and adjacent areas, these birds nesting in these areas could be disturbed by project-related activities resulting in nest abandonment. Projects that adversely affect the nesting success of protected birds or result in the mortality of these birds would be a violation of state and federal laws and considered a potentially significant impact under CEQA and NEPA.

While foraging habitat for protected birds, such as California condor, and golden eagle, is present on the site, suitable foraging habitat is located adjacent to the site and within the vicinity of the site. Loss of the foraging habitat from implementation of the project is not considered a significant impact.

Implementation of the following measures will reduce potential impacts to protected nesting birds to a less than significant level under CEQA and NEPA and will help the project comply with state and federal laws protecting these bird species. Mitigation measures specific to BUOW are presented in Section 3.3.4 (i.e., BIO-4a, BIO-4b, and BIO-4c).

> Mitigation Measure BIO-3a (*Avoidance*): The project's construction activities will occur, if feasible, between September 16 and January 31 (outside of the nesting bird season) to avoid impacts to nesting birds.
>
> Mitigation Measure BIO-3b (*Pre-construction Surveys*): If activities must occur within the nesting bird season (February 1 to September 15), a qualified biologist (someone familiar with these species and nesting birds) will conduct a single pre-construction survey for nesting birds within five (5) calendar days prior to the start of construction. The survey would also include inspecting for nesting migratory birds within the site and up to 100 feet outside of the site and for nesting raptors within the site and up to 500 feet outside of the site. All raptor nests would be considered "active" upon the nest-building stage. If no active nests are observed, no further mitigation is required.
>
> Mitigation Measure BIO-3c (*Avoidance Buffers*): On discovery of any active nests or breeding colonies near work areas, a qualified biologist will determine appropriate avoidance buffer distances based on applicable CDFW and/or USFWS guidelines, the biology of the species, conditions of the nest(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

3.3.4 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO BURROWING OWL

As discussed in Section 3.3.3, the site contained suitable foraging habitat for BUOW, and this species also may nest or roost within burrows within, or adjacent to, the site. Construction activities that adversely affect the nesting success of BUOWs or result in the mortality of individuals constitute a violation of state and federal laws and would be considered a significant impact under CEQA and NEPA. While the project site may remove some potential nesting/roosting and foraging habitat for BUOW, there is abundant habitat adjacent to the site that could be used, and implementation of the project would not significantly reduce potential nesting, roosting, and foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of BUOW nesting/roosting and foraging habitat.

Implementation of the following measures would reduce potential impacts to nesting and roosting BUOW to a less than significant level under CEQA and NEPA and help the project comply with state and federal laws protecting this avian species.

Mitigation Measure BIO-4a (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction take avoidance survey for BUOW and suitable burrows, in accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (2012), within seven (7) days prior to the start of construction activities. The survey will include the proposed work area and surrounding lands up to 500 feet. If no BUOW individuals or active burrows are observed, no further mitigation is required.

Mitigation Measure BIO-4b (*Avoidance*): If an active BUOW burrow is detected, avoidance buffers will be implemented. A qualified biologist will determine appropriate avoidance buffer distances based on CDFW's 2012 *Staff Report on Burrowing Owl Mitigation*, the biology of BUOW, conditions of the burrow(s), and the level of project disturbance. If necessary, avoidance buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged and all BUOW have left the project area.

Level of Disturbance				
Location	Time of Year	Low	Med	High
Nesting sites	April 1-Aug 15	200 meters	500 meters	500 meters
Nesting sites	Aug 16-Oct 15	200 meters	200 meters	500 meters
Nesting sites	Oct 16-Mar 31	50 meters	100 meters	500 meters

Mitigation Measure BIO-4c (*ITP* and *Passive Relocation*): If an active BUOW burrow is detected within the proposed work area and cannot be avoided, it is recommended the project obtain an Incidental Take Permit (ITP) in order to implement protection plans and/or relocation plans in consultation with CDFW and/or USFWS and protect the project from "take" of this species.

3.3.5 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO AMERICAN BADGER

The site contained annual grasslands within the valley oak woodland and forest habitat that could potentially be used by American badger for foraging and denning. American badgers denning within the site during construction have the potential to be injured or killed by project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and NEPA. While foraging habitat for American badger is present within the site, loss of foraging habitat would not be considered a potential significant impact under CEQA or NEPA because some project areas will continue to provide foraging habitat after implementation of project activities and there is plenty of suitable foraging habitat surrounding the project site.

Implementation of the following measures will reduce potential impacts to American badgers to a less than significant level under CEQA and NEPA. The following measures will be implemented prior to the start of construction:

Mitigation Measure BIO-5a (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and sign of this species) will conduct a pre-construction survey of project areas within seven (7) days prior to vegetation clearing or ground disturbing activities within the valley oak woodland and forest habitat. The goal of this survey is to search for potentially active badger dens.

Mitigation Measure BIO-5b (*Remote Cameras*): If potential American badger dens are detected during the pre-construction survey, each potential den will be monitored with a remote camera for a period of at least three consecutive nights. If there is no activity recorded at the den location, the den can be deemed "inactive" or "unoccupied" and closed or excavated the same day as determining the den inactive.

Mitigation Measure BIO-5c (*Den Avoidance*): If an American badger is denning on or within 50 feet of the site, the project proponent will avoid the den by a minimum 50-foot buffer.

Mitigation Measure BIO-5d (*Timed Den Excavation*): If an American badger is denning on or within up to 50 feet of the site and it cannot be avoided, the den may be excavated outside of the natal season (generally March 15 – June 15) or if it is determined that there are no cubs in the den. Prior to den excavation a remote camera will be placed at the den entrance for a minimum of three consecutive nights to record the general time when the badger leaves the den. Once this time has been determined and it is confirmed the badger left the den to forage the den will be excavated by hand, with the assistance of machinery. Scopes should be used to survey sections of the den prior to excavation. Should any cubs be discovered during the excavation the work will stop and the crew will leave the site immediately so the female can rescue her cubs and relocate them.

3.3.6 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE OF CALIFORNIA LEGLESS LIZARD AND NORTHERN CALIFORNIA LEGLESS LIZARD

The project site contains suitable valley oak woodland and forest and riverine/valley oak riparian forest and woodland habitats with leaf litter for California legless lizards and Northern California legless lizards to use. These species are known to forage in loose soil and leaf litter during the day and are occasionally observed on the surface at dusk and at night. Legless lizards occurring within the project site during construction have the potential to be injured or killed by project-related activities. Projects that adversely affect California legless lizards and Northern California legless lizards or result in the mortality of individuals would be considered a potentially significant impact under CEQA and NEPA.

Implementation of the following measures prior to the start of construction will reduce potential impacts to California legless lizards and Northern California legless lizards to a less than significant level under CEQA and NEPA.

Mitigation Measure BIO-6a (*Avoidance*): The project's construction activities will occur, if feasible, where ground disturbance has previously occurred and avoid areas that contain loose soil and leaf litter.

Mitigation Measure BIO-6b (*Pre-construction Surveys*): If activities must occur in areas that contain loose soil and leaf litter within valley oak woodland and forest or riverine/valley oak riparian forest and woodland habitats a qualified biologist will conduct pre-construction surveys within 48 hours prior to beginning any project activities. Any loose substrate in which legless lizards could bury themselves will be gently raked with a hand tool (e.g., a garden rake) to a depth of two inches to locate any lizards that could be under the surface. Lizards that are detected will be allowed to leave the work area of their own volition or will be moved out of harm's way by a qualified biologist to suitable habitat at least 50 feet from the project work site.

3.3.7 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO COAST HORNED LIZARDS

The valley oak woodland and forest, riverine/valley oak riparian forest and woodland, and ruderal habitats within the site and surrounding area were determined to be suitable for this species. Project-related

activities occurring within these habitats could result in injury, mortality, displacement, disturbance, or inhibit the movement of this species, and would be considered a significant impact under CEQA and NEPA.

Implementation of the following measures will reduce potential impacts to coast horned lizards to a less than significant level under CEQA and NEPA.

> Mitigation Measure BIO-7a (*Pre-construction Survey*): Within 15 days prior to vegetation clearing or ground disturbing activities within the valley oak woodland and forest, riverine/valley oak riparian forest and woodland, and ruderal habitats a qualified biologist will conduct a pre-construction survey of the work area in these habitats. Surveys will not take place when daytime temperatures are below 60˚F or above 95˚F. If no suitable habitat or species observations are found, no further mitigation is required. Lizards that are detected will be allowed to leave the work area of their own volition or will be moved out of harm's way by a qualified biologist to suitable habitat at least 50 feet from the project work site.

3.3.8 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO CROTCH'S BUMBLE BEE

All habitats within the site and surrounding area were determined to be suitable for foraging, nesting, and overwintering Crotch's bumble bee. Queens are actively flying for only two months from March until May and reach maximum flying activity in April. Males are generally present and flying from May to September with peak flying activity occurring in July. Workers of this species are present and flying from April to August, with peak flying activity occurring between May and June. Construction activities occurring within nesting or overwintering habitat could result in injury, mortality, displacement, disturbance, or inhibit the movement of this species, and would be considered a significant impact under CEQA and a violation of CESA.

There is abundant foraging habitat adjacent to the site that could be used, and implementation of the project would not significantly reduce potential foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of foraging habitat.

Implementation of the following measures will reduce potential impacts to nesting and overwintering Crotch's bumble bee to a less than significant level under CEQA and NEPA and help the project comply with state law protecting this species.

> Mitigation Measure BIO-8a (*Flying Bumble Bee and Nest Surveys*): A qualified biologist (someone who is familiar with and can identify bumble bees) will conduct three flying bumble bee and nest surveys during the peak flying periods (April, May to June, and July) prior to initial ground disturbing activities. The biologist will walk throughout the site and up to 100 feet outside of the site during the optimal time of the day to inspect for bumble bees and any nests. If an individual is observed, it will be followed until it can be determined if a nest is present within the survey boundary.

> Mitigation Measure BIO-8b (*Identification and Protection Plan*): Bumble bee individuals need to be captured to be identified. If a bumble bee nest is observed, no ground disturbing activities will occur within 50 feet of the nest until a plan to identify the species using the nest and protect nesting and overwintering Crotch's bumble bee has been submitted to CDFW and approved in writing.

3.3.9 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO MONARCH BUTTERFLY

Habitats within portions of the site are likely to be suitable for foraging Monarch butterflies. Monarchs could travel through the site during the breeding season and potentially lay eggs on milkweeds. While monarch could travel through the site, roosting habitat was absent. There is abundant foraging habitat adjacent to the site that could be used, and implementation of the project is unlikely to significantly reduce

potential foraging habitat for this species. Therefore, no mitigation measures are warranted for loss of foraging habitat. Construction activities during the breeding season could result in injury, mortality, displacement, or disturbance and would be considered a significant impact under CEQA.

Implementation of the following measures will reduce potential impacts to Monarch eggs and larvae to a less than significant level under CEQA will help the project comply with federal laws protecting this species.

> Mitigation Measure BIO-9a (*Avoidance*): Vegetation removal will not occur during the monarch breeding season (February 1 to August 31).
>
> Mitigation Measure BIO-9b (*Pre-construction Surveys*): If vegetation removal will occur during the breeding season (February 1 to August 31) a pre-construction survey of the site will be conducted by a qualified biologist (someone who can identify the species and is familiar with the species' host plants) within 15 days prior to construction activities to determine if milkweeds (*Asclepias* spp.) plants are located within the site. If no milkweed plants are observed, no further mitigation is required.
>
> Mitigation Measure BIO-9c (*Buffers*): If milkweeds are observed within the site during the breeding season (February 1 to August 31), an avoidance buffer will be placed around the area as to not to disturb the plant or its root system. The buffer will be left in place until a qualified biologist has determined the buffers are no longer warranted.
>
> Mitigation Measure BIO-9d (*Monarch Egg and Larvae Survey*): If milkweeds are observed within the site during the breeding season (February 1 to August 31) and cannot be avoided, a qualified biologist will conduct a monarch egg and larvae survey to look for eggs and larvae on milkweeds within seven (7) days prior to their removal. If no eggs or larvae are observed the milkweed plants can be removed under the supervision of a qualified biologist and will be replanted at a 3:1 ratio.
>
> Mitigation Measure BIO-9e (*Consultation with USFWS if Listed*): In the event a milkweed plant with monarch eggs or larvae is detected during the pre-construction survey and cannot be avoided and this species is listed under the ESA prior to this observation, consultation with USFWS will be completed to avoid take.

3.3.10 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO FOOTHILL YELLOW-LEGGED FROG

The site contained riverine/valley oak riparian forest along Brite Creek and woodland and valley oak woodland and forest habitats that serve as suitable habitat for FYLF. Foothill yellow-legged frogs present within these habitats during construction have the potential to be injured or killed by project-related activities. Projects that result in the mortality of individuals would be considered a potentially significant impact under CEQA and NEPA and violate federal and state laws protecting this species.

Implementation of the following measures will reduce potential impacts to FYLF to a less than significant level and help the project comply with federal and state laws that protect this species.

> Mitigation Measure BIO-10a (*Pre-construction Take Avoidance Survey*): A qualified biologist (someone familiar with the identification and habitat of this species) will conduct surveys for FYLF in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (California Department of Fish and Wildlife 2018), or current guidance for FYLF to determine if FYLF are within or adjacent to the riverine/valley oak riparian forest or valley oak woodland and forest

habitats within project site. If no FYLFs are found during the pre-construction survey and no surface water is present in the project site, work may commence without further surveys.

Mitigation Measure BIO-10b (*FYLF Consultation and Avoidance*): If any FYLF are found during preconstruction surveys or at any time during construction, consultation with CDFW and USFWS is warranted to determine if the project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when FYLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily for FYLF.

Mitigation Measure BIO-10c (*Monitor*): If ground-disturbing activities must take place between November 1 and March 31, surface water is present during the preconstruction surveys, or if surface water becomes present at any time during the work period, the qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities within FYLF habitat.

Recommendation BIO-10d (*FYLF Take Authorization*): If avoidance is not feasible the project will consult with the USFWS and CDFW to acquire take permits for FYLF prior to any project activities.

3.3.11 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO NORTHWESTERN POND TURTLE

The site contained riverine/valley oak riparian forest and woodland along Brite Creek, freshwater pond, wetland/wet meadow, and the valley oak woodland and forest habitat that serve as suitable habitat for northwestern pond turtle. Noise, vegetation removal, movement of workers, construction, and ground disturbance as a result of project activities have the potential to significantly impact northwestern pond turtle. Potentially significant impacts associated with project activities could include inadvertent entrapment or direct mortality. Project activities that impact northwestern pond turtles would be considered a potentially significant impact under CEQA and NEPA.

The following measures will be implemented prior to the start of construction if work is occurring in the riverine/ valley oak riparian forest and woodland, freshwater pond, wetland/wet meadow, or the valley oak woodland forest habitat within 330 feet of the creeks onsite and will reduce impacts to northwestern pond turtle to a less than significant level:

Mitigation Measure BIO-11a (*Pre-construction Survey and Avoidance Buffers*): Within seven (7) days prior to the start of construction activities within the riverine/ valley oak riparian forest and woodland, freshwater pond, wetland/wet meadow, or the valley oak woodland forest habitat within 330 feet of the creeks onsite, a qualified biologist (someone who is able to identify this species) will conduct a pre-construction survey for northwestern pond turtle within the site and surrounding areas up to 330 feet. Pre-construction surveys will be conducted in accordance with the draft *Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion* (United States Geological Survey 2006). If no northwestern pond turtles are observed during the pre-construction survey, then construction activities may begin. If construction is delayed or halted for more than seven (7) days, another pre-construction survey for northwestern pond turtle will be conducted. If the surveys result in the identification of a northwestern pond turtle or an individual is found on the site during construction activities, it will be allowed to leave the site on its own and the qualified biologist will determine appropriate buffers to be implemented to avoid impacts to the individual(s).

Mitigation Measure BIO-11b (*Monitor*): If northwestern pond turtles are observed on the site, a qualified biologist will conduct a pre-activity clearance survey each day and remain on the site to oversee all vegetation clearing and ground disturbing activities until the individual(s) have left the site.

Mitigation Measure BIO-11c (*Formal Consultation*): Should northwestern pond turtles get listed in this area and the project needs to move an individual consultation for protection plans and/or relocation plans with the appropriate agency will be completed to avoid take.

3.3.12 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE OF MATERNITY ROOSTING BATS AND SPECIAL STATUS BATS

Trees with natural cavities within the site may support tree-roosting species of bats like pallid bats. Roosting habitat becomes especially sensitive to bat populations during the maternity season (March 1 to September 30) when pups are maturing. It is unlikely bats would occur in the area during the overwintering season (December 1 through February 28) since they are known to migrate to warmer locations. Projects that impact maternity roosting bats or roosting special status bats would be considered a significant impact under CEQA.

Implementation of the following measures will reduce potential impacts to roosting maternity bats and roosting special status bats to a less than significant level under CEQA.

Mitigation Measure BIO-12a (*Pre-Construction Surveys*): A pre-construction survey will be performed if construction activities fall between March 1 and September 30 (bat maternity season) to identify active bat roost locations in trees within 100 feet of the site prior to the start of construction. A qualified biologist (someone familiar with bat roosts and their sign) will conduct a daytime roost survey and an emergence survey at potential roost locations within seven days prior to construction.

Mitigation Measure BIO-12b (*Establish Buffers*): On discovery of any active maternity season bat roosts, a qualified biologist will determine appropriate construction setback distances (buffer zones) based on the biology of the species, conditions of the roost(s), and the level of project disturbance, if appropriate. If necessary, construction buffers will be identified with flagging, fencing, or other easily visible means, and will be maintained until the biologist has determined that the roost will no longer be impacted by construction. Lighting is not to be used near roosts where it would shine on or into the roost entrance. Combustion equipment, such as generators, pumps, and vehicles are not to be parked, operated, under or within 100 feet of the roost.

Mitigation Measure BIO-12c (*Passive Relocation*): On discovery of roosting bats outside of the bat maternity season (March 1 through September 30) and they cannot be avoided, the bats may be excluded from their roost after leaving for the night (i.e., one-way exclusion devices or other devices). Scopes should be used to survey sections of the roost after the bats have left to check no more individuals remain prior to exclusion. Following completion of passive relocation, a report will be prepared that documents the methods and results of these efforts.

3.3.13 PROJECT-RELATED MORTALITY AND/OR DISTURBANCE TO TEHACHAPI POCKET MOUSE

The project site contained suitable foraging and burrowing habitat for Tehachapi pocket mouse. Suitably sized burrows for Tehachapi pocket mouse were observed throughout the valley oak woodland and forest habitat. If Tehachapi pocket mice are denning within the project site during construction, they have the potential to be injured or killed by project-related activities. Projects that adversely affect Tehachapi pocket

mouse or result in the mortality of individuals would be considered a potentially significant impact under CEQA and NEPA.

Implementation of the following measures will reduce potential impacts to Tehachapi pocket mouse to a less than significant level under CEQA and NEPA.

> **Mitigation Measure BIO-13a (*Pre-construction Survey*):** A qualified biologist will conduct a pre-construction survey of suitable habitats within the site within 15 days prior to vegetation clearing or ground disturbing activities. Goals of this survey include a search for potential burrows within the site for Tehachapi pocket mouse. Environmentally sensitive areas will be flagged for avoidance. If no individuals or suitable habitat is observed, no further mitigation is required.
>
> **Mitigation Measure BIO-13b (*Den Avoidance*):** If a potential Tehachapi pocket mice are burrowing on or within 50 feet of the project site, the project proponent will avoid the burrow by a minimum 50-foot buffer.
>
> **Mitigation Measure BIO-13c (*Camera Station*):** If burrows with dimensions suitable for Tehachapi pocket mice are detected during pre-construction surveys and cannot be avoided through disturbance-free buffer areas, each potential burrow will be monitored with remote camera stations for a period of three consecutive nights. If there is no activity at the burrows, they can be deemed "inactive" or "unoccupied" and closed or excavated within 24 hours.
>
> **Mitigation Measure BIO-13d (*Trapping/Formal Consultation*):** If potential Tehachapi pocket mice burrows are detected within 25 feet of a project site, trapping, according to the USFW Survey Protocol for determining the *Presence of San Joaquin Kangaroo Rats* (United States Fish and Wildlife Service, 2013), will be conducted to determine if Tehachapi pocket mouse are present. The biologist must possess the required collecting/handling permits. If this species is captured and cannot be avoided within the project area, the biologist will stop work and contact CDFW for guidance on how to proceed and avoid take.

3.3.14 PROJECT-RELATED IMPACTS TO REGULATED WATERS, WETLANDS, AND WATER QUALITY

The USFWS National Wetlands Inventory Map was consulted for known wetlands in the area and riverine/valley oak riparian forest and woodland, freshwater pond, freshwater emergent wetland, and freshwater forested/shrub wetland was classified to occur or was observed within the boundaries of the site. Project-related impacts to some or all of these waters would be considered a potentially significant impact under CEQA and NEPA. Impacts to waters of the U.S. are also subject to the permit requirements of Sections 401 and 404 of the CWA and impacts to waters of the state are subject to the permit requirements of Section 401 of the CWA and California Fish and Game Code. The placement of fill within any wetlands or other jurisdictional features will require a 401 Water Quality Certification from the RWQCB, 404 permit from the USACE, and a Lake or Streambed Alteration Agreement from CDFW. An aquatic resources delineation should be performed to determine the jurisdictional status of waters onsite.

There are no designated wild and scenic rivers within the site; therefore, the project would not result in direct impacts to wild and scenic rivers.

If construction involves ground disturbance over an area greater than one acre, the project would need to obtain a Construction General Permit under the Construction Storm Water Program administered by the RWQCB. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan to

ensure construction activities do not adversely affect water quality. This plan will need to be prepared in support of the Construction General Permit application.

Implementation of the following measures will reduce potential impacts to waters to a less than significant level under CEQA and NEPA and will help the project comply with state and federal laws protecting these waters.

> **Mitigation Measure BIO-14a (*Permits*):** If the project intends to impact jurisdictional waters, permits with USACE, RWQCB, and/or CDFW will be obtained to comply with state and federal regulations, if necessary. These permits, certifications, and agreements would ensure impacts to waters are minimized to the extent possible and permanent impacts would be offset by compensatory mitigation.

3.3.15 PROJECT-RELATED IMPACTS TO RIPARIAN HABITAT AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Riparian habitat is present along Brite Creek, within the riverine/valley oak riparian forest and woodland habitat. Impacts to riparian habitat addressed under **Mitigation Measure BIO-14a**. While there are no CNDDB-designated "natural communities of special concern" recorded within the site, valley oak woodland and forest and valley oak riparian forest and woodland were observed during the field survey and impacts to these habitats would be considered a significant impact under CEQA.

Implementation of the following measures will reduce potential impacts to natural communities of special concern to a less than significant level under CEQA.

> **Mitigation Measure BIO-15a (*Avoidance*):** The project will avoid areas of valley oak woodland and forest and valley oak riparian forest and woodland, when possible. If work occurs in these habitats oak tree removal will be avoided, and oak trees will be avoided by a minimum 90-foot buffer from the dripline, to avoid damaging their roots.

> **Mitigation Measure BIO-15b (*Revegetation Plan*):** If tree removal within these natural communities or ground disturbance within 90 feet of oak trees cannot be avoided a revegetation plan will be prepared for approval by CDFW and implemented after project completion.

3.3.16 PROJECT-RELATED IMPACTS TO WILDLIFE MOVEMENT CORRIDORS AND NATIVE WILDLIFE NURSERY SITES

The habitats of the site and surrounding areas consists of expansive open valley oak woodland and forest habitat. Within the riverine/valley oak riparian forest and woodland habitat Brite Creek could be used as wildlife movement corridors, but wildlife may be able to continue using it at night while construction is occurring and would be able to continue utilizing it after construction activities are completed.

The site has suitable features that could be used as native wildlife nursery sites. Large trees with natural cavities were located within the site and could function as native wildlife nursery sites for bats. Project-related impacts to any native wildlife nursery sites would be considered a significant impact under CEQA.

The potential impacts to species that could use the trees as a wildlife nursery site have been addressed in Mitigation Measures **BIO-12a**, **BIO-12b**, and **BIO-12c**. Implementation of these will reduce potential impacts to native wildlife nursery sites to a less than significant level under CEQA. Implementation of the following mitigation measures would reduce potential impacts to wildlife movement corridors to less than significant.

Mitigation Measure BIO-16a (*Operational Hours*): When possible, construction activities within Brite Creek in the riverine/valley oak riparian forest and woodland habitat should be limited to a half hour after sunrise through a half hour before sunset to reduce potential impacts to wildlife movement corridors.

Mitigation Measure BIO-16b (*Wildlife Access*): Access within these areas should not be blocked outside of construction hours or during overnight hours or weekends. If construction must block both sides of a wildlife access route, an alternative route through the construction area should be identified by a qualified biologist and maintained throughout the construction schedule timeframe.

3.4 SECTION 7 DETERMINATIONS

In addition to the occurrence analysis performed in Table 2 and Table 3 of this document, Table 4 summarizes project effect determinations for federally-listed species found on the CNDDB list generated on September 12, 2024, and the USFWS IPaC list generated on December 12, 2024 (see Appendix B and Appendix C, respectively), in accordance with Section 7 of the Endangered Species Act.

Table 4: Section 7 Determinations

Species	Determination	Rationale for Determination
Bakersfield cactus (*Opuntia basilaris* var. *treleasei*)	No effect	**Habitat absent.** Project site is outside of the elevational range for this species.
California condor *(Gymnogyps californianus)*	No effect	**Habitat absent.** The site lacked suitable nesting habitat. While this species could fly over or forage on the site, this species would be expected to fly away during construction.
Desert tortoise (*Gopherus agassizii*)	No effect	**Habitat absent.** Project site is outside of the known distribution range of this species and habitat is absent.
Fisher – southern Sierra Nevada Distinct Population Segment (DPS) (*Pekania pennanti*)	No effect	**Habitat absent.** Project site is outside of the current known range for this species.
Foothill yellow-legged frog – south Sierra DPS (*Rana boylii*)	May affect, but not likely to adversely affect	**Habitat present.** The site contained suitable habitat along Brite Creek and this species may be affected by project activities. Implementation of mitigation measure **BIO-10** would reduce effects to not likely to adversely affect.
Monarch butterfly (*Danaus plexippus*)	May affect, but not likely to adversely affect	**Habitat present.** While the site contained suitable foraging habitat, roosting habitat is absent. This species would be expected to fly away during construction. Implementation of mitigation measure **BIO-9** would reduce effects to not likely to adversely affect.
Northwestern pond turtle (*Actinemys marmorata*)	May affect, but not likely to adversely affect	**Habitat present**. The site contained suitable habitat within the riverine/valley oak riparian forest and woodland habitat along Brite Creek, as well as the freshwater pond habitat of Tom Sawyer Lake and this species may be affected by project activities. Implementation of

Species	Determination	Rationale for Determination
		mitigation measure BIO-11 would reduce effects to not likely to adversely affect.
San Joaquin adobe sunburst *(Pseudobahia peirsonii)*	No effect	**Habitat absent.** Project site is outside of the elevation range for this species.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	No effect	**Habitat absent.** Project site is outside of the known populations of this species and no elderberry shrubs were observed during the survey.

3.5 LESS THAN SIGNIFICANT PROJECT-RELATED IMPACTS

3.5.1 PROJECT-RELATED IMPACTS TO SPECIAL STATUS PLANT SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 22 regionally occurring special status plant species, 18 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: aromatic canyon gooseberry, Baja navarretia, Bakersfield cactus, Coulter's goldfields, grey-leaved violet, Kern buckwheat, Latimer's woodland-gilia, Madera leptosiphon, Mt. Pinos onion, Piute cypress, Piute Mountains jewel flower, Piute Mountains triteleia, sagebrush loeflingia, San Joaquin adobe sunburst, southern Sierra monardella, Spanish Needle onion, Tehachapi monardella, and Tejon poppy.

Since it is unlikely that these species would occur onsite, implementation of the project should have no impact on these 18 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.5.2 PROJECT-RELATED IMPACTS TO SPECIAL STATUS ANIMAL SPECIES ABSENT FROM, OR UNLIKELY TO OCCUR ON, THE PROJECT SITE

Of the 24 regionally occurring special status animal species, 13 are considered absent from or unlikely to occur within the site due to past or ongoing disturbance and/or the absence of suitable habitat. These species include: Bendire's thrasher, California condor, desert tortoise, fisher, golden eagle, Le Conte's thrasher, southern California legless lizard, southern rubber boa, Swainson's hawk, Tehachapi slender salamander, tricolored blackbird, Tulare grasshopper mouse, and valley elderberry longhorn beetle.

Since it is unlikely that these species would occur onsite, implementation of the project should have no impact on these 13 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.5.3 PROJECT-RELATED IMPACTS TO CRITICAL HABITAT

Designated critical habitat is absent from the site and surrounding lands. Therefore, there would be no impact to critical habitat, and mitigation measures are not warranted.

3.5.4 LOCAL POLICIES OR HABITAT CONSERVATION PLANS

The project appears to be consistent with the goals and policies of the Kern County General Plan. There are no known HCPs or NCCPs in the project vicinity. Mitigation measures are not warranted.

3.5.5 COASTAL ZONE AND COASTAL BARRIERS RESOURCES ACT

The project would not be located within the coastal zone. The project would not impact or be located within or near the Coastal Barrier Resources System or its adjacent wetlands, marshes, estuaries, inlets, and near-shore waters. Mitigation measures are not warranted.

3.5.6 PROJECT-RELATED IMPACT TO ESSENTIAL FISH HABITAT

Essential Fish Habitat and Habitat Areas of Particular Concern are absent from the project site and surrounding lands, and consultation with the National Marine Fisheries (NMFS) Service would not be required. Query results of the NMFS EHF Mapper can be found in Appendix E at the end of this document. Mitigation measures are not warranted.

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APPENDIX A: REPRESENTATIVE PHOTOS OF THE PROJECT SITE



Photograph 1

Overview of the project site.



Photograph 2

Overview of the valley oak woodland and forest within the project site.



Photograph 3

Another overview of the valley oak woodland and forest within the project site.



Photograph 4

Overview of the valley oak woodland and forest within the project site and Brite Creek can be seen on the left of the photo.



Photograph 5

Overview of a drainage that flows into Brite Creek.



Photograph 6

Overview of Brite Creek located within the riverine/ valley oak riparian forest and woodland habitat on-site.



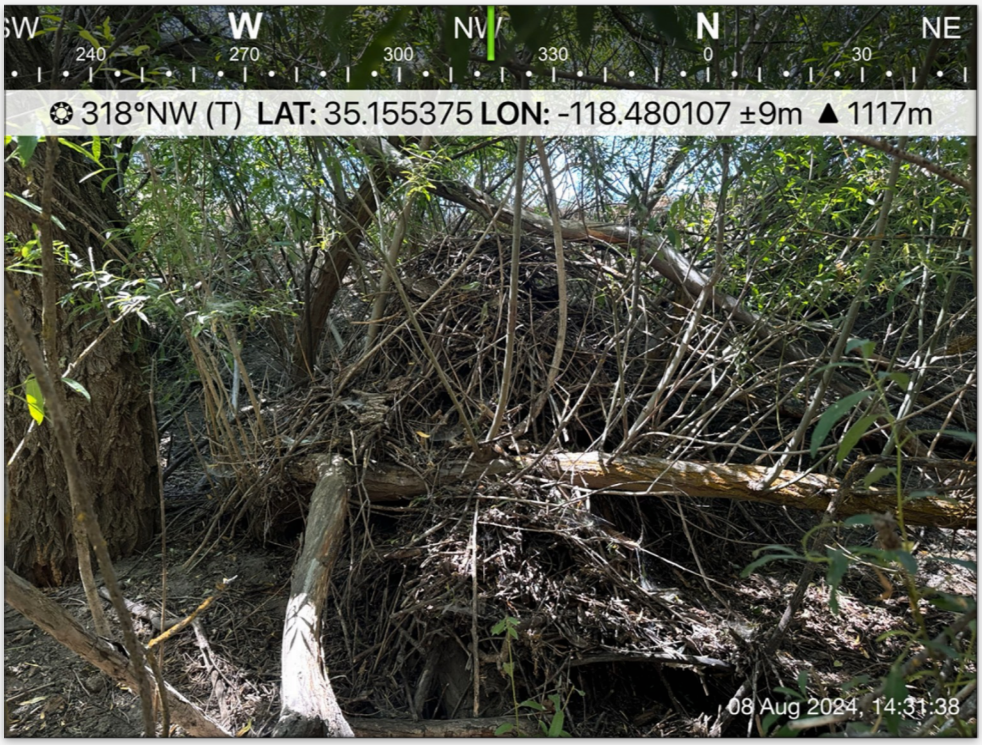
Photograph 7

Another overview of Brite Creek located within the riverine/ valley oak riparian forest and woodland habitat onsite.



Photograph 8

Another overview of Brite Creek located within the riverine/ valley oak riparian forest and woodland habitat onsite.



Photograph 11

Example of a woodrat nest located along Brite Creek.



Photograph 12

Example of a Pacific tree frog. This species was found along Brite Creek and Teha-chapi Creek adjacent to the project site.



Photograph 13

Overview of wetland/wet meadow habitat onsite.



Photograph 14

Another overview of the wetland/wet meadow habitat onsite.



Photograph 15

Overview of the wetland/ wet meadow habitat and the valley oak woodland and forest habitat onsite.



Photograph 16

Example of an existing walking trail within the ruderal habitat onsite. Wetland/wet meadow habitat can be seen adjacent to the trail.



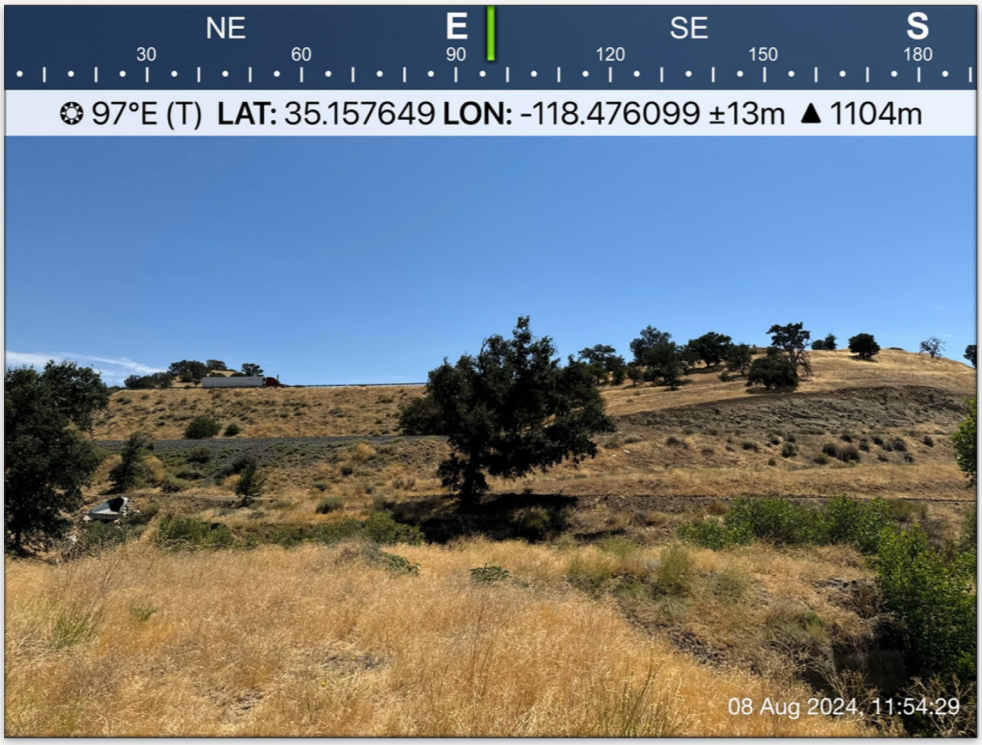
Photograph 17

Example of an existing facility within the ruderal habitat onsite. Wetland/wet meadow habitat can be seen adjacent to the building.



Photograph 18

Overview of the existing paved parking lot, located within the ruderal habitat onsite.



Photograph 19

Overview of surrounding habitat to the east.



Photograph 20

Overview of surrounding habitat to the southwest.



Photograph 21

Overview of the freshwater pond habitat, Tom Sawyer Lake.

APPENDIX B: CNDDB 9-QUAD SPECIES LIST

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Tehachapi North (3511824) OR Cummings Mtn. (3511815) OR Emerald Mtn. (3511833) OR Keene (3511825) OR Loraine (3511834) OR Monolith (3511813) OR Oiler Peak (3511835) OR Tehachapi NE (3511823) OR Tehachapi South (3511814))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
aromatic canyon gooseberry *Ribes menziesii var. ixoderme*	PDGRO02104	None	None	G4T2	S2	1B.2
Baja navarretia *Navarretia peninsularis*	PDPLM0C0L0	None	None	G3	S2	1B.2
Bakersfield cactus *Opuntia basilaris var. treleasei*	PDCAC0D055	Endangered	Endangered	G5T1	S1	1B.1
Bendire's thrasher *Toxostoma bendirei*	ABPBK06050	None	None	G4	S2	SSC
burrowing owl *Athene cunicularia*	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
calico monkeyflower *Diplacus pictus*	PDSCR1B240	None	None	G2	S2	1B.2
California legless lizard *Anniella spp.*	ARACC01070	None	None	G3G4	S3S4	SSC
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G4	S4	SSC
Comstock's blue butterfly *Euphilotes glaucon comstocki*	IILEPG201A	None	None	G5T2	S2	
Coulter's goldfields *Lasthenia glabrata ssp. coulteri*	PDAST5L0A1	None	None	G4T2	S2	1B.1
Crotch's bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
desert tortoise *Gopherus agassizii*	ARAAF01012	Threatened	Threatened	G2G3	S2S3	
foothill yellow-legged frog - south Sierra DPS *Rana boylii pop. 5*	AAABH01055	Endangered	Endangered	G3T2	S2	
golden eagle *Aquila chrysaetos*	ABNKC22010	None	None	G5	S3	FP
grey-leaved violet *Viola pinetorum ssp. grisea*	PDVIO04431	None	None	G4G5T3?	S3	1B.2
Kern buckwheat *Eriogonum kennedyi var. pinicola*	PDPGN083B4	None	None	G4T1	S1	1B.1
Latimer's woodland-gilia *Saltugilia latimeri*	PDPLM0H010	None	None	G3	S3	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Le Conte's thrasher *Toxostoma lecontei*	ABPBK06100	None	None	G4	S3	SSC
Madera leptosiphon *Leptosiphon serrulatus*	PDPLM09130	None	None	G3	S3	1B.2
merlin *Falco columbarius*	ABNKD06030	None	None	G5	S3S4	WL
Mt. Pinos onion *Allium howellii var. clokeyi*	PMLIL02161	None	None	G3G4T2	S2	1B.3
Northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S2S3	SSC
pale-yellow layia *Layia heterotricha*	PDAST5N070	None	None	G2	S2	1B.1
Palmer's mariposa-lily *Calochortus palmeri var. palmeri*	PMLIL0D122	None	None	G3T2	S2	1B.2
Piute cypress *Hesperocyparis nevadensis*	PGCUP04012	None	None	G2	S2	1B.2
Piute Mountains jewelflower *Streptanthus cordatus var. piutensis*	PDBRA2G0D2	None	None	G5T1	S1	1B.2
Piute Mountains navarretia *Navarretia setiloba*	PDPLM0C0S0	None	None	G2	S2	1B.1
Piute Mountains triteleia *Triteleia piutensis*	PMLIL210H0	None	None	G1	S1	1B.1
prairie falcon *Falco mexicanus*	ABNKD06090	None	None	G5	S4	WL
sagebrush loeflingia *Loeflingia squarrosa var. artemisiarum*	PDCAR0E011	None	None	G5T3	S2	2B.2
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin pocket mouse *Perognathus inornatus*	AMAFD01060	None	None	G3	S2S3	
Southern California legless lizard *Anniella stebbinsi*	ARACC01060	None	None	G3	S3	SSC
Southern Interior Cypress Forest *Southern Interior Cypress Forest*	CTT83230CA	None	None	G2	S2.1	
southern rubber boa *Charina umbratica*	ARADA01011	None	Threatened	G2G3	S2	
southern Sierra monardella *Monardella linoides ssp. anemonoides*	PDLAM180D7	None	None	G5T2	S2	1B.3
Spanish Needle onion *Allium shevockii*	PMLIL022M0	None	None	G2	S2	1B.3
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Tehachapi monardella *Monardella linoides ssp. oblonga*	PDLAM180D2	None	None	G5T2	S2	1B.3
Tehachapi Mountain silverspot butterfly *Speyeria egleis tehachapina*	IILEPJ6105	None	None	G5T2	S2	
Tehachapi pocket mouse *Perognathus alticola inexpectatus*	AMAFD01082	None	None	G2T1T2	S1S2	SSC
Tehachapi slender salamander *Batrachoseps stebbinsi*	AAAAD02090	None	Threatened	G2G3	S2	
Tejon poppy *Eschscholzia lemmonii ssp. kernensis*	PDPAP0A071	None	None	G5T2	S2	1B.1
Tracy's eriastrum *Eriastrum tracyi*	PDPLM030C0	None	Rare	G3Q	S3	3.2
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Tulare grasshopper mouse *Onychomys torridus tularensis*	AMAFF06021	None	None	G5T1T2	S1S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	
whitefir shoulderband *Helminthoglypta concolor*	IMGASC2540	None	None	G1G2	S1S2	
yellow-blotched salamander *Ensatina eschscholtzii croceater*	AAAAD04011	None	None	G5T3	S3	WL

Record Count: 50

APPENDIX C: IPAC SPECIES LIST

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 07/07/2025 19:18:20 UTC
Project Code: 2025-0118426
Project Name: Golden Hills Nature Park Master Plan

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2025-0118426
Project Name: Golden Hills Nature Park Master Plan
Project Type: Recreation - New Construction
Project Description: Master Plan for recreational activities and improvements to Golden Hills Nature Park.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@35.14949085,-118.49596974456874,14z



Counties: Kern County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Fisher *Pekania pennanti* Population: SSN DPS There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3651	Endangered

BIRDS

NAME	STATUS
California Condor *Gymnogyps californianus* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
Foothill Yellow-legged Frog *Rana boylii* Population: South Sierra Distinct Population Segment (South Sierra DPS) There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5133	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

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APPENDIX D: NRCS WEB SOIL SURVEY REPORT

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Kern County, California, Southeastern Part



July 7, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

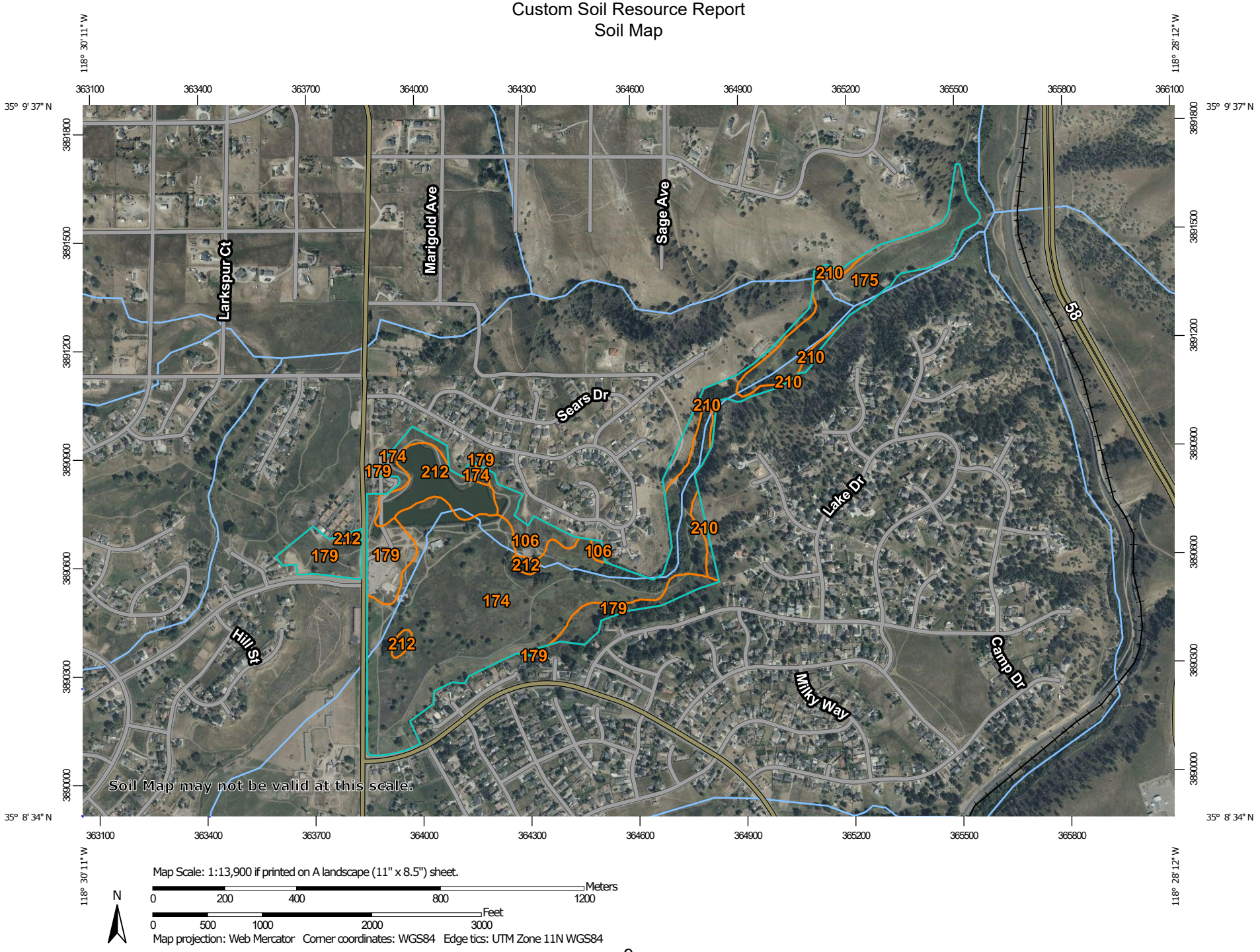
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


118° 30' 11" W
118° 28' 12" W
35° 9' 37" N
35° 8' 34" N
363100
363400
363700
364000
364300
364600
364900
365200
365500
365800
366100
3891800
3891500
3891200
3890900
3890600
3890300
3890000
Larkspur Ct
Marigold Ave
Sage Ave
Sears Dr
Lake Dr
Hill St
Milky Way
Camp Dr
58
210
175
210
210
210
210
174
179
212
179
174
212
179
106
106
212
210
174
179
212
179
Soil Map may not be valid at this scale.
Map Scale: 1:13,900 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0
200
400
800
1200
Feet
0
500
1000
2000
3000
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Kern County, California, Southeastern Part
Survey Area Data: Version 15, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 17, 2023—Oct 14, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Arujo-Friant-Tunis, 9 to 15 percent slopes	5.2	3.8%
174	Steuber sandy loam, 0 to 2 percent slopes	74.5	55.2%
175	Steuber sandy loam, 2 to 5 percent slopes	19.2	14.3%
179	Tehachapi sandy loam, 2 to 15 percent slopes	17.3	12.9%
210	Xerorthents, loamy, very steep	7.8	5.8%
212	Water	10.8	8.0%
Totals for Area of Interest		**134.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Kern County, California, Southeastern Part

106—Arujo-Friant-Tunis, 9 to 15 percent slopes

Map Unit Setting

National map unit symbol: hkmm
Elevation: 500 to 5,800 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 64 degrees F
Frost-free period: 150 to 225 days
Farmland classification: Not prime farmland

Map Unit Composition

Arujo and similar soils: 50 percent
Friant and similar soils: 25 percent
Tunis and similar soils: 20 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arujo

Setting

Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from igneous and metamorphic rock

Typical profile

H1 - 0 to 3 inches: sandy loam
H2 - 3 to 23 inches: loam
H3 - 23 to 45 inches: clay loam
H4 - 45 to 55 inches: loam
H5 - 55 to 59 inches: weathered bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R018XE104CA - Thermic Granitic Hills
Hydric soil rating: No

Description of Friant

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from schist

Typical profile

H1 - 0 to 10 inches: sandy loam
H2 - 10 to 18 inches: gravelly sandy loam
H3 - 18 to 22 inches: weathered bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 6 to 20 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: R018XE104CA - Thermic Granitic Hills
Hydric soil rating: No

Description of Tunis

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from gneiss or granite

Typical profile

H1 - 0 to 2 inches: loam
H2 - 2 to 18 inches: loam
H3 - 18 to 22 inches: weathered bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R018XE103CA - Loamy Low Hills
Hydric soil rating: No

Minor Components

Walong

Percent of map unit: 4 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent
Hydric soil rating: No

174—Steuber sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hkpt
Elevation: 1,500 to 4,500 feet
Mean annual precipitation: 9 to 14 inches
Mean annual air temperature: 57 to 64 degrees F
Frost-free period: 150 to 225 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Steuber and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Steuber

Setting

Landform: Flood plains, alluvial fans
Landform position (two-dimensional): Toeslope, backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 12 inches: sandy loam
H2 - 12 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R018XE101CA - Very Deep Alkaline Alluvium
Hydric soil rating: No

Minor Components

Havala

Percent of map unit: 5 percent
Hydric soil rating: No

Tujunga

Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed soils

Percent of map unit: 5 percent
Hydric soil rating: No

175—Steuber sandy loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: hkpv
Elevation: 1,500 to 4,500 feet
Mean annual precipitation: 9 to 14 inches
Mean annual air temperature: 57 to 64 degrees F
Frost-free period: 150 to 225 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Steuber and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Steuber

Setting

Landform: Flood plains, alluvial fans
Landform position (two-dimensional): Toeslope, backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 12 inches: sandy loam
H2 - 12 to 60 inches: sandy loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: R018XE101CA - Very Deep Alkaline Alluvium
Hydric soil rating: No

Minor Components

Steuber, steeper slopes

Percent of map unit: 5 percent
Hydric soil rating: No

Tujunga

Percent of map unit: 5 percent
Hydric soil rating: No

Steuber

Percent of map unit: 5 percent
Hydric soil rating: No

179—Tehachapi sandy loam, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: hkpz

Elevation: 1,000 to 4,300 feet
Mean annual precipitation: 10 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 150 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Tehachapi and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tehachapi

Setting

Landform: Terraces, alluvial fans
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 11 inches: sandy loam
H2 - 11 to 19 inches: sandy clay loam
H3 - 19 to 32 inches: clay loam
H4 - 32 to 44 inches: sandy loam
H5 - 44 to 60 inches: stratified loamy sand to sandy clay loam

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R018XE101CA - Very Deep Alkaline Alluvium
Hydric soil rating: No

Minor Components

Steuber

Percent of map unit: 8 percent
Hydric soil rating: No

Psamments-xerolls

Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed soils

Percent of map unit: 2 percent
Hydric soil rating: No

210—Xerorthents, loamy, very steep

Map Unit Setting

National map unit symbol: hkqz
Elevation: 1,500 to 5,000 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 61 to 66 degrees F
Frost-free period: 150 to 250 days
Farmland classification: Not prime farmland

Map Unit Composition

Xerorthents and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Xerorthents

Setting

Landform: Terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from granite

Typical profile

H1 - 0 to 20 inches: variable
H2 - 20 to 24 inches: weathered bedrock

Properties and qualities

Slope: 30 to 85 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock
Drainage class: Well drained
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8e
Ecological site: R018XE104CA - Thermic Granitic Hills
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 10 percent
Hydric soil rating: No

Unnamed, entrenched drainageways
Percent of map unit: 5 percent
Hydric soil rating: No

212—Water

Map Unit Composition
Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: Unranked

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APPENDIX E: NMFS EFH MAPPER

EFH Mapper Report

EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

West Coast Regional Office

Query Results

Degrees, Minutes, Seconds: Latitude = 35º 9' 0" N, Longitude = 119º 30' 28" W
Decimal Degrees: Latitude = 35.150, Longitude = -118.492

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

EFH

No additional Essential Fish Habitats (EFH) were identified at the report location.

Pacific Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

Atlantic Salmon

No Atlantic Salmon were identified at the report location.

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data. ****For links to all EFH text descriptions see the complete data inventory: open data inventory -->**
Pacific Coastal Pelagic Species, Jack Mackerel, Pacific (Chub) Mackerel, Pacific Sardine, Northern Anchovy - Central Subpopulation, Northern Anchovy - Northern Subpopulation, **Pacific Highly Migratory Species**, Bigeye Thresher Shark - North Pacific, Bluefin Tuna - Pacific, Dolphinfish (Dorado or Mahimahi) - Pacific,

Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data. **For links to all EFH text descriptions see the complete data inventory: open data inventory -->
Pelagic Thresher Shark - North Pacific, Swordfish - North Pacific

APPENDIX F: TRICOLORED BLACKBIRD SURVEY

PROVOST&PRITCHARD
CONSULTING GROUP

1518 Mill Rock Way, Suite 100, Bakersfield, CA 93311-1351 • Tel: (661) 616-5900
www.provostandpritchard.com

MEMORANDUM

To:	Christopher Carlson Golden Hills Community Services District
From:	Jenny McCarthy
Subject:	Results of the Tricolor Blackbird Survey for the Nature Park Master Plan
Date:	June 10, 2025

Provost & Pritchard Consulting Group ("P&P") conducted a survey around Tom Sawyer Lake and the nearby unnamed pond within the Golden Hills Community Services District (Golden Hills CSD) for tricolored blackbirds (*Agelaius tricolor*). The survey was completed prior to submittal of the Initial Study/Mitigated Negative Declaration for the Golden Hills CSD Nature Park Master Plan. The survey was recommended due to a 2008 observation of a colony of tricolor blackbirds recorded on the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), which occurred within Tom Sawyer Lake. The Project site is located in the Tehachapi Mountains in the Transverse Ranges, within the census-designated place of Golden Hills, which is northwest of the City of Tehachapi and southeast of the City of Bakersfield (see **Attachment A**).

METHODS

On May 28, 2025, the survey was conducted by P&P biologist, Jenny McCarthy. The survey consisted of walking the pre-existing dirt path around the Tom Sawyer Lake and the unnamed pond, including a 200-foot buffer around both locations using binoculars, listening for tricolor blackbird calls. All birds that were observed during the survey were recorded. Representative photos of the site were collected during the survey and are presented in **Attachment B**.

RESULTS

The survey resulted in a negative observation of tricolor blackbirds, however, suitable nesting habitat for the species was observed throughout the survey area. A colony of red-winged blackbirds (*Agelaius phoeniceus*) were identified within the habitat surrounding the lake and courtship behavior (e.g. males singing to females and males flashing their shoulder patches) was observed. Other bird species that were observed as a result of the survey include Mallard (*Anas platyrhynchos*), domestic duck (*Anas platyrhynchos domesticus*), song sparrow (*Melospiza melodia*), common raven (*Corvus corax*), lesser gold finch (*Spinus psaltris*), great-tailed grackle (*Quiscalus mexicanus*), brown-headed cowbird (*Molothrus ater*), Eurasian collared dove (*Streptopelia decaocto*), house finch (*Haemorhous mexicanus*), black-crowned night heron (*Nycticorax nycticorax*), house sparrow (*Passer domesticus*), pied-billed grebe (*Podilymbus podiceps*), American coot (*Fulica americana*), European starling (*Sturnus vulgaris*), brown creeper (*Certhia americana*), and great egret (*Ardea alba*).

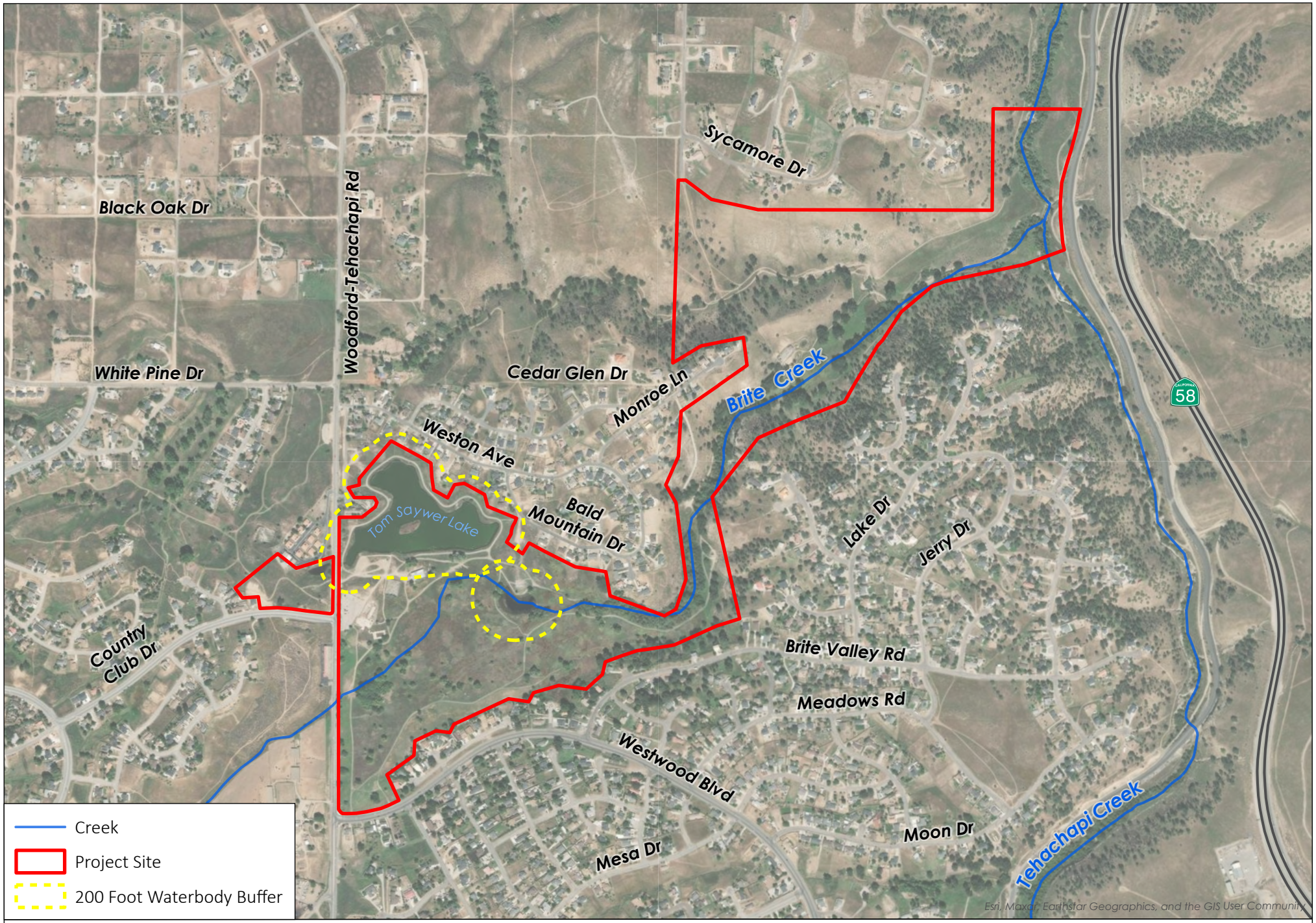
If you have any questions or need further information, please contact me via email (jmccarthy@ppeng.com). Thank you.

Sincerely,

Jenny McCarthy

Attachment A: Aerial Image of the Project Site
Attachment B: Photo Page

ATTACHMENT A: AERIAL IMAGE OF PROJECT SITE



0 500 1,000

Feet

Aerial Map

Golden Hills CSD - Nature Park Master Plan

PROVOST& PRITCHARD

6/9/2025 G:\Golden Hills CSD-1041\104124002-Nature Park Master Plan\400 GIS\Map\GoldenHIllsCSD_Nature_Park_Master_Plan\GoldenHIllsCSD_Nature_Park_Master_Plan.aprx

ATTACHMENT B: PHOTO PAGE



Photograph 1

Overview of Tom Sawyer Lake.



Photograph 2

Another overview of Tom Sawyer Lake.



Photograph 3

Overview of the unnamed pond near Tom Sawyer Lake.



Photograph 4

Another overview of the unnamed pond near Tom Sawyer Lake.

Appendix C: Phase I Cultural Resources Evaluation

PHASE I SURVEY, GOLDEN HILLS CSD NATURE PARK MASTER PLAN PROJECT, KERN COUNTY, CALIFORNIA, CALIFORNIA

Prepared for:

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January 2025
PN 36510.66

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MANAGEMENT SUMMARY

ASM Affiliates (ASM) conducted a Phase I survey for the Golden Hills CSD Nature Park Master Plan (Project). The Project is within Kern County, in the census-designated place of Golden Hills, approximately 3 miles (mi.) northwest of the city of Tehachapi. Specifically, the Project is within Section 13, Township 32 South, Range 32 East (T32S/R32E) and Section 7 and 18, T32S/R33E, Mount Diablo Base and Meridian (MDBM) as illustrated on the Tehachapi North USGS 7.5-minute topographic quadrangle. A variety of existing trails have been established within the park, which includes meadows, large stands of trees, and wildlife. The park is surrounded by suburban development (the Golden Hills community). Elevations within the study area range from 3,605 feet (ft.) above mean sea level (amsl) to 3,855 ft. asml.

The proposed study area consists of open space areas that include a demolished country club location with an abandoned golf course and two artificial lakes, an extant industrial building complex, and paved and unpaved roads. The study area totals approximately 93.5 acres (ac.).

ASM Director Peter A. Carey, MA, RPA, served as principal investigator, Senior Archaeologist Dustin Merrick, MA, RPA, was the main author of this report. The study was undertaken to assist with compliance with the California Environmental Quality Act (CEQA).

To determine whether the study area had been previously surveyed for cultural resources, and/or whether any such resources were known to exist within or near the study area, staff of the Southern San Joaquin Valley Information Center (SSJVIC) conducted an archival records search on August 19, 2024. According to the SSJVIC, four previous studies have been conducted within the study area. According to the SSJVIC, two previous studies have been conducted within the study area. Approximately 70 percent of the study area has been previously studied, with the most recent report (KE-5224) conducted approximately five years ago. An additional six previous studies were identified within the 0.5 mi. buffer. The SSJVIC results identified no previously recorded resources within the study area. An additional six resources were identified within the 0.5 mi. buffer, with the nearest located approximately 0.2 mi. from the study area.

In addition to the SSJVIC records search, a search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed on August 12, 2024. Based on the NAHC records, the study area is negative for sacred sites or traditional cultural places. Outreach letters were sent on August 23, 2024, to tribal organizations on the NAHC contact list. Follow-up emails were sent on December 4, 2024. No responses were received as a result of this outreach.

Phase I survey fieldwork of the study area was conducted on November 14, 2024, with parallel transects spaced at 15 meter (m.) intervals. A total of seven features associated with the former Golden Hills Country Club were identified within the western portion of the study area. No other archaeological resources of any kind were identified within the study area. ASM recommends the former Golden Hills Country Club not eligible for inclusion in the CRHR.

Based on the above analyses and findings, the proposed Golden Hills CSD Nature Park Master Plan Project will not result in adverse impacts or effects to historical resources, and a determination of ***no significant impact*** under CEQA is recommended. It is further recommended that, in the unlikely event that previously unrecorded cultural resources are identified during Project construction, work be halted within a 100 ft. radius of the find and a qualified archaeologist be contacted to evaluate the newly discovered resource.

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1. INTRODUCTION AND REGULATORY CONTEXT

ASM Affiliates (ASM) conducted a Phase I survey for the Golden Hills CSD Nature Park Master Plan (Project), Kern County, California. (Figure 1). The study was undertaken to assist with compliance with the California Environmental Quality Act (CEQA). The investigation was conducted, specifically, to ensure that significant impacts or adverse effects to historic properties or historical resources do not occur as a result of Project construction.

This current study included:

- A background records search and literature review to determine if any known cultural resources were present in the Project zone and/or whether the area had been previously and systematically studied by archaeologists;
- An on-foot, intensive inventory of the study area to identify and record previously undiscovered cultural resources and to examine known sites; and
- A preliminary assessment of any such resources found within the subject property.

ASM Director Peter A. Carey, MA, RPA, served as principal investigator, and ASM Associate Archaeologist Robert Azpitarte, BA, and Assistant Archaeologists Margeret Medina Lemus, BA, and Ross Way, AA, conducted the fieldwork. Senior Archaeologist Dustin Merrick, MA, RPA, was the main author of this report.

This document constitutes a report on the Phase I survey. Subsequent chapters provide background to the investigation, including historic context studies; the findings of the archival records search; a summary of the field surveying techniques employed; and the results of the fieldwork. We conclude with management recommendations for the Project.

1.1 PROJECT LOCATION AND STUDY AREA

The Project is within Kern County, in the census-designated place of Golden Hills, approximately 3 miles (mi.) northwest of the city of Tehachapi. Specifically, the Project is within Section 13, Township 32 South, Range 32 East (T32S/R32E) and Section 7 and 18, T32S/R33E, Mount Diablo Base and Meridian (MDBM) as illustrated on the Tehachapi North USGS 7.5-minute topographic quadrangle. A variety of existing trails have been established within the park, which includes meadows, large stands of trees, and wildlife. The proposed Project is surrounded by suburban development (the Golden Hills community). Elevations within the study area range from 3,605 feet (ft.) above mean sea level (amsl) to 3,855 ft. asml.

The proposed study area consists of open space areas, a demolished country club, an abandoned golf course, two artificial lakes, an extant modern industrial building complex, and paved and unpaved roads. The study area totals approximately 93.5 acres (ac.).

1.2 PROJECT DESCRIPTION

Golden Hills Community Services District proposes to adopt and carry out the Nature Park Master Plan, which seeks to redevelop the abandoned golf course with a new community center, District office, and outdoor recreational facilities. Recreational areas are anticipated to be built out in five phases, with each phase described below:

Phase 1

- Approximately 2 ac. passive area parking lot and approximately 5,000-square-ft. pavilion, located at the northeast corner of Westwood Boulevard and Woodford-Tehachapi Road.
- Approximately 2 mi. of horse trails, connecting to the parking lot and through the Nature Park property.

Phase 2

- Approximately 5,600-square-ft. pavilion and 9-hole disc golf course near Bald Mountain Drive

Phase 3

- 0.67 ac. dog park
- Two multi-use courts
- 2,500-square-ft. pavilion
- 3,000-square-ft. playground area

Phase 4

- Two multi-use fields on approximately 8.1 ac.

Phase 5

- Access roads connecting the passive area parking lot from Phase 1 to 3

1.3 REGULATORY CONTEXT

1.3.1 California Environmental Quality Act

CEQA is applicable to discretionary actions by state or local lead agencies. Under CEQA, lead agencies must analyze impacts to cultural resources. Significant impacts under CEQA occur when "historically significant" or "unique" cultural resources are adversely affected, which occurs when such resources could be altered or destroyed through project implementation. Historically significant cultural resources are defined by eligibility for or by listing in the California Register of Historical Resources (CRHR). In practice, the federal NRHP criteria for significance applied under Section 106 are generally (although not entirely) consistent with CRHR criteria (see PRC § 5024.1, Title 14 CCR, Section 4852 and § 15064.5(a)(3)).

Significant cultural resources are those archaeological resources and historical properties that:

(1) Are associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(2) Are associated with the lives of persons important in our past;

(3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

(4) Have yielded, or may be likely to yield, information important in prehistory or history.

Unique resources under CEQA, in slight contrast, are those that represent:

> An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
>
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC § 21083.2(g)).

Preservation in place is the preferred approach under CEQA to mitigating adverse impacts to significant or unique cultural resources.

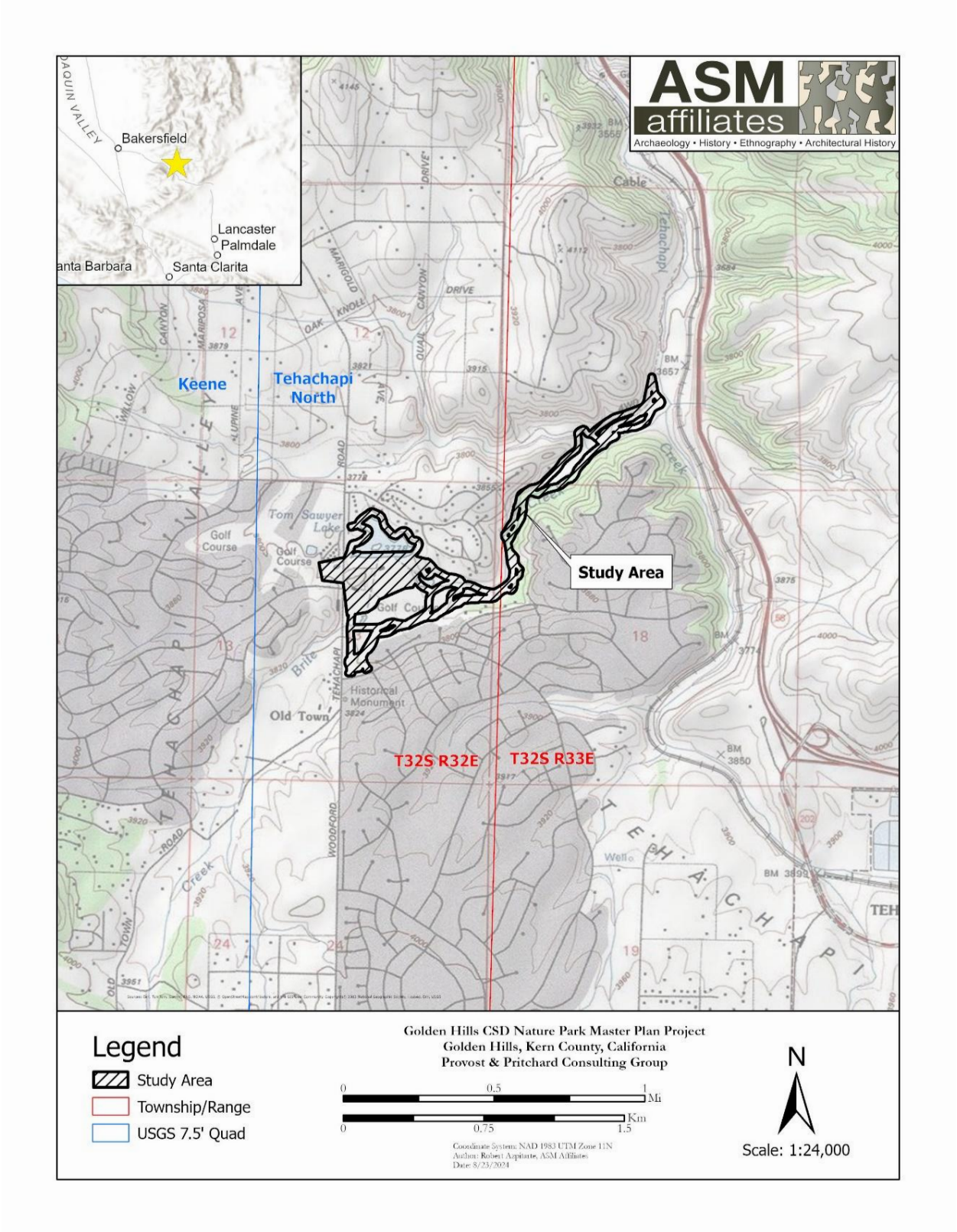


Figure 1. Location of the Golden Hills CSD Nature Park Master Plan Project, Kern County, California.

2. ENVIRONMENTAL AND CULTURAL BACKGROUND

2.1 ENVIRONMENTAL BACKGROUND AND GEOARCHAEOLOGICAL SENSITIVITY

The study area consists of open space areas that include a demolished country club location with an abandoned golf course and two artificial lakes, an extant industrial building complex, and paved and unpaved roads. A variety of existing trails have been established within the park, which includes meadows, large stands of trees, and wildlife. The park is surrounded by the suburban development (the Golden Hills community). Much of the park boundary follows existing paved roads, including Woodford – Tehachapi Road, the main thoroughfare in Golden Hills, which roughly bisects the park north to south (Figure 2).

The Tehachapi Mountains are primarily a part of the California interior chaparral and woodlands sub-ecoregion, supporting grasslands, California oak woodlands, and oak savanna (Schoenherr 1992:270). Although the study area likely would have supported an oak woodland and meadows in the past, it currently supports various non-native grasses and other introduced species.

A Caltrans District 10 geoarchaeological study that includes the study area provides a guide for the likelihood of subsurface archaeological deposits within the study area (Rosenthal and Meyer 2004). The study aimed to determine the age and depositional history of major landforms in District 10 by combining a synthesis of published paleontological, soils, and archaeological chronometric dates with geoarchaeological field testing. The ages of surface landforms were then mapped to provide an assessment for the potential for buried archaeological deposits. These ages were derived primarily from the Soil Survey Geographic Database (SSURGO) and the State Soils Geographic (STATSGO) database. A map was created from this information that ranked locations in seven ordinal classes for sensitivity for buried soils, from Very Low to Very High. This map can be employed to provide a general measure of the potential for buried archaeological deposits in any given location within Caltrans District 10.

According to the Rosenthal and Meyer (2004) model, the study area is located on landforms dating to either the Late Pleistocene and older (greater than 1.9 million years cal BP) or to the Latest Holocene (150–2000 years cal BP). According to the model, Late Pleistocene and older landforms have Very Low sensitivity for buried archaeological deposits, and Late Holocene landforms have a Moderately High sensitivity for buried archaeological deposits. Buried sites and cultural resources are therefore considered to be potentially likely within the study area; however, the study area has been disturbed by the development of roads, buildings, and structures, including the two artificial lakes.

2.2 ETHNOGRAPHIC BACKGROUND

The study area falls within the ethnographic territory of the Mountain Kawaiisu, as opposed to the Desert Kawaiisu who occupied desert areas east of Tehachapi. While Zigmond (1986) places the study area within the core tribal area for the Kawaiisu with the range of seasonal trips covering significant portions of the Mojave Desert, other research has suggested that Kawaiisu intermarried with Panamint Shoshone and thus had permanent groups in desert areas. The Mountain Kawaiisu would winter in the Tehachapi area, generally in small hamlets of around six houses (Garfinkel et al. 2011; Kroeber 1925).

The Kawaiisu language is a member of the Numic branch of the Uto-Aztecan language family and is thereby most closely related to the Shoshonean and Paiute languages of the Great Basin. More specifically, it is a dialectical variant of Southern Paiute. The vicinity of the study area has been suggested as the place from which Southern Numic, and perhaps even Proto-Numic, dispersed. While the Kawaiisu do not have

migration tales, Zigmond 1986 indicates they have occupied the vicinity of the study area for at least 2,000 years.

The Kawaiisu were foragers, with food sources derived principally from gathering. The exact plant species exploited was dependent on seasonal availability as well as precise geographical/environmental location. In the higher montane portions of their region (e.g., toward the Tehachapis), acorn-bearing oak and pinyon nuts were staples. In the lower-lying more desertic zones, mesquite, yucca, and a variety of other edible plants were emphasized. Hunting also contributed additional protein to the Kawaiisu diet; and principally included small game, such as hares, rabbits, and rodents.

Kawaiisu social and political organization was based on the family group. The ethnographic record suggests that related family groups lived in close proximity to one another, establishing informal bands and cooperating in subsistence efforts. Chiefs, or headmen, were recognized as leaders but had authority that was not comparable to western systems of hierarchy. Rather, it was their wealth that afforded them positions of perceived authority (Garfinkel and Williams 2011; Kroeber 1925).

Religious beliefs and practices were based on shamanism. This is predicated upon perceived direct and personal interactions between an individual and the supernatural world, with this interaction founded on entering an altered state of consciousness. Shamans were considered ritual specialists who exercised an unusual degree of interaction with the supernatural world and thereby acquired a high degree of supernatural power. Although formal rituals and ceremonies were limited in number and elaboration, the shamans served as the ritual officers for these. Further, the shamans also were responsible for painting and pecking the rock art that is found in this region; rock art sites served as their vision quest locales, where the shamans entered trances to have visions and thereby acquire supernatural power. The art depicted at these sites displayed the visions and spirits they saw in their altered states of consciousness (Whitley 1992, 1996, 1998a, 1998b, 2000).

There are multiple known villages in the general vicinity of the study area. Two villages, Tehechita and Teheshti-va'a-di, were located along Brite Creek, about two-thirds of a mi. southwest of the study area. The name Tehachapi is derived from the village name Tehechita. At the eastern end of the Tehachapi Valley, in the Sand Canyon area, were the villages of Ma'a'puts and Tomo Kahni. Tomo Kahni is perhaps the most well-known of these villages and is currently protected within Tomo Kahni State Historic Park (Garfinkel et al. 2011).

2.3 PRE-CONTACT ARCHAEOLOGICAL BACKGROUND

Though no complete prehistory specific to the study area exists, nearby regions have received extensive study and can serve as proxy data. The study area is in close proximity to both the southern Sierra Nevada and the Mojave Desert; and though the regions differ in geography and tribal affiliation, the prehistories of both are broadly similar, with the exception of the earliest period. Pleistocene and early Holocene sites have, to date, been found in the Mojave Desert but not in the southern Sierra Nevada region in proximity to the study area. Overall, the prehistory of the Mojave Desert has been more greatly studied and is better known than that of the southern Sierra Nevada; indeed, our current cultural historical framework for this portion of the Sierra Nevada is simply a variant of the Mojave Desert chronology. Existing information on the prehistory of the Mojave Desert is therefore emphasized in the following background.

Pre-Clovis (earlier than 12,000 Years Before Present [YBP]):

Although there is still much debate, and occasional controversy, a variety of lines of evidence including ancient DNA studies indicate that humans were in North America 15,000 – 20,000 years ago. At this point

there is relatively little that can be said about this occupation beyond the simple argument for its presence in western North America.

Paleoindian (12,000 – 9000 YBP):

Although the initial occupation of the continent is controversial and uncertain, there is widespread agreement on the subsequent Paleoindian period, which is typically characterized as involving mobile big-game hunters who exploited Pleistocene megafauna. The hallmarks of the Paleoindian period are the fluted, collaterally flaked and basally thinned and ground Clovis and Folsom spear points, associated with the earlier portions of the period, followed by a series of large, well-flaked but unfluted, lanceolate points toward the end of the period—some of which are stemmed. Some scenarios hypothesized by anthropologists suggest that the big-game hunting practiced by these Paleoindian peoples may be responsible for the extinction of the Pleistocene megafauna, such as imperial mammoth, *Bison antiquus*, and the North American horse. Aside from this so-called Pleistocene overkill problem, the image of Paleoindians as specialized big-game hunters has become pervasive for North America though it is far from proven in all parts of the continent. Recent evidence indicates that the earlier portions of the Paleoindian period—the Younger Dryas—comprised a lengthy and severe drought, thus demonstrating that the large mammal herds were already under extreme environmental stress, regardless of the effects of human predation (Haynes 1991). Paleoclimatic reconstruction in the vicinity of the study area indicates that a drought also occurred in this specific region (Ramirez and Bryson 1996), further supporting the notion that all Mojave Desert populations—human and animal—existed in stressed conditions at that time.

Very substantial, although sometimes overlooked, evidence of Paleoindian use of eastern California has been found in a number of areas including Pilot Knob Valley, east of the study area; on the shores of Pleistocene Lake China and within the Coso Range, *per se*; in Fort Irwin, northeast of Barstow; in the El Paso Mountains, a short distance northeast of the study area; and in the Tehachapi Mountains, further to the northwest (e.g., Glennan 1971, 1987; Davis and Bryan 1978; Warren and Phagan 1988; Yohe 1992a). According to Warren and Phagan (1988), only seven fluted points had been found in the Mojave Desert, although their tabulation apparently excludes the region north of the Garlock Fault, and thus, the Coso - Panamint - Death Valley area. To their list we can add four Paleoindian points from the Coso Range and Rose Valley, three from Pilot Knob Valley, and another basally thinned point which is on display at the Death Valley National Monument Visitor Center that apparently originated from within the monument. Additionally, four fluted point bases from the Edwards Air Force Base area contribute to the Paleoindian use of the study area's region (Mark Campbell, personal communication, 2000). Even more importantly, 49 fluted points were recovered by Davis and Bryan (1978) around China Lake, substantially bolstering the evidence of Paleoindian use of this general region. Clearly, there was very substantial Paleoindian occupation of this area with the tool count herein totaling 68 artifacts- nearly ten times the original 1988 estimate.

Typically, the Paleoindian evidence consists of isolated (in some cases reused) Paleoindian projectile points, although there is also evidence for Paleoindian petroglyph manufacture in the Cosos, as implied above (Whitley 2013). Furthermore, an obsidian Paleoindian point from the central Mojave Desert (Sutton and Wilke 1984) and another from the Rose Spring site (Yohe 1992a) have been sourced to the Coso Sugarloaf Quarry. When combined with the large number of points collected by Davis and Bryan (1978) around China Lake, it is clear that this area was very important for these early occupants.

Although it is likely that Paleoindian habitation sites are somewhere preserved in the region, they have yet to be identified by archaeologists, and a better understanding of the Paleoindian period in this portion of California will be obtained only when such sites are investigated (cf. Warren and Phagan 1988). In the meantime, growing scientific evidence for Paleoindian occupations on the off-shore Channel Islands west of the study area (e.g., Morris and Erlandson 1993), with the maritime adaptation this implies, and along

Tule Lake in the San Joaquin Valley north of the study area indicates that the monolithic interpretation of all North American Paleoindian period sites as associated with a culture focused on specialized big-game hunting is incorrect; and that more regional subsistence variations for Paleoindian lifeways may emerge once better evidence from western North America has been discovered and analyzed (cf. Willig and Aikens 1988).

Early Archaic (9000 – 6000 YBP):

The Early Archaic period, also known as the Western Pluvial Lakes Tradition, represents the early Holocene in paleoenvironmental terms. Its hallmark is generally considered to be the widely dispersed but ambiguously dated Western Stemmed Tradition (WST) projectile points. These include the local variants known as Lake Mohave and Silver Lake points, although these may in fact actually date between 10,500 and 7500 YBP and thus be coeval with fluted points. Combined with studies of the lithic technologies of Early Archaic and Paleoindian sites, this chronological overlap suggests that the WST may have been an in-situ development out of the earlier Paleoindian tradition (Willig and Aikens 1988), or perhaps an existing tradition onto which Paleoindian points were added.

Early Archaic sites are most commonly found on the lowest terraces above the latest Pleistocene and early Holocene lake basins and stream deltas. (Notably, fluted points are also sometimes found at these same sites and geomorphological locations, contributing to the chronological ambiguity of both point types). Early Archaic sites are, accordingly, widely regarded as part of a lacustrine-focused adaptive strategy. Although a number of archaeologists have cautioned against too simplistic an interpretation of these associations, pointing to the fact that Early Archaic sites are also found in other environments, it is nonetheless apparent that in eastern California this environmental association and its inferred subsistence implications maintain some verity. Indeed, it can be noted that recent research in the Great Basin has emphasized the general importance of lacustrine adaptations in general terms, in contrast to Jennings' (1957) earlier model of a long-lived "desert culture" tradition.

Be these controversies as they may, Davis (1978) and Davis et al. (1969) have identified and discussed the importance of a number of putative Early Archaic sites in the Panamint region. These are located in both the China Lake Basin and the Panamint Valley in former lacustrine environments, and are indicative of some lakeshore use, if not occupation, did occur during the early Holocene in this region. However, this must be matched against archaeological evidence that WST points have also been recovered as isolates in upland environments in the Cosos (Elston et al. 1983). Thus, although lakeshore exploitation may have been an emphasis during the Early Archaic in this portion of eastern California, this period apparently also included mobile hunting in other environments as well.

Middle Archaic (6000 – 4000 YBP):

Regardless of the date range of *initial* occupation, *substantial* habitation in eastern California did not occur until later, with the start of the Middle Archaic or Pinto Period, at about 6000 YBP. This lasted until approximately 4000 YBP. A number of sites from this time period are known from the Rosamond area, specifically associated with the prehistoric shoreline of Rosamond Lake, southwest of the study area. Notably, sites dating to this time period emphasize the use of rhyolite as a lithic resource, almost to the exclusion of cryptocrystalline materials such as chert and jasper (Sutton 1988a, 1988b).

The Middle Archaic, however, corresponds essentially to the Altithermal paleoenvironmental period, a hot and dry period, and is a controversial topic in Mojave Desert prehistory due to its cultural and chronological ambiguity. Much of the archaeological ambiguity stems from the uncertainty in the chronological placement of the Pinto series projectile points. What this ultimately may suggest is that much more regional

variation existed during certain periods of the prehistoric past such as those in other areas of the Great Basin (Hockett and Spidell 2022).

In the Coso area to the northeast, but not necessarily elsewhere in eastern California, there is little if any evidence for Middle Archaic occupation, at least if Meighan's (1981) obsidian hydration date revisions for the Pinto series points from the Little Lake site are accepted, as well as research conducted by King et al. (2011) production and conveyance of Coso obsidian. That is, existing evidence could be interpreted to signal a diminution in occupation—if not an outright abandonment—in this region, apparently corresponding to the hot and dry climatological conditions of the Altithermal. However, it is also possible that local inhabitants may have adopted a subsistence strategy and settlement pattern with little archaeological visibility during this period; e.g., a highly mobile pattern. Although this alternative interpretation of the apparent dearth of Middle Archaic sites must be acknowledged, it seems implausible in light of the fact that extremely dry conditions would be more commonly predicted to result in a stronger form of "tethered nomadism", and thus greater archaeological visibility, around water sources. Moreover, there is very clear evidence for Middle Archaic settlements in the Fort Irwin area (e.g., Jenkins and Warren 1984), to the east of Barstow, suggesting that not all portions of eastern California were abandoned at this time, again, emphasizing the possibility of more regional variability than heretofore acknowledged.

Late Archaic (4000 – 1500 YBP):

Much less controversy surrounds the subsequent Late Archaic period, or Elko Period, lasting from about 4000 to 1500 YBP, which correlates with improved and wetter environmental conditions across western North America — including in the western Mojave Desert, as Ramirez and Bryson's (1996) reconstruction indicates. This period correlates to the Holocene Maximum which, strictly, begins at about 3800 YBP. Although sites from this time period are sometimes considered rare in the Mojave Desert, many of the subsequent Rose Spring Period villages (detailed below) were first occupied during this earlier phase. That is, there seems to be a strong continuity between the Elko Period and subsequent times, with the latter period materials masking or burying the Elko remains. In the Antelope Valley region south of the study area this begins with a major increase in population beginning about 3000 YBP (Sutton 1988b:23).

Similar patterns have been noted in surrounding regions. For example, the start of the Late Archaic in the Coso Range region is posited to represent the initial establishment of the primary settlement and subsistence systems that are currently archaeological visible (Whitley 1994, 1998c), while this same period has been recognized as experiencing a major, far western North American-wide expansion of settlements into new environments and increases in population, stretching from the Great Basin of eastern California, through the southern Sierra Nevada, across the Transverse Ranges, and down to the coast (Whitley 2000). The primary temporal diagnostics for the Late Archaic are Elko and Gypsum series projectile points.

In the Coso Range, the Late Archaic is signaled by the establishment of major winter villages, typically at springs, in valley bottoms on the western and wetter side of the range. Analyses of paleoethnobotanical and faunal remains suggest a generalized foraging strategy, emphasizing all available resources (e.g., Gumerman 1985), including buckwheat stands around small, mud playas (Whitley et al. 1988). This evidence is complemented by an extensive but seemingly non-logistically organized use of all upland environments. Included here is a significant quantity of isolated projectile points in the uplands, suggesting mobile hunting patterns (Elston et al. 1983). Furthermore, the Late Archaic witnessed the beginning of the intensive exploitation of the Coso Sugarloaf obsidian quarry, an event that apparently correlates with the beginning of the inland-to-coastal obsidian trade in south-central California.

Rose Spring (1500 – 800 YBP):

The Rose Spring Period is differentiated from the Late Archaic/Elko Period by the introduction of the bow and arrow and a change from spear points to arrow points at circa 1450 YBP (cf. Yohe 1992b). This technological change archaeologically corresponds to the Medieval Climatic Anomaly, a period of unstable weather patterns that resulted in major droughts interspersed with major flood events.

The transition in technology is, in technical terms, dramatic. However, the introduction of this new technology did not have any immediate major impacts on social or cultural systems. At least initially, the settlement and subsistence systems appear stable in the archaeological record, and lithic technology and production did not noticeably change (Allen 1986).

In all other respects archaeological sites dated to the Rose Spring time period appear to have been a continuum from the earlier patterns, so that the change in hunting technology was probably less important than we might otherwise presume. Within the Antelope Valley area, Desert Village Complexes, representing a major change in magnitude of settlements, were founded at least by Rose Spring times, and perhaps toward the end of the earlier Elko phase. Two of these have been identified by Sutton (1988a, 1988b) in the foothills of the Antelope Valley, with a third between Rosamond and Rogers Dry Lake, and a possible fourth at Koehn Lake. It is possible, if not likely, that these represent the founding of the tribelet system of political organization in the region.

At approximately 950–750 YBP, however, a shift in settlement and subsistence practices began that, ultimately, culminated in the protohistoric/ethnographic patterns referred to as the Later Prehistoric or Numic Period (detailed below). This involved the abandonment of some winter villages, or at least a reduction in the intensity of their use; the establishment of logistical base camps around springs in the upland environments; an increasing emphasis on a relatively specialized diet focused on seeds and the pinyon nut; and prolific production of petroglyphs (Whitley 1994). Characteristically, the Rose Spring time period is one when settlement patterns became more organized and focused, while subsistence was increasingly specialized, and ritual became more common.

The causes for this subsistence transition are not yet fully understood by anthropologists. Bettinger and Baumhoff (1982), for example, have accepted it as an empirical fact, with the subsistence change then linked to the putative spread of Numic peoples out of eastern California at about this time. They have taken the position that the phenomenon to be explained is not the cause of the subsistence change, but the reasons why such a change was adaptively more successful, and how it can then be used to account for the historical distribution of Numic languages. The assumption is that evolutionary transitions are to be expected due to the inherent tendency for greater fitness to emerge in populations.

While this last tendency may or may not be so, this same time period experienced a major drought that affected all portions of western North America: from northern Mexico through the Southwest, across the Great Basin, and even into the Channel Islands in a counterclockwise trajectory termed the Little Ice Age. Moreover, the environmental stress that resulted from this drought has been cited as a causal factor in the abandonment of Ancestral Puebloan communities in the Southwest, as well as the southward retreat of Mesoamerican civilization with the collapse of Tula. Whitley (1994, 1998c) has argued that this transition in eastern California represents the first appearance of Numic bands and headmen; specifically, that it was the increasing perceived need for ritual specialists in the form of rain shamans during this period of environmental degradation that led to the establishment of bands and the creation of headmen. In this interpretation, the accelerated production of Coso petroglyphs (which are known ethnographically to have been tied to rain shamanism) is taken as a reflection of the growing number of ritual specialists, with the appearance of a logistically oriented settlement pattern as clearest evidence of increasing sociopolitical control and organization in the region of the study area.

Late Prehistoric (800 – 140 YBP):

The Late Prehistoric (or, in some areas, Numic) Period, spams from 800 YBP to European contact and corresponds to the Little Ice Age. It is distinguished from the Rose Spring time period by the introduction of brownware ceramics and a change in projectile point typology from Rose Springs types to Desert Side-Notched and Cottonwood Triangular types. Sutton (1988a, 1988b) hypothesizes that a boundary of some sort developed during this period: Desert Side-Notched points, brownware ceramics and obsidian are all common from the Fremont Valley northward; south of this area, in the Antelope Valley proper, ceramics and obsidian are rare, and Cottonwood Triangular points are the predominant projectile point type. This apparently correlates with similar patterns further toward the coast: at about 800–1,000 years ago the desert-to-coast obsidian trade became less common, and Rose Spring-like projectile points were replaced by Cottonwood-like points, making Desert Side-Notched points rare.

The Protohistoric/Historic phase of the Late Prehistoric, representing the last 300 years, is marked by a major disruption in indigenous settlement, as evidenced by a paucity of archaeological sites in eastern California. According to Earle (1990), missionization pulled away many of the region's inhabitants. Compounding the devastation of the Mission Period in California is a brief period of extreme drought ~300 YBP, as indicated by Ramirez and Bryson's (1996) paleoclimatic model, within what was already a cool and dry period. Hence, deteriorating environmental conditions may have contributed to the strain on California's indigenous groups as social disruptions combined with the introduction of new diseases, all of which would have had detrimental effects on the local population. The western Mojave Desert area was then also used as a staging ground for rustlers and other miscreants, who were raiding the Missions' livestock. The result was that the area became somewhat of a no-man's land which, no doubt, has also contributed to the paucity of ethnographic information on it.

Southern Sierra Nevada Region:

Much less research has been completed in the southern Sierra Nevada, and our understanding of its prehistory is still limited. Research completed so far, however, suggests that cultural-historical periods and temporally diagnostic artifacts are similar to those identified for the Mojave Desert, although subsistence and settlement patterns are likely to have differed significantly. The prehistory of the southern Sierra Nevada is summarized following Schiffman and Garfinkel (1981), Moratto (1984), and Cuevas (2002) below.

Little, if any, evidence for early occupation or use of the southern Sierra Nevada area has so far been identified, although it is possible that this is primarily a function of taphonomic or site preservation issues. Occasional identification of Early Archaic, referred to in this region as the *Lamont Phase* (6000–3200 YBP), projectile points suggest at least occasional use of the mountains for hunting. These points are similar to the Pinto series commonly found on the desert, potentially demonstrating cultural connections with these lowland populations. Although the archaeological record is not yet clear, small camps may have been occupied during this period as well.

Population appears to have increased during the subsequent *Canebrake Phase* (3200–1350 YBP). According to Cuevas (2002:26), pine nut cache sites at higher elevations first appear during this period, with Moratto (1984: 333) noting the establishment of camps near pinyon groves. Sierra Concave Base projectile points, essentially equivalent to Humboldt points in the Great Basin, are the primary diagnostic from this time period, although the temporal placement of Humboldt points is notoriously ambiguous.

The *Sawtooth Phase* (1350–650 YBP) is the chronological equivalent of the Rose Spring time period in the Great Basin and, as in that region, it experienced the transition from the atlatl and dart to the bow and arrow.

Sites dating to this period are common. Ornaments appear for the first time, including *Olivella* shell beads, indicating trade connections with the coast.

The final time period, the *Chimney Phase* (650 YBP–Historic Contact), reflects the immediately pre-contact cultural pattern. This included a general hunting and gathering subsistence system with diagnostics again equivalent to those in the desert.

2.4 HISTORICAL BACKGROUND

The discovery of gold in northern California in 1848 resulted in a dramatic increase of population, consisting in good part of fortune seekers and gold miners, who began to scour other parts of the state. After 1851, when gold was discovered in the Sierra Nevada Mountains in eastern Kern County, the population of the area grew rapidly (JRP Historical Consulting 2009). The first permanent Euro-American settlers came to the Tehachapi Valley in the fall of 1854 and focused primarily on ranching that included raising cattle and growing hay and grain. Some of the first settlers in the 1860s also developed a lumber trade (Barras 2015). In 1869, James Williams built the first commercial establishment in the region, the Williams Hotel. A settlement, called Williamsburg, quickly grew up around it, in what is now the unincorporated community known as Golden Hills.

Tehachapi Valley also provided an ideal location for trains making the climb from the San Joaquin Valley to switch engines and railcars. Southern Pacific Railroad began construction on a rail line connecting Bakersfield to the Mojave Desert and other eastern locations in 1874. Engineers overcame the steep grade through the Tehachapi Mountains with the "Tehachapi Loop," one of the major engineering feats of its day. The line through Tehachapi opened in 1876, with a station established a few mi. east of Williamsburg, in what is now downtown Tehachapi. Business owners and residents of small communities already present in the area moved to Tehachapi to take advantage of new opportunities provided by the railroad, marking the end of Williamsburg (ibid). Williamsburg, subsequently referred to as "Old Town," is recorded as California historical resource P-15-007760. (It is south/southwest of the study area.)

Greater economic opportunities arose in the Tehachapi Valley with the start of construction of the Los Angeles Aqueduct (formerly the Owens Valley aqueduct) in 1908. Large limestone deposits were known in the Tehachapi Valley since the first settlers entered the region, some even setting up kilns to burn the lime. When aqueduct construction began, the limestone deposits in the Tehachapi Valley became a major source for cement used in the project (Greater Tehachapi Chamber of Commerce 2016). The town of Monolith (originally named Aqueduct), located approximately 4.5 mi east of Tehachapi, had its beginnings as a camp to support cement plant workers. In 1909, shortly after the arrival of large-scale cement production in the valley, Tehachapi was incorporated (ibid).

In 1932, the first correctional institute for women in the state of California opened in Cummings Valley just west of Tehachapi. Though initially a facility independent from the California correctional system, beginning in 1944 the institution transitioned to control by the California Department of Corrections. The Kern County earthquake of July 21, 1952, rendered the facility unsafe for occupancy and the prisoners were all moved. The institution was rebuilt and reopened in 1954 as a California Correctional Institute for men. Today, it is the largest employer in the greater Tehachapi area (ibid).

The opening of California State Route 58 in 1964 put Tehachapi within an hour commute from Bakersfield and the Mojave Desert. This, coupled with the favorable climate of Tehachapi, resulted in an increase in Tehachapi's commuter population and the development of outlying communities, such as Golden Hills,

Bear Valley Springs, Stallion Springs, and Sand Canyon. Golden Hills itself was created as a master-planned community by the Boise Cascade company in the 1970s (ibid).

2.5 RESEARCH DESIGN

2.5.1 Historic-Era Archaeology: Euro American

Approaches to historical Euro American archaeological research relevant to the region have been summarized by Caltrans (1999, 2000, 2007, 2008). These concern the general topics of historical landscapes, agriculture and farming, irrigation (water conveyance systems), and mining. No consideration has yet been made for the historical oil industry and its remains, which are of central interest for archaeological work in the Kern County oil fields. Despite that limitation, Caltrans has identified a series of general research issues along with an evaluation matrix to aid in determinations of eligibility. The identified research issues include site structure and land-use (lay-out, land use, feature function); economics (self-sufficiency, consumer behavior, wealth indicators); agricultural technology and science (innovations, methods); ethnicity and cultural diversity (religion, race); household composition and lifeways (gender, children); and labor relations. The seven aspects or qualities of integrity as set for by the National Park Service (described above) for cultural resources are integrated into the evaluation matrix and are considered in the identified research issues. Principles useful for determining the research potential of an individual site or feature, including the seven aspects of integrity, are conceptualized in terms of the mnemonic AIMS-R, as follows:

1. *Association* refers to the ability to link an assemblage of artifacts, ecofacts, and other cultural remains with an individual household, an ethnic or socioeconomic group, or a specific activity or property use. Association is closely related to location, setting, and feeling and those aspects are generally considered together.

2. *Integrit*y addresses the physical condition of the deposit, referring to the intact nature of the archaeological remains. For a feature to be most useful, it should be in much the same state as when it was deposited. However, even disturbed deposits can yield important information (e.g., a tightly dated deposit with an unequivocal association) and integrity thus should not be confused with site condition. Aspects of integrity identified by the National Park Service and not covered elsewhere in AIMS-R are included here. These include design and workmanship.

3. *Materials* refers to the number and variety of artifacts present. Large assemblages provide more secure interpretations as there are more datable items to determine when the deposit was made, and the collection will be more representative of the household, or activity. Likewise, the interpretive potential of a deposit is generally increased with the diversity of its contents, although the lack of diversity in certain assemblages also may signal important behavioral or consumer patterns.

4. *Stratigraphy* refers to the vertically or horizontally discrete depositional units that are distinguishable. Remains from an archaeological feature with a complex stratigraphic sequence representative of several events over time can have the added advantage of providing an independent chronological check on artifact diagnosis and the interpretation of the sequence of environmental or sociocultural events.

5. *Rarity* refers to remains linked to household types or activities that are uncommon. Because they are scarce, they may have importance even in cases where they otherwise fail to meet other thresholds of importance (Caltrans 2007:209).

The AIMS-R principles reflect the seven aspects or qualities of cultural resource integrity, as illustrated in Table 1.

Table 1. Concordance of AIMS-R Principles and 7 Qualities of Integrity

AIMS-R Principles	NRHP Qualities of Integrity
Association	Location, Feeling, Association
Integrity	Design, Workmanship, Setting
Materials	Materials, Association
Stratigraphy	Location, Association
Rarity	Design, Workmanship

For agricultural sites, Caltrans (2007) has identified six themes to guide research: Site Structure and Land Use Pattern; Economic Strategies; Ethnicity and Cultural Adaptation; Agricultural Technology and Science; Household Composition and Lifeways; and Labor History. Expected site types would include farm and ranch homesteads and facilities, line camps, and refuse deposits. In general terms, historic-era Euro-American archaeological sites would be most likely eligible for the NRHP under Criterion D for their research potential; however, they also potentially could be eligible under Criteria A and B for their associated values with major historical trends or individuals. Historic-era landscapes might also be considered.

Historical structures are typically eligible under Criteria A and/or B for their associative values with major historical trends or individuals, and Criterion C for potential design or engineering importance.

For mining sites in California deserts, Swope and Gregory (2017) have identified four themes to guide research: Material Culture at Mining Sites in the California Deserts; Small- and Large-Scale Environmental Modifications; Dynamic Capitalism; and Character of Cabins Associated with Mining Sites in the California Desert. Expected property types would include sites related to extraction, beneficiation, secondary mining, support-system, and linear features. As mentioned above, historic-era Euro-American archaeological sites would be most likely eligible for the NRHP under Criterion D for their research potential; however, they also potentially could be eligible under Criteria A and B for their associated values with major historical trends or individuals. Historic-era landscapes might also be considered.

3. ARCHIVAL RECORDS AND SACRED LANDS FILE SEARCHES

3.1 ARCHIVAL RECORDS SEARCH

To determine whether the study area had been previously surveyed for cultural resources, and/or whether any such resources were known to exist within or near the study area, staff of the Southern San Joaquin Valley Information Center (SSJVIC) conducted an archival records search on August 19, 2024. The records search was completed to determine: (i) if pre-contact or historic-era cultural resources had previously been recorded within the study area; (ii) if the study area had been systematically surveyed by archaeologists prior to the initiation of this fieldwork; and/or (iii) whether the area surrounding the proposed Project was known to contain archaeological sites or built environment resources and to thereby be culturally sensitive. Records examined included archaeological site files and maps, the National Register of Historic Places, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest. The records search included the study area and a 0.5 mi. buffer.

According to the SSJVIC, two previous studies have been conducted within the study area (Table 2). Approximately 70 percent of the study area has been previously studied, with the most recent report (KE-5224) conducted approximately five years ago. An additional six previous studies were identified within the 0.5 mi. buffer.

The SSJVIC results identified no previously recorded resources within the study area (Table 3). An additional six resources were identified within the 0.5 mi. buffer, with the nearest located approximately 0.2 mi. from the study area. The results of the SSJVIC records search are available in Confidential Appendix A.

Table 2. Previous Studies within the Records Search Area

Report #	Year	Author	Title	Project Relationship
KE-00275	1981	Robinson, R. W.	Cultural resources investigation regarding the Golden Hills Sewer Plant Project	**Within**
KE-01369	1990	Schiffman, Robert	Archaeological Investigation of Loop Ranch Tehachapi, Kern County, California	Outside
KE-03052	2004	Hudlow, Scott	A Phase I Cultural Resource Survey for Golden Hills Zone Change, Tehachapi, Kern County, CA	Outside
KE-03324	2007	Hudlow, Scott	A Phase II Cultural Resource Evaluation for Golden Hills Zone Change, Tehachapi, Kern County, CA	Outside
KE-03950	2009	Parr, Robert	Archaeological Assessment for the Replacement of Forty-Two Deteriorated Power Poles on the Southern California Edison Viento, Cuddeback, Caliente and Discovery 12 kV Circuits near Keene and Tehachapi, Kern County, California	Outside
KE-04911	2017	Wills, Carrie	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CSL00567, 22347 Woodford Tehachapi Road, Tehachapi, Kern County, California	Outside
KE-05224	2019	Whitley, David	Phase I Survey, Golden Hills Nature Park Restoration Project, Kern County, California	**Within**
KE-05448	2021	Byerly, Ryan and King, Jerome	Archaeological Survey Report for the Keene Pavement Project, State Route 58, Caltrans District 9, Kern County, California	Outside

Table 3. Previously Recorded Resources

Primary #	Type	Description	Eligibility Status	Project Relationship
P-15-002050	Historic-era structure	Southern Pacific Railroad	Not eligible	Outside
P-15-007760	California Registered Historical Landmark	"Old Town" Tehachapi	California Registered Historical Landmark	Outside
P-15-017304	Historic-era structure	State Route 58	N/A	Outside
P-15-020600	Prehistoric isolate	Cryptocrystalline flake	Categorically not eligible	Outside
P-15-020601	Prehistoric isolate	Cryptocrystalline flake	Categorically not eligible	Outside
P-15-020602	Historic-era isolate	Church key opened can	Categorically not eligible	Outside

3.2 TRIBAL OUTREACH

As part of the CEQA process, a search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed on August 12, 2024. Based on the NAHC records, the study area is negative for sacred sites or traditional cultural places (Confidential Appendix B). Outreach letters and emails were sent on August 23, 2024, to tribal organizations on the NAHC contact list. Follow-up emails were sent on December 4, 2024. The Morongo Band of Mission Indians responded that the Project is not located within the boundaries of the ancestral territory or traditional use area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. No other responses were received as a result of this outreach.

4. METHODS AND RESULTS

4.1 FIELD METHODS

A Phase I survey of the study area was conducted by ASM Associate Archaeologist Robert Azpitarte, BA, with the assistance of Ross Way, AA, and Margarita Medina Lemus, BA, on November 14, 2024. The Phase I survey included a review of the study area for the presence of built environment features. The field methods employed also included intensive pedestrian examination of the ground surface for evidence of archaeological sites in the form of artifacts, surface features (such as bedrock mortars, historical mining equipment), and archaeological indicators (e.g., organically enriched midden soil, burnt animal bone); the identification and location of any discovered sites, should they be present; tabulation and recording of surface diagnostic artifacts; site sketch mapping; preliminary evaluation of site integrity; and site recording, following the California Office of Historic Preservation (OHP) Instructions for Recording Historic Resources using California Department of Parks and Recreation (DPR) 523 forms. Parallel survey transects spaced at maximum intervals of 15 m. apart were employed for pedestrian survey of the 93.5 ac. study area.

4.2 SURVEY RESULTS

The study area consists of open space areas that include the demolished Golden Hills Country Club, an extant industrial building complex, and paved and unpaved roads (Figures 2 through 4). Surrounding the study area are paved roads, as well as residential and business properties. Much of the study area appears to have been disturbed by various development including construction of trails, utilities, road grading, Tamarisk tree removal around Tom Sawyer Lake, and general maintenance of trails. Visibility ranged from good (50 percent to greater than 95 percent) to poor (approximately 20 percent). Representative photos of poor visibility (Figure 3) and good visibility (Figure 5) are depicted below. Soil consisted of tan to brown sandy loam throughout the study area. Modern refuse was observed throughout the study area but was more prevalent in the western portion of the study area.

A total of seven foundations associated with the former Golden Hills Country Club were identified within the western portion of the study area. The country club was built in the early 1960s (Tehachapi News 2016). The country club operated until the early 1990s; after which it was abandoned and subsequently burned down for a firefighter training exercise in 2016 (Tehachapi News 2016). All that remains of the former country club are foundations and other minor infrastructure, which are described in more detail below. No historic-era refuse or any other built features were identified related to the former Golden Hills Country Club. A DPR site form, including photographs and site sketch and location maps, is available in Confidential Appendix C.

Feature 1 is the remains of the former main building of the Golden Hills Country Club measuring 270 ft. northeast-southwest by 165 ft. by northwest-southeast. A separate painted/dyed cinder block brick is present in the northeast section and measures approximately 39 in. tall on the outside, 32.5 in. tall on the inside, and 7.5 in. wide. Individual cinder blocks are filled with concrete as mortar. A stairway composed of mortared concrete with inclusions of sandstone and quartzite cobbles is present in the southeast corner of Feature 1. At the top of this stairway is an inscribed arrow with a capital “W” pointing south. This cobbled stairway provides access to the former pool (Feature 2). Along the eastern portion of Feature 1 is a gradually sloped concrete ramp that facilitates travel down to the former recreational area and now dry pond.

Feature 2 consists of the structural ruins of the former pool facility that measures 100 ft. east-west by 65 ft. north-south. On the west side, individual shower stall walls and drains partially remain.

Feature 3 represents the former tennis court measuring 125 ft. northeast-southwest by 120 ft. northwest-southeast. The foundation is surrounded by a modern chain link fence with a large opening on the eastern side. The feature also includes a modern electrical box on the southwestern corner and multiple modern-era lamp posts. Various modern construction debris including metal, concrete, and the remains of wooden furniture have been dumped inside the tennis court.

Feature 4 is a large concrete foundation of unknown use measuring 105 ft. northeast-southwest by 60 ft. northwest-southeast. Various modern building debris have been dumped on the foundation.

Feature 5 is a smaller, rectangular concrete foundation directly east of Feature 4. This foundation measures 25 ft. by 10 ft.

Feature 6 is a small, 3 ft. square poured concrete pad directly south of Feature 4.

Feature 7 represents the large parking lot area for the former clubhouse. The parking lot measures 330 ft. north-south by 205 ft. east-west and is currently used for parking by users of the existing trails system. A short wood post trail fence separates the parking structure from the current recreation area.

No other archaeological resources of any kind were identified within the study area.



Figure 2. Study area overview, facing southeast.



Figure 3. Study area overview, facing northeast.



Figure 4. Study area overview, facing north.



Figure 5. Study area overview, facing east-northeast.



Figure 6. Eastern portion of study area, facing south.



Figure 7. Tom Sawyer Lake, facing northwest.

4.3 CRHR ELIGIBILITY EVALUATION

ASM performed a CRHR eligibility evaluation for the newly recorded site, which consists of the remains of the former Golden Hills Country Club. Using the AIMS-R evaluation matrix for historic-era sites, the sites can be assessed for CRHR eligibility as follows:

Association – The historic-era foundations identified within the survey area are ubiquitous throughout the region and lack any clear social association. While it may be possible to associate the foundations with the former country club, as simple, poured concrete and cinder block foundations, they lack clear association to any specific individual. Therefore, they do not have research potential due to the lack of a social or functional associative context.

Integrity – These features include poured concrete and cinder block foundations and asphalt parking lot of the former country club buildings which were burned for a firefighter training exercise in 2016 (Tehachapi News 2016). Although identifiable features such as date stamps may be present, no other features related to the former country club are present and thus can no longer retain integrity of design, workmanship, or setting.

Materials – These features are simple concrete and cinder block foundations, as well as an asphalt parking lot, are unremarkable since they are present throughout the region and lack distinguishing characteristics.

Stratigraphy – Though stratigraphy is possible in historic-era sites, specifically early era sites when a privy is present; these features are not present at the country club. Municipal trash services and other practices of discard during the mid-late twentieth century resulted in cultural practices that did not develop stratigraphic refuse deposits that could provide detail about the country club's patrons or staff. Since the artifact assemblages are surficial in nature and preclude stratigraphic development, this principal is not satisfied by the site.

Rarity – No rare or unusual features/feature types were identified.

Based the information above, the site lacks association with important known historical events (CRHR Criterion 1) or individuals (CRHR Criterion 2) and does not represent a distinctive example of structural types or works of master craftsmen (CRHR Criterion 3). In addition, the former country club lacks research potential beyond its recordation here (CRHR Criterion 4). Therefore, it is recommended as not CRHR eligible.

5. SUMMARY AND RECOMMENDATIONS

5.1 SUMMARY

A Phase I survey was conducted for the Golden Hills CSD Nature Park Master Plan Project, Kern County, California. A records search was conducted at the SSJVIC. This search indicated that much of the study area had been previously surveyed and that no previously recorded resources were within the study area. An NAHC SLF search was conducted for the study area and the NAHC responded with negative SLF results.

The Phase I survey fieldwork of the study area was conducted on November 14, 2024, with parallel transects spaced at 15 m. intervals. A total of seven features associated with the former Golden Hills Country Club were identified within the western portion of the study area. No other archaeological resources were identified within the study area. ASM recommends the former Golden Hills Country Club not eligible for inclusion in the CRHR.

5.2 RECOMMENDATIONS

Based on the above analyses and findings, the proposed Golden Hills CSD Nature Park Master Plan Project will not result in adverse impacts to historical resources, and a determination of ***no significant impact*** under CEQA is recommended. It is further recommended that, in the unlikely event that previously unrecorded cultural resources are identified during Project construction, work be halted within a 100 ft. radius of the find and a qualified archaeologist be contacted to evaluate the newly discovered resource.

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CONFIDENTIAL APPENDICES