City of Porterville

Terrazza Subdivision

Draft Initial Study/Mitigated Negative Declaration
July 2023

Prepared for:
City of Porterville Community Development Department
291 N. Main Street
Porterville, CA 93257

Prepared by:
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Acronyms and Abbreviations

AF ..... Acre Feet/Foot
ARB ..... Air Resources Board
BMPs ..... Best Management Practices
BPS ..... Best Performance Standards
CalEEMod ..... California Emissions Estimator Model
CalEPA ..... California Environmental Protection Agency
Cal Fire ..... California Department of Forestry and Fire Protection
Cal OES ..... California Office of Emergency Services
Cal/OSHA ..... California Department of Occupational Safety and Health Act
Caltrans ..... California Department of Transportation
CARB ..... California Air Resources Board
CBC ..... California Building Code
CCAA ..... California Clean Air Act
CCR ..... California Code of Regulations
CDFW ..... California Department of Fish and Wildlife
CEQA ..... California Environmental Quality Act
CFR ..... United States Code of Federal Regulations
CH_4 ..... Methane
CHRIS ..... California Historical Resources Information System
City ..... City of Porterville
COG ..... Council of Governments
CNDDB ..... California Department of Fish and Wildlife Natural Diversity Database
CNPS ..... California Native Plant Service
CO ..... Carbon Monoxide
CRHR ..... California Register of Historical Resources
CUPA ..... Certified Unified Program Agency
CWA ..... Clean Water Act
DOC ..... California Department of Conservations
DTSC ..... Department of Toxic Substances Control
EIR ..... Environmental Impact Report
FEMA ..... Federal Emergency Management Agency
FHSZ ..... Fire Hazard Severity Zone

FIRM ..... Flood Insurance Rate Maps
FMMP ..... Farmland Mapping and Monitoring Program
FRA ..... Federal Responsibility Area
GAMAQI ..... Guide for Assessing and Mitigating Air Quality Impacts
GHGs ..... Greenhouse Gases
GPCD ..... gallons per capita per day
IS ..... Initial Study
IS/MND ..... Initial Study/Mitigated Negative Declaration
LRA ..... Local Responsibilty Area
MMRP ..... Mitigation Monitoring & Reporting Program
MND ..... Mitigated Negative Declaration
MRZ ..... Mineral Resource Zones
NAAQS ..... National Ambient Air Quality Standards
ND ..... Negative Declaration
NOAA ..... National Oceanic and Atmospheric Administration
NO_2 ..... Nitrogen Dioxide
NO_X ..... Nitrogen Oxide
NPDES ..... National Pollutant Discharge Elimination System
NRCS ..... Natural Resources Conservation Service
O_3 ..... Ozone
PM_{10} ..... Particulate Matter less than 10 microns in diameter
$PM_{2.5}$ ..... Particulate Matter less than 2.5 microns in diameter
Ppb ..... parts per billion
Project ..... Terraza Subdivision Project
RCRA ..... Resource Conservation and Recovery Act
RHNA ..... Regional Housing Needs Assessment
RHNP ..... Regional Housing Needs Plan
RWQCB ..... Regional Water Quality Control Board, Region 5, Central Valley Region
SB ..... Senate Bill
SHC ..... Streets and Highway Code
SJVAPCD ..... San Joaquin Valley Air Pollution Control District
SMARA ..... Surface Mining and Reclamation Act
SO_2 ..... Sulfur Dioxide
SR ..... State Route

SRA ..... State Responsibility Area
SWRCB..... State Water Resources Control Board
SWPPP..... Storm Water Pollution Prevention Plan
TCAG ..... Tulare County Association of Governments
UWMP..... Urban Water Master Plan
USEPA ..... United States Environmental Protection Agency
USFWS ..... United States Fish and Wildlife Service
UST ..... Underground Storage Tank
WWTF..... Wastewater Treatment Facility

Chapter 1 Introduction

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

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 (CCR) 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 proposed 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 (MND) 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 IS/MND is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; 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 four chapters, and four technical appendices. **Chapter 1 Introduction**, provides an overview of Project and the CEQA environmental documentation process. **Chapter 2 Project Description**, provides a detailed description of Project objectives and components. **Chapter 3 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 4 Mitigation, Monitoring and Reporting Program (MMRP)**, provides the proposed mitigation measures, completion timeline, and person/agency responsible for implementation. **Appendix A** includes the California Emissions Estimator Model (CalEEMod) output files; **Appendix B**

includes the Biological Evaluation; **Appendix C** includes the Cultural Evaluation and **Appendix D** includes the Natural Resources Conservation Service (NRCS) Soils Report.

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 recommends appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level.

Chapter 2 Project Description

2.1 Project Background and Objectives

2.1.1 Project Title

City of Porterville – Terrazza Subdivision Project

2.1.2 Lead Agency Name and Address

City of Porterville
291 North Main Street
Porterville, California 93257

2.1.3 Contact person and Phone Number

Lead Agency Contact

Jason Ridenour, Assistant City Manager
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(559) 782-7460

CEQA Consultant

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Project Owner/Operator

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Porterville, CA 93257
(559)788-1000

2.1.4 Project Location

The Project is located within the City of Porterville (City), California, located in the southwest portion of Tulare County and southeastern portion of the San Joaquin Valley, at the foothills of the Sierra Nevada Mountains. It is approximately 70 miles south of Fresno, 50 miles north of Bakersfield, 30 miles northwest of Visalia and 50 miles southwest of Sequoia National Park (See **Figure 2-1**). Lake Success and the Tule River are five miles east of Porterville.

Specifically, the Project is located on a vacant parcel of land southwest of the intersection of North Plano Street and East Grand Avenue. The parcel is within the Porterville Topographic Quadrangle Porterville at Township 21S, Range 27E, Section 25, NW1/4. Mount Diablo Base and Meridian (See **Figure 2-2**). The proposed parcel is located at 36.076213 degrees latitude and -119.0097610 degrees longitude. The Assessor's Parcel Number is 253-050-007.

The Project is surrounded by a large lot residential to the north, 4-plex residential housing to the south, agricultural land to the east, and an empty lot to the west.

2.1.5 Latitude and Longitude

The centroid of the parcel is 36°04'34.4" N 119°00'35.1" W.

2.1.6 General Plan Designation

Low-Medium Residential. Project proposes a General Plan Amendment to Medium Density Residential.

2.1.7 Zoning

Low-Medium Residential (RM-1) Project proposes a Zone Change to Planned Development (PD).

2.1.8 Description of Project

2.1.8.1 Project Description

The Project proposes the development of a 12-lot subdivision for a future multi-family residential development. The Project would include twelve (12) 2-story buildings for a 46-unit residential subdivision and common area with associated improvements consisting of utility connections, drive approaches, parking lots, connection to an existing pedestrian trail, and associated landscaping. Each unit would have a small courtyard and two-car garage. There would be approximately 42 additional parking spaces. The subdivision would be gated with a single ingress/egress for vehicles and an additional pedestrian pathway and gate.

The Project would implement smart design efficiencies to optimize water and energy uses. Specific efficiencies include:

- Water –
  - Low flow toilets with dual flush;
  - Low flow shower and sink faucets;
  - Drought tolerant landscaping; and
  - Reclaim grey water for landscape irrigation.
- Energy –
  - Motion sensor lights throughout the homes;
  - Dimmer switches;
  - Interior and Exterior LED lighting;
  - Roof mounted solar, up to 90-100% of complex demand;
  - EV charging in all garages; and
  - Additional EV charging stations in the guest parking area.
- Materials –
  - Recycled building materials to the greatest extent practicable;
  - Gated Community; and
  - Security Cameras in public areas.
- Landscape –
  - Drought tolerant plants;
  - Planting of approximately 60 trees;
  - Artificial turf for pet areas; and
  - Utilization of grey water for landscape irrigation.

2.1.8.2 Construction and Schedule

The Project would start toward the end of 2023 and be completed in two phases. Phase I would build and complete half of the 46-units . This would include hardscapes, and partial landscape areas. Phase II would begin when the completed units are leased. In Phase II of the remaining 23-units and landscaped areas would be completed. The estimated schedule for the Project would be approximately one year from the start of construction.

2.1.9 Other Public Agencies Whose Approval May Be Required:

Discretionary approvals that may be required:

- City of Porterville – General Plan Amendment, Zone Change, Conditional Use Permit, Tentative Subdivision Map
- State Water Resources Control Board – National Pollutant Discharge Elimination System (NPDES) Construction General Permit
- Regional Water Quality Control Board, Central Valley Region – Waste Discharge Requirements
- San Joaquin Valley Air Pollution Control District – rules and regulations (Regulation VIII, Rule 9510, Rule 4641)
- Ministerial approvals and agreements that may be required:
- City of Porterville – building permits, encroachment permits

2.1.10 Consultation with California Native American Tribes

The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the CEQA Guidelines. Pursuant to Public Resources Code (PRC) Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias.

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

Pursuant to Senate Bill 18 (SB 18), Native American tribes traditionally and culturally affiliated with the Project area (Santa Rosa Rancheria Tachi Yokut Tribe, the Tule River Indian Tribe and the Wuksache Indian Tribe) were invited to consult regarding the project based on a list of contacts provided by the NAHC. The City mailed

notices of the proposed project to each of these tribes on August 13, 2019, which included the required 90-day time period for tribes to request consultation, which ended on November 13, 2019.

In addition, and pursuant to Assembly Bill 52 (AB 52), the Santa Rosa Rancheria Tachi Yokut Tribe, the Tule River Indian Tribe and the Wuksache Indian Tribe were invited to consult under AB 52. The City mailed notices of the proposed project to each of these tribes on August 13, 2019, which included the required 30-day time period for tribes to request consultation, which ended on September 13, 2019.

The City did not receive any further correspondence requesting consultation from either Tribe.

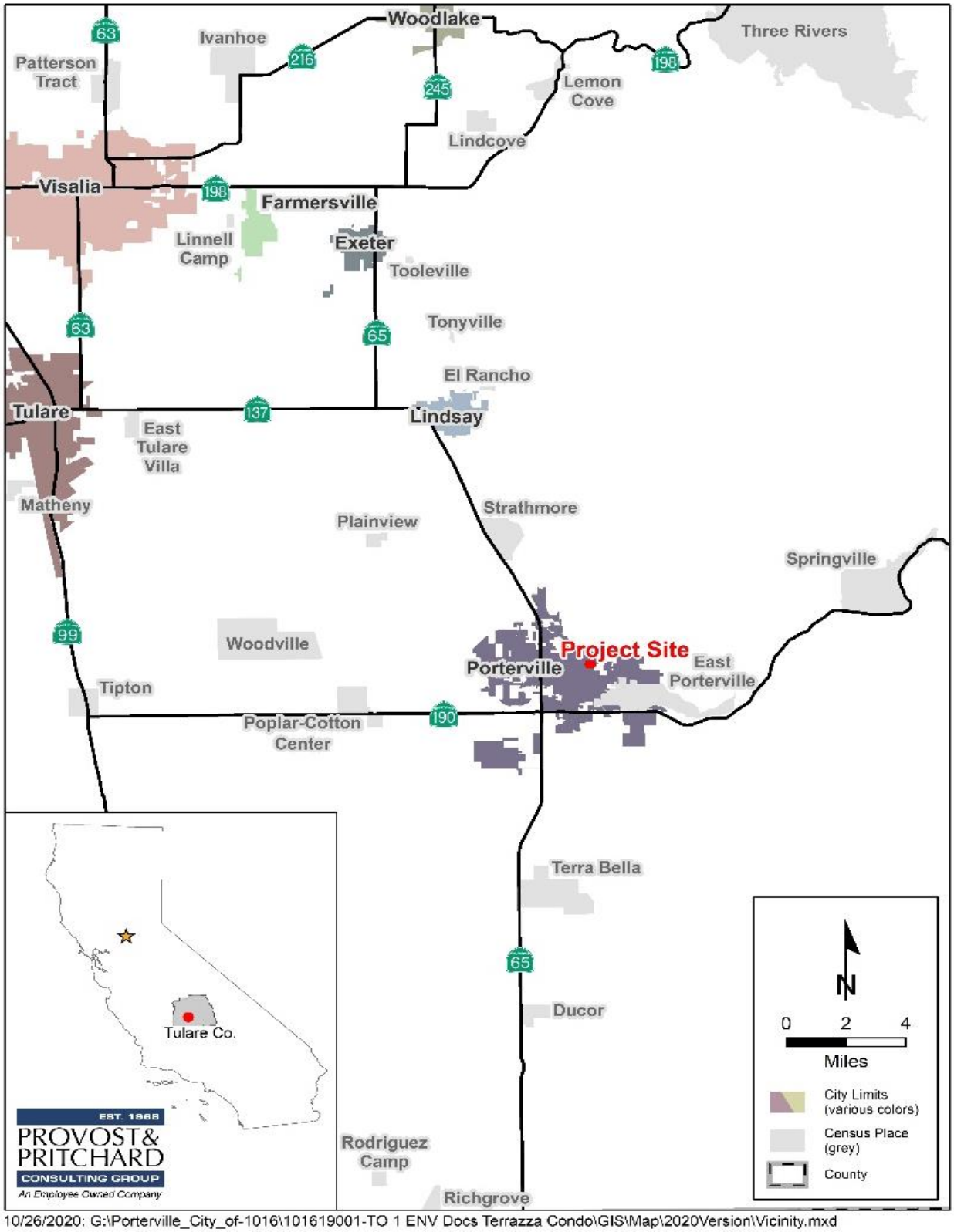

Figure 2-1. Regional Location

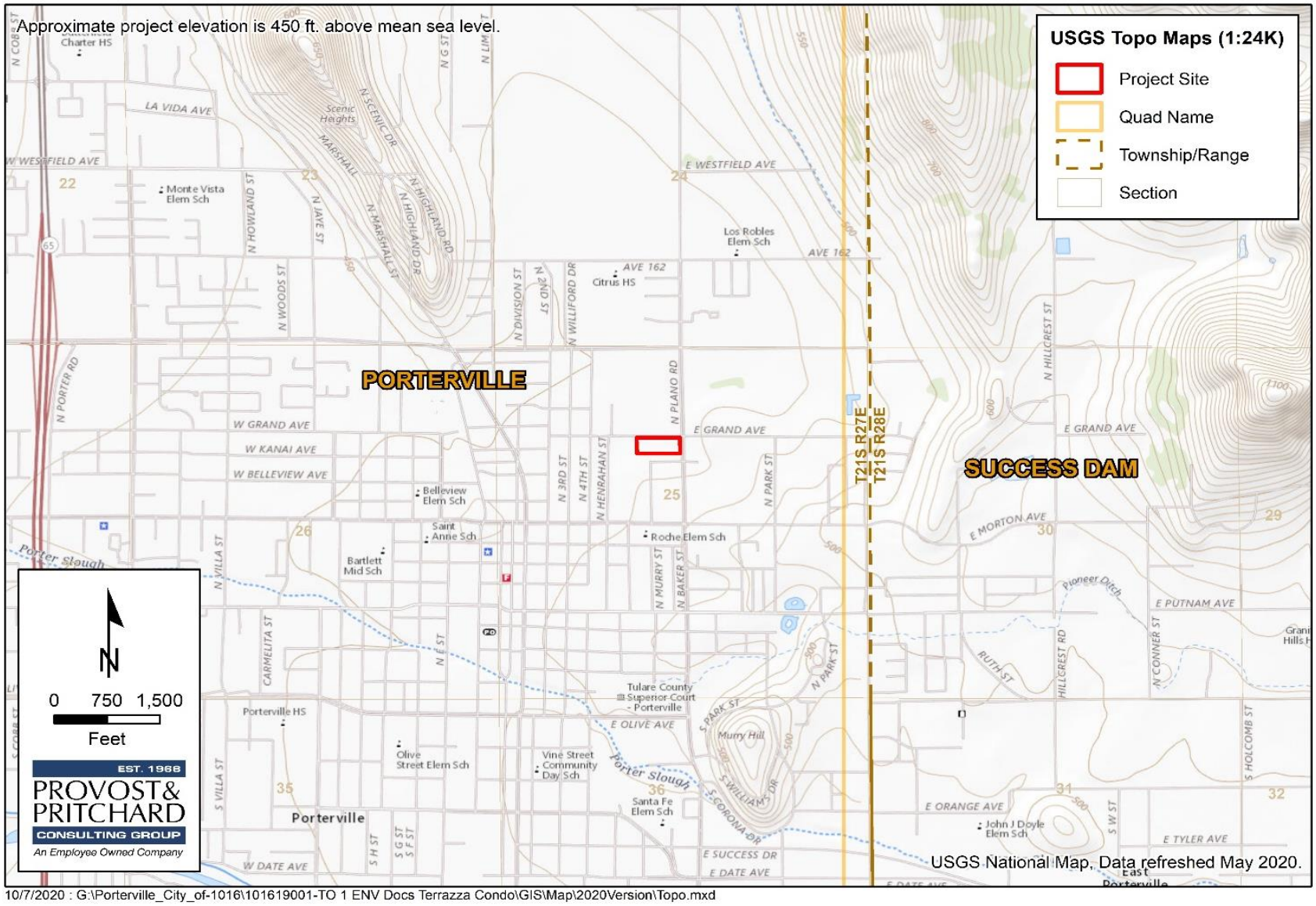

Figure 2-2. Topographical Quad Map

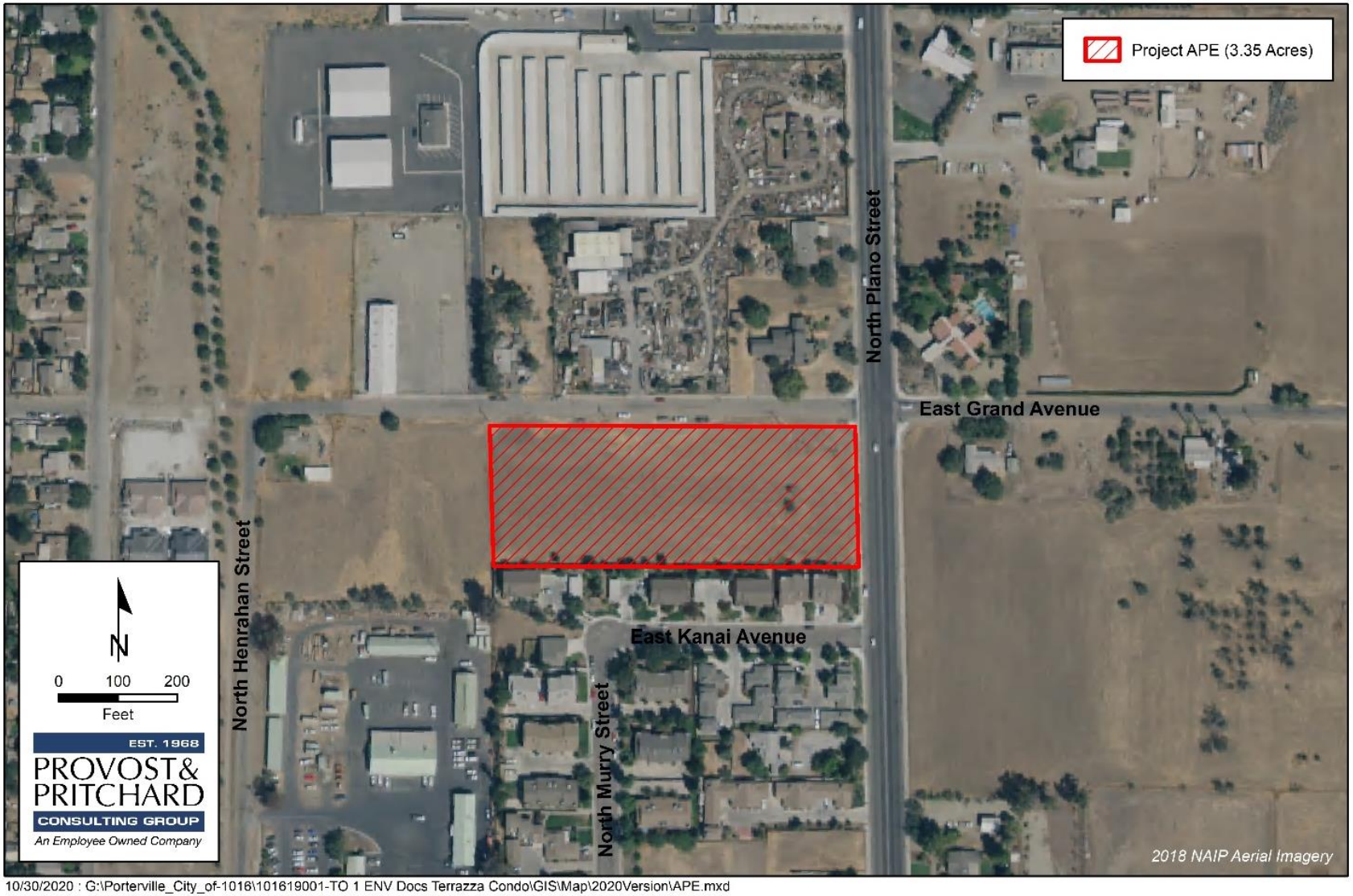

Figure 2-3. Aerial/Area of Potential Effect

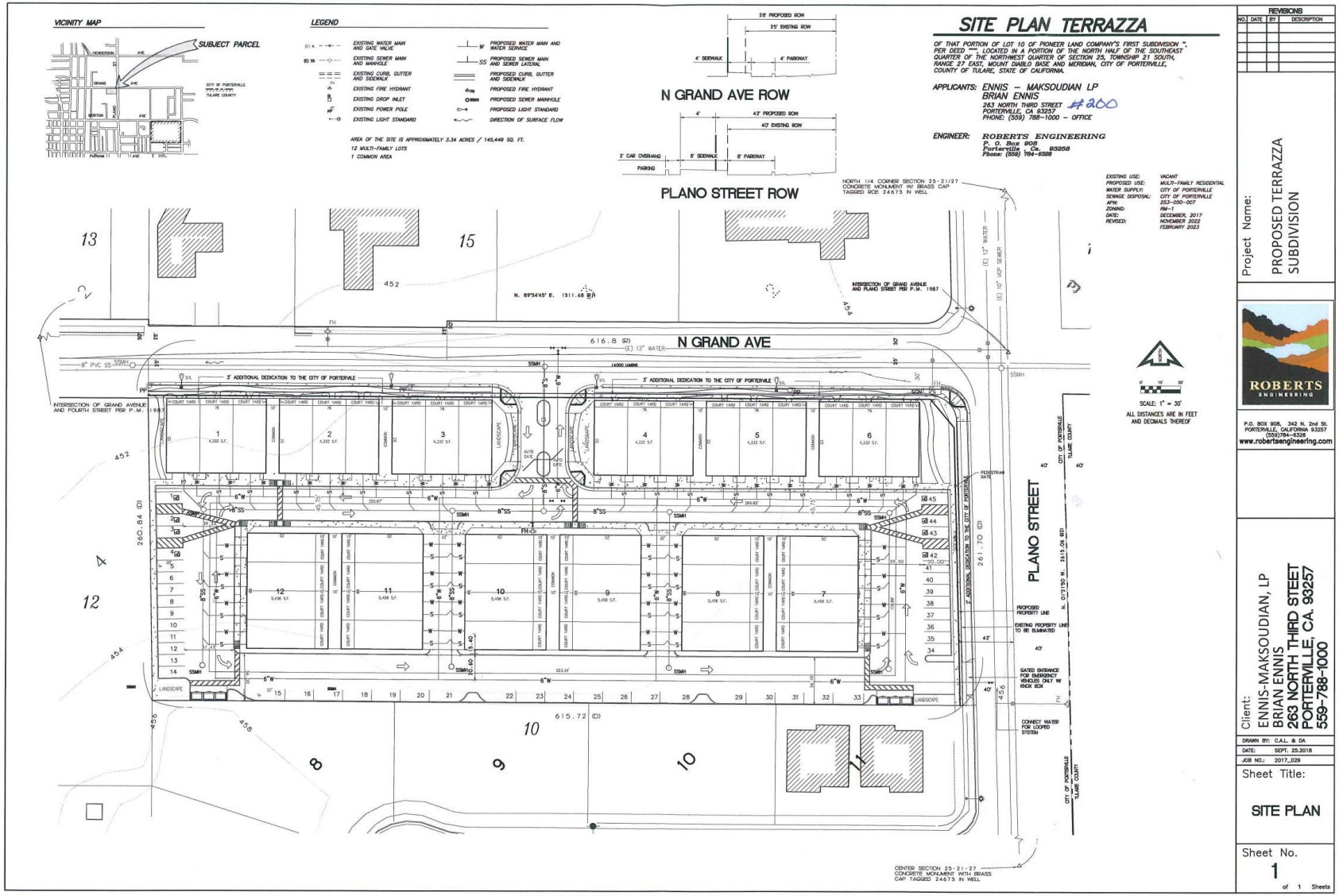

Figure 2-4. Site Plan

2.2 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and subsequent discussion on the following pages.

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

The analyses of environmental impacts here in **3** are separated into the following categories:

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)

Chapter 3 Impact Analysis

3.1 Aesthetics

Table 3-1. Aesthetics Impacts

Aesthetics				
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 a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning 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?	☐	☐	☒	☐

3.1.1 Environmental Setting

The City is located in the southern portion of the San Joaquin Valley at the westerly base of the Sierra Nevada foothills. Most of the City has relatively level terrain, with hilly topography along its north and eastern edges. Much of Porterville has views of the mountains and associated foothills to the east of the City. The Tule River flows from Lake Success and through the City in a westerly direction.

The aesthetic character of the Project site and surrounding area can generally be described as urban, with varying types of surrounding land uses contributing to its visual setting. There are currently residential uses south and northeast of the Project, while commercial, and light industrial development, including a storage facility and welding operation, make up the remaining surrounding uses. There are also several vacant parcels in the vicinity of the Project which are planned for future low-density residential uses. The Project consists of flat, vacant land with scattered vegetation and distant views of the foothills to the east.

There are no designated scenic resources within the City; however, eastward views to the Sierra Nevada foothills and mountains can be considered scenic vistas. The General Plan identifies the Tule River and Rocky Hill as prominent landmarks within the City and has adopted guiding policies around preserving these areas as open space. In addition, the General Plan considers the agricultural foundation of the City's development patterns, surrounding topography, and landscape important for both community identity, aesthetic value, and environmental quality.

3.1.2 Regulatory Setting

3.1.2.1 Federal

National Scenic Byway Program. The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic and culturally important roads. There are ten national scenic byways in California.[1] The California Scenic Highway Program, established by state legislature in 1963 under the Streets and Highways Code Section 260, seeks to protect and enhance California's natural beauty and scenic resources. The law enables the California State Legislature to determine which state routes are eligible for designation as a scenic highway, and the California Department of Transportation (Caltrans) works alongside local governments to adopt the scenic designation.

3.1.2.2 State

Scenic Highway Program: California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the Streets and Highway Code (SHC) Section 260, *et seq*. A highway may be officially designated "scenic" depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in SHC Section 263. A list of California's scenic highways and map showing their locations may be obtained from Caltrans' Scenic Highway Coordinators.

3.1.2.3 Local

2030 City of Porterville General Plan[2]: The City's General Plan sets forth the following goals and policies that protect the aesthetic character of the City and which have potential relevance to the Project's CEQA review:

- LU-I-14 Allow residential developments to employ creative site design, landscaping, and architectural quality that blend with the characteristics of each location and its surroundings and offer superior design solutions.
- LU-I-17 Require that all new subdivisions preserve natural, cultural, and biological resources, including stands of large trees and rock outcroppings, to the maximum extent feasible.
- LU-I-19 Enforce zoning and development regulations through project review, construction inspections, and code enforcement, with fees to enable full-cost recovery for providing these services.
- LU-I-25 Establish buffering requirements and performance standards intended to minimize harmful effects of excessive noise, light, glare, and other adverse environmental impacts.

3.1.3 Impact Assessment

a) Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact. The Sierra Nevada foothills, specifically Rocky Hill, is the primary natural scenic feature nearest to the Project. Urban development within the City is the primary visual feature to the north and south, and vacant/urban land with single-family residences to the east and west of the Project.

The Project includes the construction of up to 46 multi-family residential units and the improvements associated with new residential development, including landscaping, parking lots, and lighting. The Project would conform to design standards set forth in the City's General Plan and Zoning Ordinance. Construction

[1] Scenic America. 2021. https://www.scenic.org/visual-pollution-issues/scenic-byways/scenic-byway-maps-by-state/ Accessed on August 18, 2021
[2] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm Accessed February 12, 2019

activities would be visible from adjacent roadways, but would be temporary in nature. Views of the Sierra Nevada Mountains are visible in the distance, beyond the urbanized portion of the City.

The City's General Plan identifies views extending along the Tule River and Rocky Hill as prominent scenic resources worth preserving. The Project itself does not fall within protected scenic or open space resources identified in the General Plan. The Project area is located in an urban setting, is flat, and in an area predominately surrounded by urban uses. As such, the Project would not result in a use that is visually incompatible with the surrounding area. Impacts would be less than significant.

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

No Impact. The Project is located within the City, which does not have any Officially Designated or Eligible State Scenic Highways. The nearest Eligible State Scenic Highway is State Route (SR) 190, east of SR 65 approximately 1.76 miles directly south of the Project and therefore would not adversely affect the scenic quality of the highway. There are no trees, rock outcroppings, or historical buildings within a state scenic highway that would be blocked or damaged by the Project. There are no scenic resources or scenic vistas located on or in the immediate vicinity of the Project site. There would be no impact.

c) Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public view 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 sits within an urbanized portion of the City. Existing uses directly adjacent to the Project consist of residential, commercial, or industrial in nature. The Project would result in a General Plan Amendment and Rezone in order to allow the multi-family residential use at the Project site. The Project would comply with all zoning regulations for the PD district and would be consistent with the visual character of the surrounding areas. The impact would be less than significant.

d) Would the project 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 would create new lighting sources associated with residential dwelling units. Project implementation would be consistent with regulations outlined in Chapter 21, Article 300, Section 7 of the zoning code which are intended to minimize artificial light that may have a detrimental effect on the environment or enjoyment of the night sky, and unnecessary illumination of adjacent properties. Although the Project would add new light sources for exterior and interior buildings, it would be consistent with City codes, therefore impacts would be less than significant.

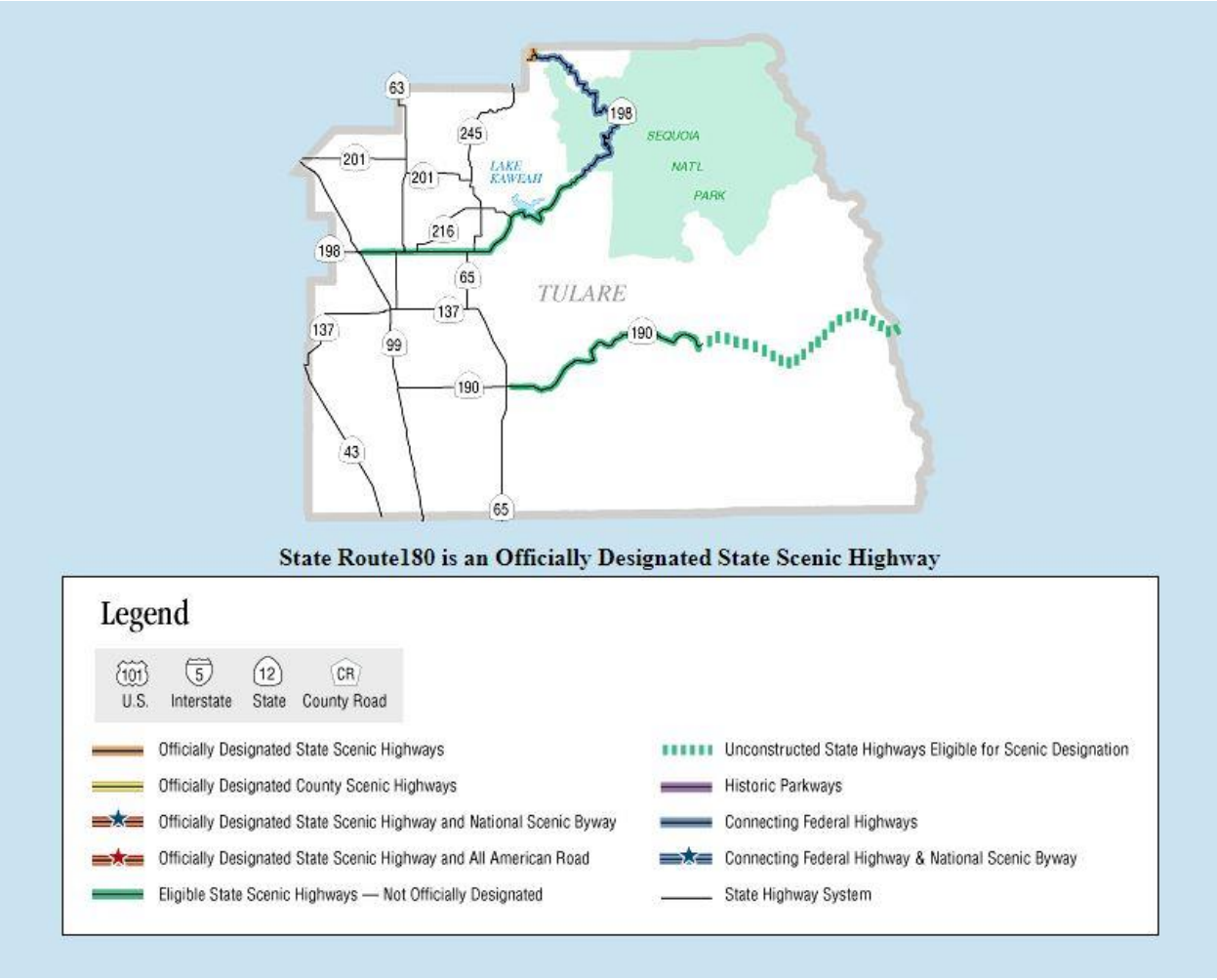

Figure 3-1. Tulare County Scenic Highways

3.2 Agriculture and Forestry Resources

Table 3-2. Agriculture and Forest Resources Impacts

Agriculture and Forest Resources				
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?	☐	☐	☐	☒

3.2.1 Environmental Setting

The Project does not propose any land use changes that would directly or indirectly affect agriculture and/or agricultural uses. The California Department of Conservation (DOC) maintains a program for mapping and monitoring inventories of various categories of agricultural lands. The program, entitled the *Farmland Mapping and Monitoring Program* (FMMP), land designations are shown in **Figure 3-2**.

The Project site is designated as Urban and Built-up Land. Urban and Built-up Land is defined below as:

1. *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, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.*

The Project is located in an urbanized portion of the City. Surrounding uses are predominately commercial or residential, with a scattering of vacant parcels planned for future residential projects. According to the FMMP, the Project is located in a portion of the City identified as urban, built-up land. In addition, the Project is identified as Developed Land in 2030 by the *General Plan Open Space and Conservation Element*. The Project site is neither zoned for agriculture, nor enrolled in a Williamson Act Contract.

3.2.2 Regulatory Setting

3.2.2.1 Local

2030 City of Porterville General Plan[3]: The City General Plan sets forth the following goals and policies that protect the Agriculture & Farmland Resources of the City and which have potential relevance to the Project's CEQA review:

- OSC-I-17 Prohibit the conversion of prime agricultural land for urban development through General Plan amendments, after adoption of this General Plan Updated, unless there are no other feasible alternative for development.

3.2.3 Impact Assessment

a) Would the project 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, the Project is classified as Urban and Built-Up Land, is not located on land that is designated as Prime Farmland, Unique Farmland or Farmland of State Importance, and is currently vacant (See **Figure 3-2**). Therefore, implementation of the Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. There would be no impact.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is an urban infill property which is zoned RM-1. As part of the Project the site would be rezoned to PD (Planned Development), which would allow for the density of the proposed use. The Project site is not currently being farmed and is not under a Williamson Act contract. Therefore, the Project would not conflict with agricultural zoning, or a Williamson Act contract. There would be no impact.

c) Would the project 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))? and;

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impacts. The Project site is an urban vacant property which is zoned RM-1 and would be rezoned to PD. No forest or timberland is located on or near the Project. There would be no impact.

e) Would the project 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?

No Impact. The Project site is currently vacant and not in use as agricultural land, and therefore would not convert farmland to non-agricultural use. In addition, the Project would not convert forest land to non-forest use. There would be no impact.

[3] 2030 City of Porterville General Plan Open Space and Conservation Element
http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter6OpenSpaceandConservation_000.pdf, accessed February 12, 2019

Figure 3-2. Farmlands Map

3.3 Air Quality

Table 3-3. Air Quality Impacts

Air Quality					
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. 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?	☐	☐	☐	☒

3.3.1 Environmental Setting

The Project is located in the San Joaquin Valley Air Basin (SJVAB) which is the second largest air basin in the State. To assist local jurisdictions in the evaluation of air quality impacts, the San Joaquin Valley Air Pollution Control District (SJVAPCD) published the *Guide for Assessing and Mitigating Air Quality Impacts* (GAMAQI) for quantification of emissions and evaluation of potential impacts to air resources[4] and guidance for land-use agencies in addressing greenhouse gas (GHG) emission impacts for new Projects under CEQA.[5] This guidance document includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, the SJVAPCD-recommended thresholds of significance are used to determine whether implementation of the proposed Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact to human health and welfare. The thresholds of significance are included in **Table 3-7. Maximum Daily Air Pollutant Emissions During Construction.** and **Table 3-8. Maximum Daily Air Pollutant Emissions During Operation.** to provide for a comparative significance determination.

Assessment of the significance of a project's air quality impacts may be considered on a regional or localized level. Determination of project impacts on achieving the goal of air quality plans and evaluating impacts related to emissions of criteria pollutants are considered on both regional and localized levels in this analysis. Evaluation of impacts to sensitive receptors considers the project's localized criteria pollutant emissions in this analysis. Sources of the project's localized criteria pollutant emissions would include: reactive organic gases (ROG), Nitrogen oxides (NO_x), Inhalable Particulate Matter 2.5 microns ($PM_{2.5}$) Inhalable Particulate Matter

[4] SJVAPCD GAMAQI https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed July 2020.
[5] Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf Accessed September 2020.

2.5 microns (PM_{10}) Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), and Toxic Air Contaminants (TACs) which include acetaldehyde, benzene, 1.3 butadiene, carbon tetrachloride, hexavalent chromium, paradichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter which is a complex mixture of substances. The Project's estimated air emissions were calculated using CalEEMod modeling, Version 2016.3.2 for the Project, for which criteria pollutants and greenhouse gas emissions results are provided as **Appendix A**. The sections below detail the methodology of the air quality impact assessment and conclusions. See **Section 3.9** for discussion of greenhouse gas emissions results.

3.3.2 Regulatory Setting

Under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most serious of classifications. An "unclassified" designation signifies that the data does not support either an attainment or nonattainment designation. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The United States Environmental Protection Agency (USEPA) designates areas for ozone, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used. The USEPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, USEPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for PM_{10} based on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified."

The State and national attainment status designations pertaining to the SJVAB are summarized in **Table 3-4**. The SJVAB is currently designated as a nonattainment area with respect to the State PM_{10} standard, ozone, and $PM_{2.5}$ standards. The SJVAB is designated nonattainment for the National Ambient Air Quality Standards (NAAQS) 8-hour ozone and $PM_{2.5}$ standards. On September 25, 2008, the USEPA re-designated the San Joaquin Valley to attainment status for the PM_{10} NAAQS and approved a PM_{10} Maintenance Plan.

3.3.2.1 Local Regulations

2030 City of Porterville General Plan[6]: The 2030 City General Plan sets forth the following goals and policies regarding air quality and which have potential relevance to the Project's CEQA review:

OSC-G-9: Improve and protect Porterville's air quality by making air quality a priority in land use and transportation planning and in development review.

OSC-I-58: Continue to assess air quality impacts through environmental review and require developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.

[6] 2030 City of Porterville General Plan. http://www.ci.porterville.ca.us/depts/CommunityDevelopment/documents/Chapter6OpenSpaceandConservation_000.pdf Accessed 1 March 2019.

OSC-I-59: Require dust control measures as a condition of approval for subdivision maps, site plans, and all grading permits.

Table 3-4. Summary of Ambient Air Quality Standards and Attainment Designation.

Summary of Ambient Air Quality Standards & Attainment Designation					
Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm	Nonattainment/ Severe	–	No Federal Standard
	8-hour	0.070 ppm	Nonattainment	0.075 ppm	Nonattainment/ Extreme**
Particulate Matter (PM_{10})	AAM	20 µg/m³	Nonattainment	–	Attainment
	24-hour	50 µg/m³		150 µg/m³	
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m³	Nonattainment	12 µg/m³	Nonattainment
	24-hour	No Standard		35 µg/m³	
Carbon Monoxide (CO)	1-hour	20 ppm	Attainment/ Unclassified	35 ppm	Attainment/ Unclassified
	8-hour	9 ppm		9 ppm	
	8-hour (Lake Tahoe)	6 ppm		–	
Nitrogen Dioxide (NO_2)	AAM	0.030 ppm	Attainment	53 ppb	Attainment/ Unclassified
	1-hour	0.18 ppm		100 ppb	
Sulfur Dioxide (SO_2)	AAM	–	Attainment	--	Attainment/ Unclassified
	24-hour	0.04 ppm		--	
	3-hour	–		0.5 ppm	
	1-hour	0.25 ppm		75 ppb	
Lead (Pb)	30-day Average	1.5 µg/m³	Attainment	–	No Designation/ Classification
	Calendar Quarter	–		--	
	Rolling 3-Month Average	–		0.15 µg/m³	
Sulfates (SO_4)	24-hour	25 µg/m³	Attainment	No Federal Standards	
Hydrogen Sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m³)	Unclassified		
Vinyl Chloride (C_2H_3Cl)	24-hour	0.01 ppm (26 µg/m³)	Attainment		
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/km-visibility of 10 miles or more due to particles when the relative humidity is less than 70%.	Unclassified		

** For more information on standards visit: https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf*
*** No Federal 1-hour standard. Reclassified extreme nonattainment for the Federal 8-hour standard September 2020.*
Source: CARB 2015; SJVAPCD 2015

To assist local jurisdictions in the evaluation of air quality impacts, the SJVAPCD published the GAMAQI. This guidance document includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, the SJVAPCD-recommended thresholds of significance are used to determine whether implementation of the Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact to human health and welfare. The thresholds of significance are included in **Table 3-5** and **Table 3-6**. **Table 3-7** through **Table 3-8** to provide for a comparative significance determination.

3.3.2.2 Short-Term Construction-Generated Emissions

Short-term construction emissions associated with the Project were estimated using CalEEMod. The emissions modeling includes emissions generated by construction and grading equipment most commonly associated with the site work, equipment delivery, and vehicle, equipment, and worker fuel usage. Emissions were quantified based on anticipated construction schedules and construction equipment requirements that would occur over approximately 12 months. All remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in **Appendix A**.

The SJVAPCD is responsible for controlling emissions primarily from stationary sources. However, the SJVAPCD also coordinates with the APCD's eight county Councils of Government (COGs) or Metropolitan Planning Organizations (MPOs) that are responsible for regional transportation planning and funding programs. The COG and MPO Transportation Planning Programs are used by SJVAPCD in its responsibilities in developing, updating, and implementing air quality attainment plans for the air basin. The SJVAPCD has adopted ozone plans and particulate matter plans for purposes of controlling harmful emissions and achieving attainment of state and national attainment standards. A project that would exceed established thresholds for criteria pollutants would be considered to have a significant impact on the implementation of air quality plans and would also constitute a cumulatively considerable net increase of criteria pollutants for which the air basin is in non-attainment.

Construction of the Project is expected to begin after Project approval with full buildout completed in 2022. The results of the emissions modeling for the Project are presented in **Table 3-5.**

Table 3-5 Short-Term - Construction-Generated Emissions of Criteria Air Pollutants.

Year	Annual Emissions (Tons/Year)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
2021	0.2846	2.5626	2.3366	0.2386	0.1734
2022	0.4685	0.1151	0.1494	<0.01	<0.01
Maximum Annual Proposed Project Emissions:	**0.4685**	**2.5626**	**2.3366**	**0.2386**	**0.1734**
SJVAPCD Significance Thresholds:	***10***	***10***	***100***	***15***	***15***
Exceed SJVAPCD Thresholds?	***No***	***No***	***No***	***No***	***No***

3.3.2.3 Long-Term - Operational Emissions

The unmitigated long-term operational emissions for the Project are listed in **Table 3-6**. Operational emissions would occur over the lifetime of the Project and result from three main Project-specific sources: building emissions/maintenance (area), energy usage (energy), and motor vehicles (mobile) usage. Completion of the Project is expected as early as 2022 and was used as the Project buildout modeling year as a conservative assumption. The SJVAPCD considers construction and operational assumptions separately when making significance determinations. Modeling assumptions and output files are included in **Appendix A**.

Table 3-6. Unmitigated Long-Term Operational Emissions.

Source	Annual Emissions (Tons/Year)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	0.7158	0.0193	0.3189	<0.01	<0.01
Energy:	<0.01	*0.0235*	*0.0100*	<0.01	<0.01
Mobile	0.0805	*0.2687*	*0.9250*	0.2521	0.0689
Highest Operational Emissions Any Year	**0.7991**	**0.3115**	**1.2539**	**0.2570**	**0.0738**
SJVAPCD Significance Thresholds:	***10***	***10***	***100***	***15***	***15***
Exceed SJVAPCD Thresholds?	***No***	***No***	***No***	***No***	***No***

3.3.3 Screening Thresholds for Determining Impacts to Sensitive Receptors

Impacts to sensitive receptors would occur primarily during Project construction. Construction activities could produce short-term emissions that have the potential in large concentrations to contribute to cancer risk over a 70-year exposure period. The Air Quality and GHG reports (**Appendix A**) provide technical information on the types of pollutants that have the potential to affect sensitive receptors.

The SJVAB includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities that exceed the 100 pounds per day screening level of any criteria pollutant after compliance with Rule 9510 and implementation of all applicable mitigation measures would require preparation of an ambient air quality analysis. The criteria pollutants of concern are NO_x, CO, PM_{10}, and $PM_{2.5}$. There is no localized emission standard for ROG and most types of ROG are not toxic and have no health-based standard, however, ROG was included for informational purposes only. **Table 3-7** lists the maximum daily air pollutant emissions generated by the Project during construction.

Table 3-7. Maximum Daily Air Pollutant Emissions During Construction.

Maximum Daily Emissions by Year	Emissions (Pounds/Daily)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction 2021	3.9705	40.5520	21.9863	20.2596	11.8517
Construction 2022	50.7916	16.1164	17.2115	1.0853	0.8369
Maximum Daily Proposed Project Emissions:	**50.7916**	**40.5520**	**21.9863**	**20.2596**	**11.8517**
SJVAPCD Screening Thresholds	***100***	***100***	***100***	***100***	***100***

Operational emission would begin to accrue upon completion of the Project. The Project is anticipated to be completed in 2022. **Table 3-8** lists the maximum daily air pollutant emissions generated by the Project during its operation.

Table 3-8. Maximum Daily Air Pollutant Emissions During Operation.

Maximum Daily Emissions	Emissions (Pounds/Daily)				
	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	4.0103	0.4232	3.6318	0.0502	0.0502
Energy	0.0151	0.1288	0.0548	0.0104	0.0104
Mobile	0.4126	1.5618	5.2393	1.4678	0.4002
Total Daily Emissions	**4.4380**	**2.1138**	**8.9259**	**1.5284**	**0.4608**
SJVAPCD Screening Thresholds	***100***	***100***	***100***	***100***	***100***
Exceed SJVAPCD Thresholds?	***No***	***No***	***No***	***No***	***No***

Table 3-7 and **Table 3-8** demonstrate the Project's impacts as evaluated against SJVAPCD screening thresholds for criteria pollutant emissions used to determine significance in accordance with health-based standards would not exceed and would be considerably below the significance thresholds.

3.3.4 Impact Assessment

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

Less than Significant Impact. The CEQA Guidelines indicate that a significant impact would occur if the Project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI does not provide specific guidance on analyzing conformity with the Air Quality Plan (AQP). Therefore, the Air Quality and GHG report (**Appendix A**) assumed the following criteria for determining Project consistency with the current AQPs:

1. Will the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs?

   Whether this criterion is met is determined by comparison of Project emissions to the regional and localized thresholds identified by the SJVAPCD for regional and local air pollutants.

2. Will the project comply with applicable control measures set forth in the AQPs?

   The primary control measures applicable to development projects in the SJVAPCD is the required compliance with *Regulation VIII-Fugitive PM_{10} Prohibitions* and *Rule 9510-Indirect Source Review*.

Regional air quality impacts and attainment of standards are the result of cumulative impacts of all emission sources within the air basin. Individual projects are generally not large enough to contribute measurably to an existing violation of air quality standards. Therefore, the cumulative impact of the Project is important because it is based on its cumulative contribution combined with one or more other closely related past, present, and reasonably foreseeable future projects emitting similar emissions. Because of the region's non-attainment status for ozone, $PM_{2.5}$, and PM_{10}, if Project generated emission of either of the ozone precursor pollutants ROG, NO_x, PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCDs significance thresholds, then the Project would be considered to contribute to violations of the applicable standards and conflict with the attainment plans. As demonstrated in **Table 3-5** for construction-generated emissions, and in **Table 3-6**, operational emissions of criteria pollutants would not exceed the SJVAPCDs significance thresholds. Therefore, the Project would not contribute to air quality violations in conflict with attainment plans.

As stated in No. 2 above, the AQP contains a number of control measures, including *Regulation VIII-Fugitive PM_{10} Prohibitions* and *Rule 9510-Indirect Source Review* which are applicable to the Project. Both of these are adopted by the SJVAPCD and constitute enforceable requirements with which the Project must comply. The Project is expected to comply with all applicable SJVAPCD rules and regulations; therefore, the Project complies with the criterion and would not conflict with or obstruct implementation of the applicable air quality attainment plans and the impact would be less than significant.

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. The CEQA Guidelines indicate that a significant impact would occur if the Project would conflict with or obstruct implementation of any applicable air quality plans. The GAMAQI discusses four SJVAPCD Air Quality Plans for 1-hour ozone, 8-hour ozone, PM10 and PM2.5. These plans evaluate control methods and use computer modeling to estimate future levels of pollution to ensure that the Valley will meet air quality goals. The GAMAQI states that using established criteria pollutant emissions thresholds when compared to the project emissions and the project emission are determined to be less than the thresholds of significance they would be determined to "not conflict or obstruct implementation of the Districts [SJVAPCD] air quality plans"[7]. Determination of whether the proposed Project emissions would violate any ambient air quality standard was performed through CalEEMod.

Regional air quality impacts and attainment of standards are the result of cumulative impacts of all emission sources within the SJVAB. Individual projects are generally not large enough to contribute measurably to an existing violation of air quality standards. Therefore, the cumulative impact of the Project is based on its cumulative contribution. Because the of the region's non-attainment status for ozone, $PM_{2.5}$, and $PM_{10,}$ if Project generated emissions of either of the ozone precursor pollutants ROG, No_x, PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds, then the Project would be considered to contribute to violations of the applicable standards and conflict with the attainment plans. As demonstrated in **Table 3-7** and **Table 3-8** emissions of ozone precursor pollutants during the Project's construction period would not exceed the SJVAPCD's significance thresholds, and would therefore not contribute to air quality violations in conflict with attainment plans. As shown in **Table 3-7** above, the regional analysis of construction emissions generated by the Project indicates that the Project would not exceed the District's significance thresholds during its operations. The comparison of Project impacts against SJVAPCD's thresholds indicates the Project is consistent with the applicable Air Quality Attainment Plan. Therefore, the Project would not result in a significant cumulative health impact.

The AQP contains a number of control measures, including Regulation VIII-*Fugitive PM_{10} Prohibitions* and Rule 9510 *Indirect Source Review* which are applicable to the Project and with which the Project must comply. The Project would comply with all applicable SJVAPCD rules and regulations; therefore, the Project complies with the criteria and would not conflict with or obstruct implementation of the applicable air quality attainment plans. Impacts would be less than significant.

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

Less than Significant Impact. Sensitive receptors are those who are sensitive to air pollution, including children, the elderly, and the infirm. The SJVAPCD considers a sensitive receptor a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The closest existing off-site sensitive receptors are single-family homes adjacent to the property. Porterville Boy and Girls Club is the closest sensitive receptor and is within 0.08 miles of the Project to the south and Roche Avenue Elementary School a bit further south at 0.20 miles.

[7] (San Joaquin Valley Air Pollution Control District. 2015. Final Guidance for Assessing and Mitigating Air Quality Impacts, 2015). Accessed August 11, 2020.

As demonstrated in **Table 3-7** and **Table 3-8**, the Project would not exceed the SJVAPCDs thresholds established in accordance with health-based standard for determining significance of criteria pollutant emissions. Therefore, in accordance with these standards, exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

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

No Impact. 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 and would not emit objectional odors. The Project would therefore have no impact with respect to generation of emissions leading to odors or other adverse or objectionable emissions.

3.4 Biological Resources

Table 3-9. Biological Resources Impacts

Biological Resources				
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 state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 Environmental Setting and Baseline Conditions

The biological reconnaissance survey was conducted by Provost and Pritchard biologists over two site visits, March 19 and July 18, 2019. The survey consisted of walking and driving through the Project area while identifying land use, biological communities, and plant and animal species. Further, the site and surrounding area were assessed for suitable wildlife habitat.

The analysis was based on resources known to exist or with potential to exist within the Project and surrounding areas. Sources of information used in preparation of this analysis included: the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB); the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system; the California Native Plant Society

(CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; the Jepson Herbarium online database (Jepson eFlora); USFWS Environmental Conservation Online System (ECOS); the NatureServe Explorer online database; the United States Department of Agriculture (USDA) NRCS Plants Database; the CDFW California Wildlife Habitat Relationships database; the California Herps online database; and various manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

A search of CNDDB for published accounts of special status plant and animal species was conducted for the *Porterville* 7.5-minute quadrangle, which contains the Project in its entirety, and for the eight surrounding quadrangles: *Cairns Corner, Lindsay, Frazier Valley, Woodville, Success Dam, Sausalito School, Ducor,* and *Fountain Springs*. The aforementioned species, and their potential to occur within the Project area, are listed in **Table 3-10** and **Table 3-11** below.

Table 3-10. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity.

Species	Status	Habitat	Occurrence on Project Site
American badger (*Taxidea taxus*)	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	**Absent.** Suitable burrows were absent during the biological survey. The disturbed habitats and clay soils onsite are unsuitable for this species. There has been one recorded observation of this species in the vicinity of the Project, which corresponds to an undated historic collection near Porterville Airport. The Project site is isolated from any patches of remaining suitable habitat, separated by urban and agricultural development. Frequent human disturbance and vehicle traffic along roadways would prevent this species from reaching the site.
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 expanse of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages up to 100 miles from roost/nest site.	**Absent.** This species is known to occur in the vicinity of Springville and Blue Ridge National Wildlife Refuge in eastern Tulare County. However, nesting and foraging habitat are absent from the Project area and vicinity. this species could potentially fly over the Project site, however that is unlikely.
Blunt-nosed leopard lizard (*Gambelia sila*)	FE, CE, CFP	Inhabits semi-arid grasslands, alkali flats, low foothills, canyon floors, large washes, and arroyos, usually on sandy, gravelly, or loamy substrate, sometimes on hardpan. Often found where there are abundant rodent burrows in dense vegetation or tall grass. Cannot survive on lands under cultivation. Known to bask on kangaroo rat mounds and often seeks shelter at the base of shrubs, in small mammal burrows, or	**Absent.** The Project area does not provide suitable habitat for this species and is outside of its current distribution range. There are no recorded observations of this species in the vicinity of the Project.

Species	Status	Habitat	Occurrence on Project Site
		in rock piles. Adults may excavate shallow burrows but rely on deeper pre-existing rodent burrows for hibernation and reproduction.	
California red-legged frog (*Rana draytonii*)	FT	Inhabits perennial rivers, creeks, and stock ponds with vegetative cover within the Coast Range and northern Sierra foothills.	**Absent.** The Project area does not provide suitable habitat for this species and is outside its current known range.
Delta smelt (*Hypomesus transpacificus*)	FT, CE	This pelagic and euryhaline species is Endemic to the Sacramento-San Joaquin River Delta, upstream through Contra Costa, Sacramento, San Joaquin, and Solano Counties.	**Absent.** Suitable perennial aquatic habitat for this species is absent from the Project area and surrounding lands.
Giant gartersnake (*Thamnophis gigas*)	FT, CT	Occurs in marshes, sloughs, drainage canals, irrigation ditches, rice fields, and adjacent uplands. Prefers locations with emergent vegetation for cover and open areas for basking. This species uses small mammal burrows adjacent to aquatic habitats for hibernation in the winter and to escape from excessive heat in the summer.	**Absent.** Habitats required by this species are absent from the Project area and surrounding lands. The Project is outside of the known distribution range of this species.
Northern California legless lizard (*Anniella pulchra*)	CSC	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.	**Unlikely.** The highly disturbed habitats and clay soils of the Project area are unsuitable for this species. There is one historic (1940) observation recorded at an unknown location mapped non-specifically to the center of Porterville, and there are additional recent (2002, 2016, and 2017) observations approximately 3 miles and 4 miles southeast of the Project.
Pallid bat (*Antrozous pallidus*)	CSC	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 man-made structures.	**Unlikely.** Roosting habitat is absent onsite. Individuals could potentially roost in trees or crevices of structures in the vicinity, although frequent disturbance in this region would make this unlikely. At most, this species could forage on flying arthropods over the Project site or other ruderal vacant lots in the vicinity. The only recorded regional occurrence of this species corresponds to a historic collection from 1946 approximately 6 miles southeast of the Project site.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and	**Unlikely.** Burrows and suitable refugia are absent. Ground squirrels and rodents or associated signs were not observed. therefore, foraging habitat is absent. The highly disturbed

Species	Status	Habitat	Occurrence on Project Site
		woodland in valleys and adjacent foothills.	habitats and clay soils of the Project area, in addition to fragmentation of the surrounding land, are generally unsuitable for this species. The Project is located within Satellite Recovery Area 8 and is approximately 60 miles northeast of the nearest known Core Population, in Western Kern County (USFWS, 2010). There are 28 recorded observations of this species in the vicinity of the Project; however, 25 of these observations correspond to records from the 1972-1975. There has been only one recorded observation in the vicinity in the past 25 years, and it occurred approximately 13 miles north-northwest of the Project site. Although some populations of San Joaquin Kit Fox in other parts of California have adapted to an urbanized environment, modern kit fox occurrences are locally scarce.
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.** There are two recorded nesting occurrences approximately 15 miles northwest of the Project. Nesting habitat is absent onsite and foraging habitat is marginally suitable. The clay soils of the Project area are unsuitable for rodent populations, which is necessary for high-quality foraging habitat.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	FE, CE	Burrows in soil. Often found in grassland and shrubland.	**Absent.** The Project site is outside the current range for this species, according to the USFWS 5-year review (2010). NatureServe database also lists this species as "extirpated/possibly extirpated" from the Upper Tule watershed (HUC: 18030006). The nearest recorded observation of this species was from 1943, approximately 12 miles west of the Project area.
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSC	Occurs in a variety of habitats, but prefers cool, dark roost sites, and are often found in caves and mines. They roost in the open, hanging from walls and ceilings. Western populations typically forage on moths in areas of dense foliage.	**Absent.** Roosting and foraging habitat is absent from the Project area. There have been two recorded observations of this species in the Project's vicinity: one historic (1941) observation at an unknown location near Mine Hill, and one observation in 1988 at an unknown location, possibly within Porterville Mine.
Tricolored Blackbird (*Agelaius tricolor*)	CCE, CSC	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 on dairy farm forage fields.	**Unlikely.** Suitable nesting habitat is absent from the Project area and surrounding lands. Foraging habitat is marginally suitable for this species.

Species	Status	Habitat	Occurrence on Project Site
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs of the Central Valley and foothills. Adults are active March to June.	**Absent.** The Project is not located within the presumed historical or current distribution of this species. In 2014 USFWS published findings suggesting previous CNDDB observations of this species within Tulare County should be discounted.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Unlikely.** Traditional vernal pools are absent within the Project area. However, there were ruts around the Project that were full of water and could hold this species. According to CNDDB records, this species reportedly occurs in roadside pools along Highway 65 which runs approximately 1.5 miles west of the Project area. The nearest recorded observation was reported near the intersection of Scranton Avenue and Highway 65, approximately 3 miles southwest of the Project. Frequent disturbance, including ground disturbance associated with disking, and vehicular traffic makes the site generally unsuitable for this species. Additional vernal pool fairy shrimp dry and wet surveys were performed by qualified biologist and under the direction of USFWS. No special status fairy shrimp were identified. Further discussion is provided below.
Western mastiff bat (*Eumops perotis californicus*)	CSC	Found in open, arid to semi-arid habitats, including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas, where it feeds on insects in flight. Roosts most commonly in crevices in cliff faces but may also use high buildings and tunnels.	**Unlikely.** Suitable roosting habitat is absent from the Project area and surrounding lands. At most, the ruderal field could be used for nocturnal foraging. The only recorded observation of this species in the vicinity of the Project was reported in 1994 over Lake Success, approximately 5 miles east of the Project site.
Western spadefoot (*Spea hammondii*)	CSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal pool s or temporary wetlands, lasting a minimum of three weeks, which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	**Unlikely.** Typical vernal pools and wetlands required for breeding are absent from the Project site and surrounding lands. Although the clay soils onsite are conducive to seasonal pooling, **t**he highly disturbed habitats of the Project area and surrounding lands are unsuitable for this species. The nearest recorded observation of this species occurred within a vernal pool reserve approximately 13 miles southwest of the Project site. There are two recent (2001 and 2010) observations recorded, one within an ecological reserve and the other within undeveloped lands in the foothills. Both of these observations were located approximately 14 miles from the Project site.

Table 3-11. List of Special Status Plants with Potential to Occur Onsite and/or in the Vicinity.

Species	Status	Habitat	Occurrence on Project Site
Brittlescale (*Atriplex depressa*)	CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkali or clay soils in shadescale scrub, valley grassland, alkali sink, and riparian communities at elevations below 1050 feet. Equally likely to occur in wetlands and non-wetlands. Blooms June – October.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. This species was not observed onsite during the field survey, which was performed during the blooming season. The only recorded observation of this species in the vicinity was reported in 1965, approximately 13 miles southwest of the Project site.
Calico monkeyflower (*Diplacus pictus* / *Mimulus pictus* / *Eunanus pictus*)	CNPS 1B	Found in the Sierra Nevada foothills and the Tehachapi mountains in bare, sunny, shrubby areas, and around granite outcrops within foothill woodland communities at elevations between 450 feet and 4100 feet. Blooms March – May.	**Unlikely.** The disturbed habitats of the Project site are unsuitable for this species. The nearest recorded observation of this species was reported in 1983, approximately 4 miles east of the Project.
California alkali grass (*Puccinellia simplex*)	CNPS 1B	Found in the San Joaquin Valley and other parts of California in saline flats and mineral springs within valley grassland and wetland-riparian communities at elevations below 3000 feet. Blooms March – May.	**Absent.** Habitats required by this species are absent from the Project area and surrounding lands. The only recorded observation of this species in the vicinity was reported in 1998, approximately 14 miles west-northwest of the Project site.
California jewelflower (*Caulanthus californicus*)	FE, CE, CNPS 1B	Found in the San Joaquin Valley and Western Traverse Ranges. Occurs on flats and slopes, generally in non-alkaline grassland at elevations between 230 feet and 3280 feet. Blooms February – April.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. According to CNDDB and CNPS this species is presumed extirpated from the Porterville region.
Chaparral ragwort (*Senecio aphanactis*)	CNPS 2B	Found in chaparral, cismontane woodland, and coastal scrub, typically within drying alkaline flats at elevations between 65 feet – 2800 feet. Blooms February – May.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. The only recorded observation of this species was reported in 1982 at approximately 1200 feet elevation on Mine Hill, approximately 6 miles east of the Project site.
Earlimart orache (*Atriplex cordulata var. erecticaulis*)	CNPS 1B	Found in the San Joaquin Valley in saline or alkaline soils, typically within valley or foothill grassland, at elevations below 325 feet. Blooms August – September.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. There are two recorded observations of this species in the vicinity; one reported in 1999 approximately 14 miles west-northwest and one reported in 1989 approximately 13 miles west-southwest of the Project.

Species	Status	Habitat	Occurrence on Project Site
Keck's checkerbloom (*Sidalcea keckii*)	FE, CNPS 1B	Occurs in cismontane woodland, valley and foothill grassland, typically on grassy slopes in clay soils at elevations between 275 feet – 1650 feet. Blooms April – May.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. According to CNDDB and CNPS, this species is presumed extirpated from the Porterville region.
Lesser saltscale (*Atriplex minuscula*)	CNPS 1B	Found in the San Joaquin Valley in playas; sandy, alkaline soils in shadescale scrub, valley grassland, and alkali sink communities at elevations below 300 feet. Blooms April – October.	**Absent.** The disturbed habitats and clay soils onsite are generally unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. The only recorded observation of this species in the vicinity was reported in 2010 approximately 14 miles west-northwest of the Project site.
Lost Hills crownscale (*Atriplex coronata var. vallicola*)	CNPS 1B	Found in the San Joaquin Valley in chenopod scrub, valley and foothill grassland, and vernal pools at elevations below 1400 feet. Typically found in dried ponds on alkaline soils. Blooms April – September.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. The only recorded observation of this species was in 1965 within vernal pool grassland approximately 13 miles southwest of the Project site.
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found in openings in foothill woodland, often yellow-pine forest, and chaparral at elevations between 1000 feet and 4300 feet. Blooms April – May.	**Absent.** The Project area is outside of the elevational range of this species and suitable habitat is absent. The only recorded observation in the vicinity was reported in 1935 approximately 5 miles south-southeast of the Project.
Recurved larkspur (*Delphinium recurvatum*)	CNPS 1B	Found in the San Joaquin Valley and other parts of California. Occurs in poorly drained, fine, alkaline soils in grassland at elevations between 100 feet and 1965 feet. Most often found in non-wetlands, but occasionally found in wetlands. Blooms March – June.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. In the Project's vicinity, there are four recorded observations of this species, two of which have been determined extirpated. The remaining two observations were reported in 1969 and 2010, both located more than 12 miles from the Project site.
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 in valley grassland and foothill woodland communities at elevations between 325 feet and 2950 feet. Blooms March – May.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. The nearest recorded observation of this species was reported in 1990 approximately 1.5 miles east-northeast of the Project site.

Species	Status	Habitat	Occurrence on Project Site
San Joaquin woollythreads (*Monolopia congdonii*)	FE, CNPS 1B	Occurs in the San Joaquin Valley in sandy soils in shadescale shrub and grasslands at elevations between 300 feet and 2300 feet. Found primarily in non-wetlands, but occasionally found in wetlands. Blooms February – May.	**Absent.** The disturbed habitats and clay soils of the Project site are unsuitable for this species. The only recorded observation of this species in the vicinity corresponds to a historic collection from 1881 in an unknown location along Deer Creek in Tulare County.
Shining navarretia (*Navarretia nigelliformis ssp. radians*)	CNPS 1B	Found in cismontane woodland and valley and foothill grassland communities, sometimes in vernal pools. Occurs at elevations between 200 feet and 3200 feet. Blooms May – July.	**Absent.** The disturbed habitats of the Project area are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. A population of this species occurs in the Lake Success area approximately 4.5 miles east of the Project.
Spiny-sepaled button-celery (*Eryngium spinosepalum*)	CNPS 1B	Found in the Sierra Nevada Foothills and portions of the San Joaquin Valley. Occurs in vernal pools, swales, and roadside ditches at elevations between 325 feet and 4160 feet in valley grassland, freshwater wetlands, and riparian communities. Blooms April – July.	**Absent.** The disturbed habitats of the Project area are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. The nearest observation of this species was reported in 2016 near Lake Success, approximately 4 miles northeast of the Project site.
Springville clarkia (*Clarkia springvillensis*)	FT, CE, CNPS 1B	Found in chaparral, cismontane woodland, valley and foothill grassland. Most often occurs in cut banks and openings in blue oak woodland in decomposed granite loam soils at elevations between 675 feet – 7400 feet. Blooms May.	**Absent.** The Project site is below the accepted altitudinal range of this species and suitable habitat is absent. The nearest recorded observation of this species was reported in the foothills in 2002, approximately 2 miles north of the Project area.
Striped adobe-lily (*Fritillaria striata*)	CT, CNPS 1B	Found in the Sierra Nevada foothills in adobe soil within valley grassland and foothill woodland communities at elevations below 3300 feet. Blooms February – April.	**Unlikely.** The disturbed habitats of the Project area are unsuitable for this species. There is one recorded observation of this species which intersects the Project area. However, this record corresponds to a historic collection from 1927 at an unknown location in the vicinity of Porterville. The status of this population has is considered extirpated. The nearest presumed extant observation record of this species was reported in 2007 in the foothills approximately 2 miles north of the Project site.

Species	Status	Habitat	Occurrence on Project Site
Subtle orache (*Atriplex subtilis*)	CNPS 1B	Found in the San Joaquin Valley in saline depressions at elevations below 230 feet. Blooms June – October.	**Absent.** The disturbed habitats of the Project area are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. There are three recorded observations of this species in the vicinity. Observations were reported in 1975, 1971, and 1999, all of which were located more than 13 miles from the Project site.
Vernal pool smallscale (*Atriplex persistens*)	CNPS 1B	Occurs in San Joaquin Valley and Sacramento Valley in alkaline vernal pools at elevations below 375 feet. Usually found in wetlands, but occasionally found in non-wetlands. Blooms June – September.	**Absent.** The Project site is above the accepted altitudinal range of this species, and the disturbed onsite are unsuitable. This species was not observed during the field survey, which was conducted during the blooming season. The only recorded observation of this species in the vicinity was reported in 1985 at Pixley Vernal Pool Preserve, approximately 13 miles southwest of the Project site.

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	CT	California Threatened
FPE	Federally Endangered (Proposed)	CCT	California Threatened (Candidate)
FPT	Federally Threatened (Proposed)	CFP	California Fully Protected
FC	Federal Candidate	CSC	California Species of Special Concern
		CWL	California Watch List
		CCE	California Endangered (Candidate)
		CR	California Rare

CNPS LISTING

1A	Plants Presumed Extinct in California.	2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
1B	Plants Rare, Threatened, or Endangered in California and elsewhere.		

3.4.2 Regulatory Setting

3.4.2.1 Federal

Endangered Species Act: The USFWS and the National Oceanographic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) enforce the provisions stipulated in the Federal Endangered Species Act of 1973 (FESA, 16 United States Code [USC] § 1531 et seq.). Threatened and endangered species on the federal list (50 Code of Federal Regulations [CFR] 17.11 and 17.12) are protected from take unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. Pursuant to the requirements of the FESA, an agency reviewing a proposed action within its jurisdiction must determine whether any federally listed species may be present in the proposed action area and determine whether the proposed action may affect such species. Under the FESA, habitat loss is considered an effect to a species. In addition, the agency is required to determine whether the proposed action is likely to

jeopardize the continued existence of any species that is listed or proposed for listing under the FESA (16 USC § 1536[3], [4]). Therefore, proposed action-related effects to these species or their habitats would be considered significant and would require mitigation.

Migratory Bird Treaty Act: The federal Migratory Bird Treaty Act (MBTA) (16 USC § 703, Supp. I, 1989) prohibits killing, possessing, trading, or other forms of take of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. "Take" is defined as the pursuing, hunting, shooting, capturing, collecting, or killing of birds, their nests, eggs, or young (16 USC § 703 and § 715n). This act encompasses whole birds, parts of birds, and bird nests and eggs. The MBTA specifically protects migratory bird nests from possession, sale, purchase, barter transport, import, and export, and take. For nests, the definition of take per 50 CFR 10.12 is to collect. The MBTA does not include a definition of an "active nest." However, the "Migratory Bird Permit Memorandum" issued by the USFWS in 2003 clarifies the MBTA in that regard and states that the removal of nests, without eggs or birds, is legal under the MBTA, provided no possession (which is interpreted as holding the nest with the intent of retaining it) occurs during the destruction.

United States Army Corps of Engineers Jurisdiction: Natural drainage channels and adjacent wetlands may be considered "waters of the United States" or "jurisdictional waters" subject to the jurisdiction of the USACE. The latest update took effect on March 20, 2023 as the final "Revised Definition of "waters of the United States" and replaced the 2019/2020 Navigable Waters Protection Rule (NWPR) rule. However, in light of preliminary injunctions, the agencies are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime in 26 States until further notice. The 2023 Rule was developed with consideration of the relevant provisions of the CWA and the statute as a whole, relevant Supreme Court case law, and the agencies' technical expertise implementing the longstanding pre-2015 "waters of the United States" framework. The extent of jurisdiction has been defined in the CFR but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- *All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- *All interstate waters including interstate wetlands;*
- *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;*
- *All impoundments of waters otherwise defined as Waters of the United States under the definition;*
- *Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).*

As determined by the United States Supreme Court in its 2001 Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC) decision, 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 Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered a navigable and therefore jurisdictional water. Furthermore, the Supreme Court clarified that the USEPA and the USACE will not assert jurisdiction over ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The USACE regulates the filling or grading of waters of the United States. under the authority of Section 404 of the Clean Water Act. 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.

3.4.2.2 State

California Endangered Species Act: The California Endangered Species Act (CESA) of 1970 (Fish and Game Code § 2050 et seq. and California Code of Regulations (CCR) Title 14, Subsection 670.2, 670.51) prohibits the take of species listed under CESA (14 CCR Subsection 670.2, 670.5). Take is defined as hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill. Under CESA, state agencies are required to consult with the California Department of Fish and Wildlife when preparing CEQA documents. Consultation ensures that proposed projects or actions do not have a negative effect on state-listed species. During consultation, CDFW determines whether take would occur and identifies "reasonable and prudent alternatives" for the project and conservation of special-status species. CDFW can authorize take of state listed species under Sections 2080.1 and 2081(b) of Fish and Game Code in those cases where it is demonstrated that the impacts are minimized and mitigated. Take authorized under section 2081(b) must be minimized and fully mitigated. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Under CESA, CDFW is responsible for maintaining a list of threatened and endangered species designated under state law (Fish and Game Code § 2070). CDFW also maintains lists of species of special concern, which serve as "watch lists." Pursuant to the requirements of CESA, a state or local agency reviewing a proposed project within its jurisdiction must determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation. Impacts to species of concern or fully protected species would be considered significant under certain circumstances.

Native Plant Protection Act: The California Native Plant Protection Act of 1977 (California Fish and Game Code §§ 1900–1913) requires all state agencies to use their authority to carry out programs to conserve endangered and otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require the project proponent to notify CDFW at least 10 days in advance of any change in land use, which allows CDFW to salvage listed plants that would otherwise be destroyed.

Nesting Birds: California Fish and Game Code Subsections 3503, 3503.5, and 3800 prohibit the possession, incidental take, or needless destruction of birds, their nests, and eggs. California Fish and Game Code Section 3511 lists birds that are "Fully Protected" as those that may not be taken or possessed except under specific permit.

California Department of Fish and Wildlife Jurisdiction: The CDFW has regulatory jurisdiction over lakes and streams in California. Activities that divert or obstruct the natural flow of a stream; substantially change its bed, channel, or bank; or use any materials (including vegetation) from the streambed, may require that the project applicant enter into a Streambed Alteration Agreement with the CDFW in accordance with California Fish and Game Code Section 1602.

California Environmental Quality Act: The California Environmental Quality Act of 1970 (Subsections 21000–21178) requires that CDFW be consulted during the CEQA review process regarding impacts of proposed projects on special status species. Special-status species are defined under CEQA Guidelines subsection 15380(b) and (d) as those listed under FESA and CESA and species that are not currently protected by statute or regulation but would be considered rare, threatened, or endangered under these criteria or by the scientific community. Therefore, species considered rare or endangered are addressed in this biological resource evaluation regardless of whether they are afforded protection through any other statute or regulation. The CNPS inventories the native flora of California and ranks species according to rarity.11 Plants with Rare Plant Ranks 1A, 1B, 2A, or 2B are considered special-status species under CEQA.

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if it can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare and endangered plants and animals. Section 15380(d) allows a public agency to undertake a review to determine if a significant effect on species that have not yet been listed by either the USFWS or CDFW (i.e., candidate species) would occur. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agency has an opportunity to designate the species as protected, if warranted.

3.4.2.3 Local

3.4.2.3.1 Porterville General Plan Policies

- *OSC-G-7: Protect habitat for special status species, designated under State and federal law.*

3.4.3 Impact Assessment

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 Game or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporated: Species identified as candidate, sensitive, or special status species in local or regional plans policies or regulations by CDFW or the USFWS that have the potential to be impacted by the Project are identified below with corresponding mitigation measures.

3.4.3.1 Project-Related Impacts to Special Status Animal Species.

There are 17 special status animal species that appeared on the database queries for the Project area including American badger (*Taxidea taxus*), blunt-nosed leopard lizard (*Gambelia sila*), California Condor (*Gymnogyps californianus*) California red-legged frog (*Rana draytonii*), Delta smelt (*Hypomesus transpacificus*), giant gartersnake (*Thamnophis gigas*), Northern California legless lizard (*Anniella pulchra*), pallid bat (*Antrozous pallidus*), San Joaquin kit fox (*Vulpes macrotis mutica*), Swainson's Hawk (*Buteo swainsoni*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), Townsend's big-eared bat (*Corynorhinus townsendii*), Tricolored Blackbird (*Agelaius tricolor*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*); vernal pool fairy shrimp (*Branchinecta lynchi*), western mastiff bat (*Eumops perotis californicus*), and western spadefoot (*Spea hammondii*). None of these species were observed during the biological survey. As identified in **Table 3-10**, all of the aforementioned special status animal species are absent from the Project area due to historic and ongoing disturbance and/or the absence of suitable habitat. Therefore, the implementation of the Project would have no effect on individual animals or regional populations of these special status animal species.

Trees onsite were limited to two shrubby olive trees, neither of which were large enough to house a raptor nest. However, smaller avian species could nest within the olive trees and ground nesting birds, particularly those tolerant of disturbance, such as Killdeer (*Charadrius vociferous*), could nest on the bare ground onsite. Trees onsite are not suitable for raptor nesting, however, there are larger trees in the vicinity which could support raptor nesting.

Birds foraging within the Project site during construction activities would be expected to fly away from disturbance, subsequently eliminating the risk of injury or mortality while foraging. However, birds nesting within the Project site could be injured or killed by Project activities. Furthermore, construction activities could disturb birds nesting within or adjacent to work areas, resulting in nest abandonment. Project construction activities that adversely affect the nesting success of raptors and migratory birds or result in the mortality of

individual birds constitutes a violation of State and federal laws and is considered a significant impact under CEQA. Implementation of the following measures would reduce potential impacts to nesting raptors, migratory birds, and special status birds to a less than significant level under CEQA and would ensure compliance with State and federal laws protecting these avian species.

3.4.3.2 Project-Related Impacts to Special Status Plant Species.

There are 19 special status plant species that appeared on the database queries for the Project including brittlescale (*Atriplex depressa*), calico monkeyflower (*Diplacus pictus/Mimulus pictus/Eunanus pictus*), California alkali grass (*Puccinellia simplex*), California jewelflower (*Caulanthus californicus*), Chaparral ragwort (*Senecio aphanactis*), Earlimart orache (*Atriplex cordulata var. erecticaulis*), Keck's checkerbloom (*Sidalcea keckii*), lesser saltscale (*Atriplex miniscula*), Lost Hills crownscale (*Atriplex coronata var. vallicola*), Madera leptosiphon (*Leptosiphon serrulatus*), recurved larkspur (*Delphinium recurvatum*), San Joaquin adobe sunburst (*Pseudobahia peirsonii*), San Joaquín woollythreads (*Monolopia congdonii*), shining navarretia (*Navarretia nigelliformis ssp. radians*), spiny-sepaled button-celery (*Eryngium spinosepalum*), Springville clarkia (*Clarkia springvillensis*), striped adobe-lily (*Fritillaria striata*), subtle orache (*Atriplex subtilis*), and vernal pool smallscale (*Atriplex persistens*). None of these species were observed during the biological survey. As identified in **Table 3-11**, all of the aforementioned special status plant species are absent from the Project area due to historic and ongoing disturbance and/or the absence of suitable habitat. Therefore, the implementation of the Project would have no effect on individual plants or regional populations of these special status plant species.

3.4.3.3 Project-Related Impacts to Vernal Pool Fairy Shrimp.

During the March 19, 2020, survey, an unidentified species of fairy shrimp was observed within a roadside tire rut. In the region there are multiple species of fairy shrimp, but only vernal pool fairy shrimp are listed as State or federally protected. It is impossible to confidently identify fairy shrimp in the field. Therefore, additional surveys were performed to determine the species of fairy shrimp present during the March 19, 2020 survey. It was determined that dry season sampling, cyst hatching, and wet season sampling would be the appropriate surveys, based on the absence of typical vernal pool habitat and the arid climate of the region.

On October 21, 2020, Helm Biological Consulting (HBC) and under the direction of USFWS, conducted protocol-level dry-season sampling for threatened or endangered large branchiopods (fairy shrimp and tadpole shrimp). Further, HBC cultured any cysts observed (hatched and reared hatchlings to maturity) to accurately identify species. All methods were conducted with permission and in accordance with USFWS protocols. The survey resulted in the identification of versatile fairy shrimp (*Branchinecta lindahli*), a species with no State or federal listing status. Further fairy shrimp expertise was requested to review HBC reports and determine if there would be any impacts to listed fairy shrimp under the provisions of CEQA. Live Oak Associates Inc., reviewed the studies and reports and determined that based on the information collected from HBC, combined with the historical and existing habitat of the site, it was concluded that the vernal pool fairy shrimp are highly unlikely to occur on the Project and that project impacts to the vernal pool fairy shrimp would be less than significant. The reports and findings can be found in **Appendix B** of this document.

Based on the results of the all the surveys, no further mitigation measures for fairy shrimp are warranted.

Mitigation Measures. The following measures will be implemented prior to the start of construction:

BIO-1 (Avoidance): The Project's construction activities will occur, if feasible, between September 1 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.

BIO-2 (Pre-construction Surveys): If activities must occur within nesting bird season (February 1 to August 31), a qualified biologist will conduct pre-construction surveys for active nests within 14 days prior to the start of construction. The survey will include the proposed work area and surrounding lands within 500

feet. If no active nests are observed, no further mitigation is required. Raptor nests are considered "active" upon the nest-building stage.

BIO-3 (Establish Buffers): On discovery of any active nests near work areas, the biologist will determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers will be identified with flagging, exclusion fencing, or other easily visible means, and will be maintained until the biologist has determined that the nestlings have fledged.

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?

No Impact: According to CNDDB, there are no natural communities of special concern with potential to occur within the Project area or vicinity. Additionally, no natural communities of special concern were observed during the biological survey. Therefore, implementation of the Project would have no impact on riparian habitat, or any other sensitive natural communities and no mitigation is warranted.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact. The Project consists of a ruderal, vacant lot of land at an elevation of approximately 450 feet above mean sea level. The site is relatively flat, and several tire ruts with standing water that were observed around the property and side roads. The property has been subject to regular ground-disturbance, as it is disked at least twice per year for vegetation management and fire prevention. In addition, the northern portion of the site, along Grand Avenue, is used as a parking area for vehicles associated with businesses and residences in the vicinity. Based on the studies discussed above by two well-known vernal pool and fairy shrimp experts, the Project has low-quality habitat and does not contain listed fairy shrimp species. Therefore, impacts would be less than significant. Mitigation is not warranted.

d) Would the project 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. The Project area does not contain features likely to function as wildlife movement corridors and is located in a region often disturbed by human activities related to adjacent industrial uses which would discourage dispersal and migration. However, migratory birds may nest on and near the project site. Mitigation measures **BIO-1** through **BIO-3** discussed above would reduce impacts to migratory birds to less than significant.

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

No Impact: Project design appears to be consistent with the goals and policies of the City 2030 General Plan. As such, there would be no impact to local policies or ordinances and mitigation is not warranted.

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

Less than Significant: Several conservation and recovery plans apply to land in the City, including the Recovery Plan for Upland Species of the San Joaquin Valley and the Valley Elderberry Longhorn Beetle Habitat Conservation Plan. A review of Figure 6-4 (Special Status Species and Sensitive Vegetation) in the City's General

Plan indicates the Project site is not within an area set aside for the conservation of habitat or sensitive plant or animal species pursuant to such plans. The nearest such areas are the Valley Elderberry Longhorn Beatle Conservation Area, located along the Tule River within the Yaudanchi Ecological Reserve, located approximately 2.7 miles southeast of the Project site. Therefore, impacts would be less than significant. Mitigation is not warranted.

3.5 Cultural Resources

Table 3-12. Cultural Resources Impacts

Cultural Resources					
	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?	☐	☒	☐	☐

3.5.1 Environmental Setting

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euroamerican occupation of the area. The most frequently encountered prehistoric and early historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic archaeological sites may include foundations or features such as privies, corrals, and trash dumps.

In 1986, the City conducted a comprehensive inventory of sites and districts with potential historic significance. The final evaluation process produced an inventory of 75 sites that may have eligibility for National Register designation. However, these properties are not currently listed on the National Register. According to the Southern San Joaquin Valley Archeological Information Center, many more properties have potential to be listed in the national and state registries if they were formally evaluated or re-evaluated. In total, the Porterville Planning Area contains four National Register Sites and two California Historic Landmarks.

3.5.1.1 Records Search

Provost & Pritchard had contacted the CHRIS to identify cultural resources that may meet the CEQA definition of a historical resource or a unique resource, and to recommend procedures for avoiding or mitigating impacts to such resources as necessary. Based on the information, there are no recorded cultural resources within the Project area. There are 20 recorded resources within one-quarter mile radius of the site.

3.5.2 Regulatory Setting

3.5.2.1 Federal

National Historic Preservation Act of 1966 (as amended), Section 106: The significance of cultural resources is evaluated under the criteria for inclusion in the National Register of Historic Places (NRHP), authorized under the National Historic Preservation Act of 1966, as amended. 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 (see below) for significance applied under Section 106 are generally (although not entirely) consistent with CRHR criteria (see PRC Section 5024.1; Title 14 CCR, Sections 4852 and 15064.5(a)(3)).

Significant cultural resources are those archaeological resources and historical properties that:

(A) Are associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

(B) Are associated with the lives of persons important in our past;

(C) 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

(D) 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 Section 21083.2(g)).

Preservation in place is the preferred approach under CEQA to mitigating adverse impacts to significant or unique cultural resources. Sites listed or eligible for listing on the NRHP are considered to be historic properties. Sites younger than 50 years, unless of exceptional importance, are not eligible for listing in the NRHP.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act, a federal law and joint resolution of Congress was created to protect and preserve the traditional religious rights and cultural practices of American Indians, Eskimos, Aleuts and Native Hawaiians. These rights include, but are not limited to, access of sacred sites, repatriation of sacred objects held in museums, freedom to worship through ceremonial and traditional rites, including within prisons, and use and possession of objects considered sacred.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act requires federal agencies and institutions that receive federal funding to return Native American cultural items to lineal descendants and culturally affiliated Indian tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony.

3.5.2.2 State

CEQA requires consideration of project impacts on archaeological or historical sites deemed to be "historical resources." Under CEQA, a substantial adverse change in the significant qualities of a historical resource is considered a significant effect on the environment. For the purposes of CEQA, a "historical resource" is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (Title 14 CCR Section15064.5[a][1]-[3]). Historical resources may include, but are not limited to, "any object,

building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]).

The eligibility criteria for the California Register are the definitive criteria for assessing the significance of historical resources for the purposes of CEQA (Office of Historic Preservation.). The criteria for a resource to be considered "historically significant" for listing on the California Register is demonstrated below.
A resource is considered "historically significant" if it meets one or more of the following criteria for listing on the California Register:

- *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.*
- *Is associated with the lives of persons important in our past.*
- *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.*
- *Has yielded, or may be likely to yield, information important in prehistory or history. (PRC Section5024.1[c])*

California Health and Safety Code: Health and Safety Code Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the County coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission. PRC Section 5097.98 specifies the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials is within the jurisdiction of the Native American Heritage Commission.

3.5.2.3 Local

• OSC-G-11: Identify and protect archaeological, paleontological, and historic resources.
• OSC-I-72: Develop an agreement with Native American representatives for consultation in the cases where new development may result in disturbance to Native American sites.
• OSC-I-73: Require that new development analyze and avoid any potential impacts to archaeological, paleontological, and historic resources by:

o Requiring a records review for development proposed in areas that are considered archaeologically sensitive, including hillsides and near the Tule River;
o Studying the potential effects of development and construction (as required by CEQA);
o Developing, where appropriate, mitigation measures to minimize potential impacts; and Implementing appropriate measures to avoid the identified impacts.

3.5.3 Impact Assessment

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

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

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

a-c) Less than Significant Impact with Mitigation Incorporated. The Project is located on a vacant lot within an already urbanized portion of the City. Previous grading activities adjacent to the Project site have not uncovered any historical resources. In addition, archeological and historical searches were conducted throughout the city limits and the proposed Sphere of Influence during the General Plan Update process. According to the search, there are no known historical structures or monuments recorded to be on the site. Additionally, a cultural

resources records search of the proposed location was conducted on August 6, 2019, to determine whether cultural resources are present within the Project area (see **Appendix C**) with no cultural resources identified within the Project area.

Although no archaeological or historical sites appear to be within the Project area, it has not been physically surveyed and as such, the possibility remains that resources do exist on the site. In the event that historic resources are discovered during construction, there is a possibility that subsurface construction activities could damage or destroy those resources. This is considered a potentially significant impact; however, implementation of Mitigation measures **CUL-1 and CUL-2** would ensure that significant impacts remain less than significant with mitigation incorporated.

Mitigation Measures

CUL-1: If, during construction, cultural resources are discovered, all work will be halted within 50 feet of the discovery. A professional archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology will be retained by the City to determine the significance of the discovery. Upon a finding of significance, the City will implement the required mitigation (if any) as determined by the archaeologist.

CUL-2: In the event human remains are encountered during construction activities, all work within the vicinity of the remains would halt in accordance with Health and Safety Code §7050.5, Public Resources Code §5097.98, and Section 15064.5 of the CEQA Guidelines, and the Fresno County coroner's office would be contacted.

3.6 Energy

Table 3-13. Energy Impacts

Energy					
	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?	☐	☐	☐	☒

3.6.1 Environmental Setting

California's total energy consumption is second-highest in the nation, but, in 2016, the state's per capita energy consumption ranked 48th, due in part to its mild climate and its energy efficiency programs. In 2017, California ranked second in the nation in conventional hydroelectric generation and first as a producer of electricity from solar, geothermal, and biomass resources while also in 2017, solar PV and solar thermal installations provided about 16% of California's net electricity generation.[8]

Southern California Edison provides electric service to Porterville residents. Natural gas service is primarily provided by the Southern California Gas Company. There are three major companies that provide communications services in Porterville: AT&T, Sprint, and Verizon. Charter Communications is the primary cable television and internet provider.

3.6.2 Regulatory Setting

3.6.2.1 Local

2030 City of Porterville General Plan[9]: The 2030 City General Plan sets forth the following goals and policies regarding energy and which have potential relevance to the Project's CEQA review:

- C-G-3 Make efficient use of existing transportation facilities and, through coordinated land use planning, strive to improve accessibility to shops, schools, parks and employment centers and reduce total vehicle miles traveled per household to minimize vehicle emissions and save energy.

[8] United States Energy Information Administration. Independent Statistics and Analysis. California Profile Overview. https://www.eia.gov/state/?sid=CA#tabs-1 Accessed October 2020.

[9] 2030 City of Porterville General Plan Open Space and Conservation Element http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter6OpenSpaceandConservation_000.pdf, accessed February 12, 2019

3.6.3 Impact Assessment

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 California Building Code (CBC) (CCR, Title 24, Part 2), establishes building codes in California. CCR Title 24, Part 6 herein referred to as Title 24, establishes the standards for building energy in California. Title 24 applies to all buildings that are heated and/or mechanically cooled and are defined under the CBC and grouped under California law occupancy types.[10]

Current regulations for construction equipment, heavy-duty equipment, and earthmoving equipment used in construction contributes to reductions in energy as well as reduction in pollutant emissions. California implemented its In-Use Off-Road Diesel Fueled Fleets regulations (off-road regulation) which applies to all self-propelled off-road diesel vehicles 25 horsepower or greater and most two-engine vehicles. The Small Off-Road Engines program was implemented by California to apply to categories of outdoor powered equipment and specialty vehicles often used in construction.

Additionally, the Project would incorporate energy efficient features and materials that would result in the overall utilization of less. These features and materials include:

- Motion sensor lights throughout the homes;
- Dimmer switches;
- Interior and Exterior LED lighting;
- Roof mounted solar, up to 90-100% of complex demand;
- EV charging in all garages;
- Additional EV charging stations in the guest parking area.
- Recycled building materials to the greatest extent practicable;
- Gated Community; and
- Security Cameras in public areas.

With the incorporation of CCR Title 24 energy standards, implementation of the solar energy system and energy efficient features and materials, regulation of construction vehicles and equipment, the Project would have a less than significant impact on energy resources and would not result in wasteful or unnecessary consumption of energy resources during Project operation or construction.

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

No Impact. The Project would adhere to the State of California Administrative Code Title 24 as adopted in the Porterville Municipal Code. There would be no impact.

[10] See California Building Code Occupancy Classifications at the following link: A Simple Guide to California Building Code Occupancy Classification - AirFixture

3.7 Geology and Soils

Table 3-14. Geology and Soils Impacts

Geology and Soils				
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 most recently adopted Uniform Building Code creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

3.7.1 Environmental Setting

The City sits on top of the alluvial fans of the Tule River and its distributaries. The alluvial fans are soft near the river and other waterways and firm in the north, northeast and downtown, areas as a transition to the granitic bedrock deposits in the foothills. The City contains a wide variety of soil types which have a significant bearing on land planning and development. Porterville Clay is the most prominent soil type located within the

City.[11] While State and federal laws regulate soil quality, as indicated by the farmland classification system, local land use planning is important for limiting erosion potential.

3.7.1.1 Faults and Seismicity

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the site.[12] The nearest major fault is the San Andreas Fault, located approximately 69 miles southwest of the Project site. The San Andreas Fault is the dominant active tectonic feature of the Coast Ranges and represents the boundary of the North American and Pacific plates. A smaller fault zone, the Poso Creek Fault is approximately 31 miles south of the site and an unnamed fault located is approximately six miles southwest.

3.7.1.2 Liquefaction

The potential for liquefaction, which is the loss of soil strength due to seismic forces, is dependent on soil types and density, the groundwater table, and the duration and intensity of ground shaking. Although no specific liquefaction hazard areas have been identified in the City, this potential is recognized throughout the San Joaquin Valley where unconsolidated sediments and a high-water table have been found. There is only moderate risk of soil slumping and liquefaction when near the Tule River, which is approximately 1.32 miles south of the Project.[13] Soils in the Project site consist of Porterville Clay 0 to 2 percent of slope and 2 to 9 percent slopes (**Appendix D**).

3.7.1.3 Soil Subsidence

Subsidence occurs when a large land area settles due to over-saturation or extensive withdrawal of ground water, oil, or natural gas. These areas are typically composed of open-textured soils that become saturated. These areas are high in silt or clay content.[14] The Project site is comprised of Porterville clay (0 to 2 percent slopes), and Porterville clay (2 to 9 percent slopes). Both are well drained with a low to moderate risk of subsidence (**Appendix D**).

3.7.1.4 Dam and Levee Failure

The Project site is within the inundation zone of Lake Success. The Lake Success dam is located approximately 4.2 miles east of the Project site.

3.7.1.5 Erosion Potential

Erosion is the process by which the soil and rock components of the Earth's crust are worn away and removed from one place to another by natural forces such as weathering, solution, and transportation. Soil erosion can lead to sedimentation of waterbodies, eventually having an adverse impact on water quality and wildlife. Once erosion occurs, it may be difficult for natural vegetation to reestablish itself. The loss of topsoil to erosion is detrimental to agriculture and other landscaping. The risk of erosion is greatly increased during grading and construction activities, when soils are loosened and bare of vegetation. Soil erodibility can be identified by a specific soil's "K-Factor." 5 Values of K range from 0.02 to 0.69, with the higher the value, the more susceptible the soil is to erosion. Soils with K factors above 0.40 are considered to be the most susceptible to erosion.[15] However, this factor is only one of the measurements needed to determine overall soil erosion potential. According to the Porterville General Plan Public Health and Safety Element, the Project Site is within a high erosion susceptibility area. This measurement does not take the impacts of rainfall, slope above 25 percent, groundcover, and wildland fires on erosion potential into account. Soils with moderate or moderate-high

[11] Porterville General Plan Public Health and Safety Element, http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter7PublicHealthandSafety_000.pdf , Accessed February 12, 2019
[12] Department of Conservation https://www.conservation.ca.gov/cgs/alquist-priolo , accessed February 12 2019
[13] Ibid.
[14] Ibid.
[15] 2030 City of Porterville General Plan Public Health and Safety Element, http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter7PublicHealthandSafety_000.pdf, accessed February 12, 2019

erodibility are common throughout the City. In general, impacts to soil are addressed by the City's site review and grading plan requirements.

3.7.2 Regulatory Setting

3.7.2.1 Federal

No federal regulations regarding geology and soils are applicable to the Project.

3.7.2.2 State

California Alquist-Priolo Earthquake Fault Zoning Act: The Alquist-Priolo Earthquake Fault Zoning Act (originally enacted in 1972 and renamed in 1994) is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The statute prohibits the location of most types of structures intended for human occupancy across the traces of active faults and regulates construction in the corridors along active faults.

California Building Code: The CCR Title 24 is assigned to the CBC, which, by law, is responsible for coordinating all building standards. The CBC incorporates by reference the International Building Code with necessary California amendments. The International Building Code is a widely-adopted model building code in the United States published by the International Code Council. About one-third of the text within the CBC has been tailored for California earthquake conditions.

Paleontological Resources: Paleontological resources are the fossilized remains of plants and animals and associated deposits. The Society of Vertebrate Paleontology has identified vertebrate fossils, their taphonomic and associated environmental indicators, and fossiliferous deposits as significant nonrenewable paleontological resources. Botanical and invertebrate fossils and assemblages may also be considered significant resources. 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) §15126.4 (a)(1)). California PRC §5097.5 (see above) also applies to paleontological resources. The University of California Museum of Paleontology lists 25 locations within Tulare County, where fossils have been found. Identified fossil types include prehistoric vertebrates, invertebrates, and plants, however mapping of these locations has not been completed.

3.7.2.3 Local

2030 City of Porterville General Plan[16]: The City General Plan sets forth the following goals and policies that protect the geology and soils of the City and which have potential relevance to the Project's CEQA review:

- PHS-I-2 Maintain and enforce appropriate building standards and codes to avoid and/or reduce risks associated with geologic constraints and to ensure that all new construction is designed to meet current safety regulations.
- OSC-I-73: Require that new development analyze and avoid any potential impacts to archaeological, paleontological, and historic resources by:
    - Requiring a records review for development proposed in areas that are considered archaeologically sensitive, including hillsides and near the Tule River;
    - Studying the potential effects of development and construction (as required by CEQA);
    - Developing, where appropriate, mitigation measures to minimize potential impacts; and Implementing appropriate measures to avoid the identified impacts.

[16] Ibid.

3.7.3 Impact Assessment

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

a-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.

Less than Significant Impact. The Project site is not located within a currently-designated Alquist-Priolo Earthquake Zone. In addition, no known active or potentially active faults are located within the Project's vicinity. The closest active faults are an unnamed fault approximately six miles southwest, Poso Creek Fault approximately 31 miles south, and the San Andreas Fault zone Cholame-Carrizo section is approximately 69 miles southwest of the Project site. The Project work would occur in an area typically unaffected by seismic activity. The Project structures would be constructed to the standards of the most recent seismic standards as set forth in the CBC. Compliance with these standards would ensure potential impacts related to strong seismic ground shaking would be less than significant.

a-ii) Strong seismic ground shaking?

Less than Significant Impact. As discussed in a-i) above, the most likely hazard associated with earthquakes for the Porterville area is ground shaking, rather than surface rupture or ground failure. Due to the unlikely nature of major seismic activity near the Project site and due to the distance to the known major faults, hazards due to ground shaking would be minimal. Additionally, according to the City's General Plan, PHS-I-2, and State regulations the Project structures would be constructed to the standards of the most recent seismic standards as set forth in the CBC. Compliance with these standards would ensure potential impacts related to strong seismic ground shaking would be less than significant.

a-iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Seismic-related ground failures, such as ruptures, lateral spreading, ground lurching, seiches, or mudslides, are unlikely to occur in the City because of its relatively stable geologic formation and distance to active faults. However, the City's General Plan states that there is a moderate risk of landslides and liquefaction near the Tule River due to the hillside topography and soil slumping. Because the Project site is generally level and is approximately 1.3 miles north of the Tule River, the Project would not expose people or structures to potential substantial effects associated with seismic-related ground failure, including liquefaction. Therefore, this impact is less than significant.

a-iv) Landslides?

Less than Significant Impact. The City's General Plan, Figure 7-1 (Geological and Soil Hazards) indicates that the Project site is located on relatively flat topography and is not adjacent to any steep slopes or areas that would otherwise be subject to landslides. The Project would not expose people or structures to potential substantial adverse effects associated with landslides. Therefore, impacts related to landslides would be less than significant.

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

Less than Significant Impact. Soil erodibility can be identified by a specific soil's "K-Factor." Values of K range from 0.02 to 0.69, with the higher the value, the more susceptible the soil is to erosion. Soils with K factors above 0.40 are considered to be the most susceptible to erosion.[17] The City has provided soils mapping of the planning area with soil K-Factors identified. Based on this mapping, the Project site is located in an area with a K-Factor between 0.32 and 0.43, which is classified as having a high susceptibility to erosion.

[17] City of Porterville Public Health and Safety, http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter7PublicHealthandSafety_000.pdf , Accessed February 19, 2019.

Implementation of the Project would include grading activities that could result in short-term soil erosion during the construction period. To reduce the potential for soil erosion during construction of the Project, a plan to control the erosion shall be prepared for the project in conformance with the California Storm Water Best Management Practice Handbook for Construction Activity[18], prior to the start of grading.

In addition, soil erosion and loss of topsoil would be minimized through implementation of SVJAPCD fugitive dust control measures and compliance with the NPDES permit requirements. The impacts would be less than significant.

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. See Sections a-ii through a-iv above. The Project neither proposes, nor requires a substantial grade change or change in topography. The implementation of the Project would not cause on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse. Development would be exclusive to the Project site and potentially adjacent City right-of-way. Therefore, impacts would be less than significant.

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

d) Less than Significant Impact. Expansive soils can swell or shrink in response to changes in moisture, which can significantly damage infrastructure and foundations located on expansive soils. According to the City's General Plan, the Project is located within an area with high soil expansion potential. However, during the City's site review and grading process, the City would review grading plans and provide analysis in order for the Project to be compliant with City standards. Any impacts would be less than significant.

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

No Impact. The Project would does not propose using septic tanks or other alternative wastewater disposal systems. No impacts would occur.

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

Less than Significant with Mitigation Incorporated. No known paleontological resources have been identified at the Project site, however, if a paleontological resource is found during construction, then potentially significant impact would occur unless properly mitigated. The Project would be less than significant with mitigation incorporated.

Mitigation Measure – GEO - 1

Should paleontological resources be encountered on the Project site, all ground disturbing activities in the area will stop. A qualified paleontologist will be contacted to assess the discovery. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations will be prepared and submitted to the City for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology.

[18] California Storm Water Best Management Practice Hanbook for Construction Activity, https://www.casqa.org/sites/default/files/BMPHandbooks/BMP_NewDevRedev_Complete.pdf , Accessed February 19, 2019

3.8 Greenhouse Gas Emissions

Table 3-15. Greenhouse Gas Emissions Impacts

Greenhouse Gas Emissions				
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?	☐	☐	☒	☐

3.8.1 Environmental Setting

The Earth's climate has been warming for the past century. Experts believe this warming trend is related to the release of certain gases into the atmosphere. GHGs absorb infrared energy that would otherwise escape from the Earth. As the infrared energy is absorbed, the air surrounding the Earth is heated. An overall warming trend has been recorded since the late 19th century, with the most rapid warming occurring over the past 35 years, with 16 of the 17 warmest years on record occurring since 2001. Not only was 2016 the warmest year on record, but eight of the 12 months that make up the year—from January through September, with the exception of June—were the warmest on record for those respective months. October, November, and December of 2016 were the second warmest of those months on record—in all three cases, behind records set in 2015.[19] Human activities have been attributed to an increase in the atmospheric abundance of greenhouse gases. The following is a brief description of the most commonly recognized GHGs.

3.8.1.1 Greenhouse Gases

Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas. CO_2 is emitted from natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources include the burning of coal, oil, natural gas, and wood.

Methane (CH_4) is a flammable greenhouse gas. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and ruminants such as cattle.

Nitrous oxide (N_2O), is a colorless greenhouse gas. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load.

Water vapor is the most abundant, and variable greenhouse gas. It is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life.

[19] NASA, NOAA Data Show 2016 Warmest Year on Record Globally. https://www.nasa.gov/press-release/nasa-noaa-data-show-2016-warmest-year-on-record-globally. January 18, 2017. Accessed 14 February 2020.

Ozone (O_3) is known as a photochemical pollutant and is a greenhouse gas; however, unlike other greenhouse gases, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. Ozone is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds, nitrogen oxides, and sunlight.

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

Chlorofluorocarbons (CFCs) are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. CFCs destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol in 1987.

Hydrofluorocarbons (HFCs) are synthetic chemicals that are used as a substitute for CFCs. Of all the greenhouse gases, HFCs are one of three groups (the other two are perfluorocarbons and sulfur hexafluoride) with the highest global warming potential. HFCs are human-made for applications such as air conditioners and refrigerants.

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere; therefore, PFCs have long atmospheric lifetimes, between 10,000 and 50,000 years. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest global warming potential of any gas evaluated. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

3.8.1.2 Effects of Climate Change

The impacts of climate change have yet to fully manifest. A hotter planet is causing the sea level to rise, disease to spread to non-endemic areas, as well as more frequent and severe storms, heat events, and air pollution episodes. Also affected are agricultural production, the water supply, the sustainability of ecosystems, and therefore the economy. The magnitude of these impacts is unknown.

Emissions of GHGs contributing to global climate change are largely attributable to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. GHG emissions are typically expressed in carbon dioxide-equivalents (CO_2e), based on the GHG's Global Warming Potential (GWP). The GWP is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, 1 ton of CH_4 has the same contribution to the greenhouse effect as approximately 21 tons of CO_2. Therefore, CH_4 is a much more potent GHG than CO_2.

3.8.2 Regulatory Setting

3.8.2.1 Federal

Although climate change and GHG reduction is a concern at the federal level; currently there are no regulations or legislation that have been enacted specifically addressing GHG emissions reductions and climate change at the project level.

3.8.2.2 **State**

Assembly Bill 32 - California Global Warming Solutions Act of 2006

AB 32 (Health and Safety Code Sections 38500, 38501, 38510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599 "*et seq.,*") requires that Statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases that are regulated by AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride, and sulfur hexafluoride. The reduction to 1990 levels will be accomplished through an enforceable Statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce Statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the State achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

Senate Bill 97 - CEQA: Greenhouse Gas Emissions

Senate Bill 97, signed in August 2007, acknowledges that climate change is an important environmental issue that requires analysis under CEQA. This bill directs the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, by July 1, 2009. The Resources Agency is required to certify or adopt those guidelines by January 1, 2010. Amendments to the CEQA guidelines took effect March 18, 2010. The revisions include a new section (Sec. 15064.4) that specifically addresses the potential significance of GHG emissions. Section 15064.4 calls for a "good-faith effort" to "describe, calculate or estimate" GHG emissions. Section 15064.4 further States that a lead agency "should" consider several factors when assessing the significance of impacts from GHG emissions on the environment, including: the extent to which the project would increase or reduce GHG emissions; whether project emissions exceed an applicable threshold of significance; and the extent to which the project complies with "regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions." The guidelines also State that a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements of previously approved plan or mitigation program (Sec. 15064(h)(3)). However, the guidelines do not require or recommend a specific analytical methodology or provide quantitative criteria for determining the significance of GHG emissions.

Cap-and-Trade Regulation

The cap-and-trade regulation is a key element in California's climate plan. It sets a Statewide limit on sources responsible for 85 percent of California's greenhouse gas emissions, and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013, and apply to large electric power plants and large industrial plants. In 2015, they will extend to fuel distributors (including distributors of heating and transportation fuels). At that stage, the program will encompass nearly 85 percent of the State's total greenhouse gas emissions.

GHG emissions addressed by the cap-and-trade regulation are subject to an industry-wide cap on overall GHG emissions. The cap-and-trade regulation sets a firm limit or cap on GHGs, which declines approximately 3 percent each year beginning in 2013. Any growth in emissions must be accounted for under the cap, such that

a corresponding and equivalent reduction in emissions must occur to allow any increase. The cap-and-trade regulation will help California achieve its goal of reducing GHG emissions to 1990 levels by the year 2020, and ultimately achieving an 80% reduction from 1990 levels by 2050. As such, the ARB has determined that the cap-and-trade regulation meets the requirements of AB 32.

3.8.2.3 Local

2030 Tulare County General Plan: The Tulare County General Plan sets forth several goals and policies relating to greenhouse gas emissions, none of which are relevant to this Project's CEQA review.

Tulare County Climate Action Plan[20]: The Tulare County Climate Action Plan sets forth the following GHG emission reduction target for Tulare County:

- 26.2 percent reduction in County development related emissions
- 6 percent average project reduction required from new development beyond that required by regulation

San Joaquin Valley Air Pollution Control District

SJVAPCD Climate Change Action Plan:

On August 21, 2008, the SJVAPCD Governing Board approved the District's Climate Change Action Plan with the following goals and actions:

Goals:

- Assist local land-use agencies with CEQA issues relative to projects with GHG emissions increases.
- Assist Valley businesses in complying with mandates of AB 32.
- Ensure that climate protection measures do not cause increase in toxic or criteria pollutants that adversely impact public health or environmental justice communities.

Actions:

- Authorize the Air Pollution Control Officer to develop GHG significance threshold(s) or other mechanisms to address CEQA projects with GHG emissions increases. Begin the requisite public process, including public workshops, and develop recommendations for Governing Board consideration in the spring of 2009.
- Authorize the Air Pollution Control Officer to develop necessary regulations and instruments for establishment and administration of the San Joaquin Valley Carbon Exchange Bank for voluntary GHG reductions created in the Valley. Begin the requisite public process, including public workshops, and develop recommendations for Governing Board consideration in spring 2009.
- Authorize the Air Pollution Control Officer to enhance the District's existing criteria pollutant emissions inventory reporting system to allow businesses subject to AB32 emission reporting requirements to submit simultaneous streamlined reports to the District and the State of California with minimal duplication.
- Authorize the Air Pollution Control Officer to develop and administer voluntary GHG emission reduction agreements to mitigate proposed GHG increases from new projects.
- Direct the Air Pollution Control Officer to support climate protection measures that reduce GHG emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted area.

[20] Tulare County Climate Action Plan. http://generalplan.co.tulare.ca.us/documents/GeneralPlan2010/ClimateActionPlan.pdf Accessed November 2018.

SJVAPCD CEQA Greenhouse Gas Guidance:

On December 17, 2009, the SJVAPCD Governing Board adopted "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA"[21] and the policy, "District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency".[22] The SJVAPCD concluded that the existing science is inadequate to support quantification of the impacts that project specific greenhouse gas emissions have on global climatic change. The SJVAPCD found the effects of project-specific emissions to be cumulative, and without mitigation, and that their incremental contribution to global climatic change could be considered cumulatively considerable. The SJVAPCD found that this cumulative impact is best addressed by requiring all projects to reduce their greenhouse gas emissions, whether through project construction, design or operations elements incorporating BPS or other suitable mitigation.

The SJVAPCD's approach is intended to streamline the process of determining if project-specific greenhouse gas emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less than significant cumulative impact. Such plans or mitigation programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and have a certified final CEQA document.

Alternately, if there are no approved plans or mitigation programs applicable to a project, BPS have been identified by SJVAPCD that can be incorporated into projects to demonstrate adequate good faith effort to reduce operational emissions according to performance-based determinations. Projects complying with BPS would not require specific quantification of GHG emissions and could be determined to have a less than significant cumulative impact for GHG emissions. Projects not complying with BPS would require quantification of GHG emissions and demonstration that operational greenhouse gas emissions have been reduced or mitigated by 29 percent, as targeted by ARB's AB 32 Scoping Plan. Finally, quantification of GHG emissions would be required for all projects for which the lead agency has determined that an Environmental Impact Report is required, regardless of whether the project incorporates BPS.

Bay Area Air Quality Management District's Thresholds for Significance

Although the Project is not located in the Bay Area Air Quality Management District (BAAQMD), the Bay Area Air Quality Management District has developed thresholds for significance based on the Statewide AB 32 objectives and are therefore useful for consideration. The BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce Statewide GHG emissions. For operational-related emissions the BAAQMD established a GHG threshold (for projects other than stationary sources) of either, compliance with a qualified climate action plan, or 1,100 MT of CO2e/yr, or 4.6 MT CO2e/SP/yr (residents + employees). For operational-related stationary sources the BAAQMD established a GHG threshold of 10,000 MT/yr[23]. The BAAQMD determined that if a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. If a project would generate GHG emissions below the BAAQMD thresholds or if mitigation can be applied to lessen the emissions such that the project meets its share of

[21] Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf

[22] District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency. http://www.valleyair.org/Programs/CCAP/12-17-09/2%20CCAP%20-%20FINAL%20District%20Policy%20CEQA%20GHG%20-%20Dec%2017%202009.pdf

[23] BAAQMD Proposed AQ CEQA Thresholds of Significance. 2009. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/proposed-thresholds-of-significance-dec-7-09.pdf?la=en

emission reductions needed to address the cumulative impact, the project would normally be considered less than significant.

3.8.3 Methodology

An Air Quality and Greenhouse Gas Emissions Report (**Appendix A**) was prepared in May 2020. The sections below detail the methodology of the report and its conclusions.

3.8.3.1 Short-Term Construction-Generated Emissions

Short-term construction emissions associated with the Project were calculated using CalEEmod, Version 2016.3.2. Emissions' modeling was assumed to occur over an approximate 12-month period on a 3.34 acre site. Remaining assumptions were based on the default parameters contained in the model. Modeling assumptions and output files are included in **Appendix A**.

3.8.3.2 Long-Term Operational Emissions

Long-term operational emissions associated with the Project are largely due to vehicle emissions, and are estimated to be minimal in nature. Modeling assumptions and output files are included in **Appendix A**.

3.8.4 Impact Assessment

3.8.4.1 Thresholds of Significance

In accordance with SJVAPCD's *CEQA Greenhouse Gas Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects*[24], proposed projects complying with Best Performance Standards (BPS) would be determined to have a less-than-significant impact. Projects not complying with BPS would be considered less than significant if operational GHG emissions would be reduced or mitigated by a minimum of 29 percent, in comparison to business-as-usual (year 2004) conditions. In addition, project-generated emissions complying with an approved plan or mitigation program would also be determined to have a less-than-significant impact.

Bay Area Air Quality Management District's Thresholds for Significance: BAAQMD's approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce Statewide GHG emissions. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. If mitigation can be applied to lessen the emissions such that the Project meets its share of emission reductions needed to address the cumulative impact, the Project would normally be considered less than significant. Although the Project is not located in the Bay Area, the BAAQMD's thresholds for significance are based on the Statewide AB 32 objectives, are scientifically supported and are more appropriate to assess potential impacts related to GHG emissions. For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy or annual emissions less than 1,100 metric tons per year (MT/yr) of CO2e. For stationary source projects, such as those requiring a permit from a local air district to operate, the threshold is 10,000 MT/yr of CO2e. Although the BAAQMD thresholds are generally intended for ongoing sources of emissions (e.g., manufacturing facilities, refineries), their use in CEQA is appropriate for construction projects that occur over a relatively short period and contribute a relatively low total amount of GHGs, as compared to a land use development project that would generate substantial annual emissions indefinitely.

[24] Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf Accessed September 2020

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

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

Less than Significant Impact.

Short-Term Construction-Generated Emissions

Estimated construction-generated emissions are summarized in **Table 3-16**. As indicated, construction of the Project would generate maximum annual emissions of approximately 668.2055 $MTCO_2e$. Construction-related production of GHGs would be temporary and last approximately 12 months. These emissions are totaled and amortized over 30 years and added to the operational emissions in **Table 3-17** below.

Table 3-16. Short-Term Construction-Generated GHG Emissions

Year	Emissions (MT CO_2e)(1)
2021	355.3454
2022	21.2814
Amortized over 30 years	*12.5542*

1. *Emissions were quantified using the CalEEmod, Version 2016.3.2. Refer to* ***Appendix A.*** *for modeling results and assumptions. Totals may not sum due to rounding.*

Long-Term Operational Emissions

Estimated long-term operational emissions are summarized in **Table 3-17**.

Table 3-17. Long-Term Operational GHG Emissions

Year	Emissions (MT CO_2e)(1)
Estimated Annual Operation CO2e Emissions	379.5566
Amortized Construction Emissions	12.5542
Total Estimated Annual Operational CO2e Emissions	392.1108
*AB 32 Consistency Threshold for Land-Use Development Projects**	*1,100*
Exceed Threshold?	***No***

1. *Emissions were quantified using the CalEEmod, Version 2016.3.2. Refer to* ***Appendix A.*** *for modeling results and assumptions. Totals may not sum due to rounding.*

* As published in the Bay Area Air Quality Management District's CEQA Air Quality Guidelines. Available online at http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en Accessed September 2020.

The City does not have an adopted GHG plan or MT/yr thresholds for CO_2e. The SJVAPCD CEQA guidance for GHG emissions recommends that a project not be considered to have a significant impact if it complies with an applicable air quality plan, results in a 29% reduction from business as usual (BAU) GHG emissions (2004 levels), or implements applicable Best Performance Standards (BPS). The SJVAPCD metrics (reduction from BAU, implementation of BPS) are not appropriate for this Project. The thresholds provided by the BAAQMD, while not in our area, are very stringent and based on Statewide AB 32 objectives. Because they are designed to avoid significant impacts from global climate change, which occurs at a global scale, they do not depend on site-specific characteristics. The City has determined that the BAAQMD's thresholds are the most appropriate threshold for this Project, which has predominantly short-term construction emissions, and extremely low operational emissions (392.1108 CO_2e). Any impacts would be less than significant.

3.9 Hazards and Hazardous Materials

Table 3-18. Hazards and Hazardous Materials Impacts

Hazards and Hazardous Materials				
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?	☐	☐	☒	☐

3.9.1 Environmental Setting

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 (GC) Section 65962.5 requires the California Environmental Protection Agency (CalEPA) 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.[25] 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 February 5th, 2019 determined that there are no known active hazardous waste generators or hazardous material spill sites within the Project site or immediate surrounding vicinity.

The area immediately surrounding the Project consists of suburban residential, rural residential, vacant land, and commercial land uses. No gas station, intensive industrial facilities, or dry cleaners are located in the immediate area.

3.9.1.1 Airports

The Porterville Municipal Airport is approximately 3.75 miles southwest of the Project. Fresno Yosemite International Airport is approximately 61 miles northwest of the Project.

3.9.1.2 Emergency Response Plan

3.9.1.2.1 EMERGENCY PLANNING

The California Emergency Services Act (GC Section 8550-8668) requires each city to prepare and maintain an Emergency Plan for natural, manmade, or war-caused emergencies that result in conditions of disaster or in extreme peril to life. The Porterville Emergency Operations Plan was adopted in 2004. The Plan includes planning and response scenarios for seismic hazards, extreme weather conditions, landslides, dam failure and other flooding, wildland fires, hazardous materials incidents, transportation emergencies, civil disturbance, and terrorist attacks. It is meant to work in conjunction with the Tulare County Emergency Operations Plan and the State Emergency Plan. The Emergency Council of the Tulare County Operational Area meets for regional coordination purposes at least four times per year. In addition, the City Fire Department has specific procedures for hazardous materials emergency response.[26]

3.9.1.2.2 EVACUATION ROUTES & POTENTIAL SHELTER SITES

The City has designated several evacuation routes through Porterville to be used in case of catastrophic emergencies. The extent and the severity of a disaster will determine which routes and which direction people must take in order to escape or avoid the afflicted areas. Sierra View District Hospital in Porterville provides emergency health care services. In the event of a natural or man-made disaster, the City will coordinate with the Red Cross, Salvation Army, and State and federal agencies responsible for providing emergency shelter for displaced residents. The sites most commonly used are schools, senior centers, community centers, public buildings, and churches.[27]

3.9.1.3 Sensitive Receptors

There is a medium density subdivision adjacent south of the Project site, a single-family residence approximately 180 feet east, and a single-family residence approximately 210 feet northeast.

[25] California Department of Toxic Substances Control. DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List). DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List) | Department of Toxic Substances Control (ca.gov). Accessed April 10, 2023.
[26] Porterville General Plan Public Health and Safety http://www.ci.porterville.ca.us/depts/CommunityDevelopment/documents/Chapter7PublicHealthandSafety_000.pdf , Accessed February 14, 2019
[27] Ibid.

3.9.2 Regulatory Setting

3.9.2.1 Federal

Hazardous Materials - U.S. Environmental Protection Agency: The USEPA was established in 1970 to consolidate in one agency a variety of Federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection. USEPA's mission is to protect human health and to safeguard the natural environment — air, water, and land — upon which life depends. USEPA works to develop and enforce regulations that implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to States and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. Where national standards are not met, USEPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality.

Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act: The Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.

Clean Water Act/SPCC Rule: The CWA (33 U.S.C. Section 1251, *et seq*., formerly the Water Pollution Control Act of 1972), was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. As part of the Clean Water Act, the USEPA oversees and enforces the Oil Pollution Prevention regulation contained in Title 40 of the CFR, Part 112, which is often referred to as the "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans. A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, or the total above ground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "navigable waters" of the United States. Other federal regulations overseen by the USEPA relevant to hazardous materials and environmental contamination include Title 40, CFR, Chapter 1, Subchapter D – Water Programs and Subchapter I – Solid Wastes. Title 40, CFR, Chapter 1, Subchapter D, Parts 116 and 117 designate hazardous substances under the Water Pollution Control Act. Title 40, CFR, Part 116 sets forth a determination of the reportable quantity for each substance that is designated as hazardous. Title 40, CFR, Part 117 applies to quantities of designated substances equal to or greater than the reportable quantities that may be discharged into waters of the United States.

3.9.2.2 State

California Environmental Protection Agency: CalEPA was created in 1991 by Governor's Executive Order. The Air Resources Board (ARB), the Department of Pesticide Regulation (DPR), the Department of Resources Recycling and Recovery (CalRecycle), the DTSC, the Office of Environmental Health Hazard Assessment (OEHHA) and the SWRCB were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of State resources. The mission of CalEPA is to restore, protect, and enhance the environment to ensure public health, environmental quality, and economic vitality under Title 22 of the CCR.[28]

Department of Toxic Substances Control: DTSC is a department of CalEPA and is the primary agency in California that regulates hazardous waste, clean-up of existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of RCRA and the Health and Safety Code. Other laws that affect hazardous waste are specific to

[28] California Environmental Protection Agency. http://www.calepa.ca.gov ,Accessed February 13, 2019.

handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. GC Section 65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, SWRCB Division of Drinking Water lists of contaminated drinking water wells, sites listed by the SWRCB as having UST leaks and which have had a discharge of hazardous wastes or materials into the water or groundwater, and lists from local regulatory agencies of sites that have had a known migration of hazardous waste/material.

Unified Program: The Unified Program (CCR Title 27, Division 1, Subdivision 4, Chapter 1, Sections 15100-15620) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following six environmental and emergency response programs[29]:

- Hazardous Waste Generator program and Hazardous Waste On-site Treatment activities;
- Aboveground Storage Tank program Spill Prevention Control and Countermeasure Plan requirements;
- UST program;
- Hazardous Materials Release Response Plans and Inventory program;
- California Accidental Release Prevention program;
- Hazardous Materials Management Plans and Hazardous Materials Inventory Statement requirements.

The Secretary of CalEPA is directly responsible for coordinating the administration of the Unified Program. The Unified Program requires all counties to apply to the CalEPA Secretary for the certification of a local unified program agency. Qualified cities are also permitted to apply for certification. The local Certified Unified Program Agency (CUPA) is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities for these six program elements in the county. Most CUPAs have been established as a function of a local environmental health or fire department.

Hazardous Waste Management Program: The Hazardous Waste Management Program (HWMP) regulates hazardous waste through its permitting, enforcement, and Unified Program activities in accordance with HHSC Section 25135, *et seq*. The main focus of HWMP is to ensure the safe storage, treatment, transportation, and disposal of hazardous wastes.

State Water Resources Control Board: The SWRCB was created by the California legislature in 1967. The mission of SWRCB is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The joint authority of water allocation and water quality protection enables SWRCB to provide comprehensive protection for California's waters.

California Department of Industrial Relations – Division of Occupational Safety and Health (Cal/OSHA): In California every employer has a legal obligation to provide and maintain a safe and healthful workplace for employees, according to the California Occupational Safety and Health Act of 1973 (per Title 8 of the CCR). The Division of Occupational Safety and Health (Cal/OSHA) program is responsible for enforcing California laws and regulations pertaining to workplace safety and health and for providing assistance to employers and workers about workplace safety and health issues. Cal/OSHA regulations are administered through Title 8 of the CCR. The regulations require all manufacturers or importers to assess the hazards of substances that they produce or import and all employers to provide information to their employees about the hazardous substances to which they may be exposed.

[29] California Environmental Protection Agency. http://www.calepa.ca.gov/cupa/ ,Accessed February 13, 2019.

3.9.2.3 Local

2030 City of Porterville General Plan[30]: The City General Plan sets forth the following goals and policies relating to hazardous and hazardous materials which have potential relevance to the Project's CEQA review:

- PHS-I-13 Maintain automatic and/or mutual aid agreements with surrounding jurisdictions for fire protection.
- PHS-I-24 Provide cost effective fire, police, and emergency medical service within the City to minimize potential injury, loss and/or destruction to persons or property.
- PHS-I-28 Ensure that new development incorporates safety concerns into the site, circulation, building design and landscaping plans.
- PHS-I-31 Maintain multi-jurisdictional communication systems and cooperation for emergency training, planning and management.

3.9.3 Impact Assessment

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

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?

a-b) Less than Significant Impact. The Project would include the construction of up to 46 multifamily residential units, including new internal access roads. Construction activities would involve the use, storage, transportation and disposal of oil, gasoline, diesel fuel, paints, solvents and other hazardous materials. However, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the DTSC, USEPA, and the Occupational Safety and Health Administration. No manufacturing, industrial, or other uses utilizing large amounts of hazardous materials would occur within the Project site. Project operation may involve the use of common materials associated with residential uses (i.e., cleaning products, fertilizers, pesticides, herbicides, etc.) that could be potentially hazardous if handled improperly or ingested. However, these products are not considered acutely hazardous and are not generally considered unsafe. All storage, handling, and disposal of hazardous materials during project construction and operation would comply with applicable standards and regulations. The proposed residential use would not generate significant amounts of any hazardous materials. Therefore, any impacts would be less than significant.

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. The closest schools are Roche Elementary School, and Belleview Elementary, they are 0.29 miles south and 0.6 miles southwest, respectively. The Project would not result in the use or emission of substantial quantities of hazardous materials. During construction, any hazardous materials would be handled, stored, and disposed of in accordance with applicable standards and regulations. The Project would result in no impacts.

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. According to the DTSC EnviroStor database, the Project site is not located on a federal superfund site, State response site, voluntary cleanup site, school cleanup site, evaluation site, school investigation site, military evaluation site, tiered permit site, or corrective action site. The Project site is not included on the list of hazardous materials sites compiled pursuant to GC Section 65962.5. As a result, there would be no impacts.

[30] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm ,Accessed February 13, 2019.

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; and,

No Impact. The Project is not located within a two-mile radius of a public airport or a public use airport and is not within an airport land use plan. The nearest airport is Porterville Municipal Airport approximately 3.75 miles of the Project. The Porterville Municipal Airport is not expected to pose safety hazard for people residing at the Project site. Therefore, the would be no impacts.

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

Less than Significant Impact. The City lists State Route 65 and 190 and Olive Avenue as evacuation routes. The Project would include new internal access roads throughout the proposed residential development. The Project would generate temporary construction traffic; however the Project location does not fall within or near any of the designated evacuation routes. The Project does not include changes to any public or private roadways that would interfere with the established evacuation routes or shelters identified by the City's General Plan.

The City adopted the Porterville Emergency Operations Plan in 2004. The Plan includes planning and response scenarios for seismic hazards, extreme weather, landslides, dam failure, and other flooding, wildland fires, hazardous materials incidents, transportation emergencies, civil disturbance, and terrorist attacks. The Porterville Emergency Operations Plan is meant to work in conjunction with the Tulare County Emergency Operations Plan and the State Emergency Plan. The Emergency Council of the Tulare Operational Area meets for regional coordination purposes at least four times per year. In addition, the City Fire Department has specific procedures for hazardous materials emergency response[31].

The Project would consist of 46 residential units with an internal road to serve each unit. The implementation of the Project would not physically interfere with the County's emergency planning program or the City Fire Department access to and from the Project site. Therefore, the 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. The Porterville General Plan Public Health and Safety Element describes areas of the City that would pose a risk for wildland fire. Suburban, urban areas, or rocky barren areas have minimal surface fuels and therefore typically have the lowest fire hazard. Areas that are heavily wooded, undeveloped areas with trees and unkempt vegetation are considered to be a greater fuel source. The Project is located in an urban setting, which is not prone to wildland fires. In addition, the Project consists of medium density housing units, therefore increasing the amount of urban land with minimal surface fuels. Any impacts would be less than significant.

[31] Porterville 2030 General Plan. Page 181. 1 (revize.com) Site Accessed August 2021.

3.10 Hydrology and Water Quality

Table 3-19. Hydrology and Water Quality Impacts

Hydrology and Water Quality				
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 offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

3.10.1 Environmental Setting

The City has a dry climate with evaporation rates that exceeds rainfall. The local climate is considered warm desert with annual precipitation between approximately 7 to 9 inches, and rainfall rates are highly variable. The majority of precipitation (roughly 84%) falls during the months of November through April.

The Porterville area is underlain by an unconfined aquifer that is part of the Tule Sub-basin of the San Joaquin Valley Groundwater Basin, which has been classified as a critically overdrafted basin.[32] The City's municipal

[32] California Department of Water Resources. Critically Over drafted Basins Map. https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118/Critically-Overdrafted-Basins. Accessed May 2021.

wells are generally scattered west of Plano Avenue and south of Westfield Avenue and the distribution system is operated under pressure. The City receives all of its municipal water from groundwater.[33]
According to the City 2020 Urban Water Management Plan (UWMP)[34], the City's urban development boundary is primarily residential land use and contributes approximately 60 percent of the total water demand, with the remaining water demand made up by commercial, institutional, industrial, and landscape irrigation demands.

The City's water use increased in a fairly linear fashion up through 2007. Beginning in 2008, water use began to decline due to economic conditions and water conservation measures. The City produced/used approximately 3,117 million gallons (MG) (9,565 ac/ft/yr) of water from groundwater supplies to serve a population of 65,702 in 2015. Of that, approximately 1,786 MG were for single family residential.[35] This was approximately 37% less than what the General Plan projected for water use for Year 2015. It should also be noted that actual population growth within the City has not kept up with the population growth projections of the General Plan. Therefore, the actual water use in the City is less than what was projected under the City's General Plan.

3.10.1.1 Water Demand

According to the City's UWMP, the City uses 179 gallons per capita per day (gpcd) water consumption as a conservative approach for planning purposes in their water, sewer, storm drain integrated master plan and other studies.[36]

3.10.1.2 Sustainable Groundwater Management Act

Since 2015, the City, Porterville Irrigation District, Saucelito Irrigation District, Teapot Dome Water District, Vandalia Water District, Terra Bella Irrigation District, Kern-Tulare Water District, and the County have been meeting to form the Eastern Tule Groundwater Sustainability Agency to cover each District. The Boards and Council of county, city and districts approved an Memorandum of Understanding (MOU) (Tulare County Agreement No. 27407) with the Eastern Tule Interested Parties on November 3, 2015 (Resolution Number 2015-0916) and the Joint Powers Agreement with the Eastern Tule Interested Parties. The City has entered into an MOU with Tule sub basin members to form an Integrated Regional Water Management Plan.[37]

3.10.1.3 Tule Sub-basin

As of 2015, the Tule Sub-basin is considered to be in a state of overdraft as groundwater levels have declined an average of 0.75 feet per year according to the Department of Water Resources (DWR). In addition, well yields have decreased substantially in the past 10 years.

3.10.1.4 Dams

The Project site is located within the inundation zone for the Lake Success Dam and is located 4.92 miles west of the Dam.

3.10.2 Regulatory Setting

3.10.2.1 Federal

Clean Water Act: The CWA is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 CFR 1251). The regulations implementing the CWA protect waters of the U.S.

[33] City of Porterville – Hydraulic Analysis, page 1. Dee Jaspar & Associates, Inc. (May 2015).
[34] City of Porterville 2020 Urban Water Management Plan. April 2022. 2020 Urban Water Management Plant (revize.com). Accessed April 11, 2023.
[35] City of Porterville 2015 Urban Water Management Plan. October 2017. http://www.ci.porterville.ca.us/documents/2015UWMPUpdate-Final.pdf. Accessed May 2021. Page 14.
[36] City of Porterville 2020 Urban Water Management Plan. April 2022. 2020 Urban Water Management Plant (revize.com). Accessed April 11, 2023.
[37] Ibid

including streams and wetlands (33 CFR 328.3). The CWA requires States to set standards to protect, maintain, and restore water quality by regulating point source and some non-point source discharges. Under Section 402 of the CWA, the NPDES permit process was established to regulate these discharges.

Federal Emergency Management Agency Flood Zones: The National Flood Insurance Act (1968) makes available federally-subsidized flood insurance to owners of flood-prone properties. To facilitate identifying areas with flood potential, the Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) that can be used for planning purposes to help identify flood zones. Flood zones are geographic areas that the FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's FIRM or Flood Hazard Boundary Maps. Each zone reflects the severity or type of flooding in the area.

3.10.2.2 State

State Water Resources Control Board: The SWRCB has jurisdiction over water quality issues in California. The SWRCB is governed by the Porter-Cologne Water Quality Act (Division 7 of the Water Code (WC)), which establishes the legal framework for water quality control activities by the SWRCB. The intent of the Porter-Cologne Act is to regulate factors which may affect the quality of waters of the State to attain the highest quality which is reasonable, considering a full range of demands and values. Much of the implementation of the SWRCB's responsibilities is delegated to its nine Regional Boards. The Project site is located within the Central Valley Regional Water Quality Control Board (RWQCB). The RWQCB administers the NPDES storm water-permitting program in the Central Valley region. Construction activities on one acre or more are subject to the permitting requirements of the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). Additionally, RWQCB is responsible for issuing Waste Discharge Requirements Orders under WC Section 13260, Article 4, Waste Discharge Requirements.

The SWRCB requires a Storm Water Pollution Prevention Plan (SWPPP) as a requirement of the NPDES to regulates water quality associated with construction or industrial activities.

Department of Water Resources. WC Section 10004, *et seq*. requires that DWR update the State Water Plan every five years. The Plan is currently undergoing its 2018 update; the most recent adopted version is from 2013.

For Update 2013, DWR worked with researchers at the University of California, Davis, to quantify how much growth might occur in the Tulare Lake Hydrologic Region through 2050. The model was used to estimate a year 2050 urban footprint under the scenarios of alternative population growth and development density. Each of the growth scenarios shows a decline in irrigated acreage over existing conditions, but to varying degrees. Irrigated crop acreage declines, on average, by about 90 thousand acres by year 2050 as a result of low population growth and urbanization in Tulare Lake region, while the decline under high population growth was higher by about 200 thousand acres. The change in water demand from 2006 to 2050 is estimated for the Tulare Lake Hydrologic Region for the agriculture and urban sectors under nine growth scenarios and 13 scenarios of future climate change. Urban demand increased under all nine growth scenarios tracking with population growth. Agricultural water demand decreases under all future scenarios due to reduction in irrigated lands as a result of urbanization and background water conservation. Groundwater resources were evaluated for performance under the plausible futures, resulting in 198 scenarios showing the change in groundwater storage from 2013 to 2050. About 95 percent of the futures lead to groundwater declines in the Tulare Lake Hydrologic Region and about 50 percent of the futures lead to declines greater than 10 percent.[38]

Government Code 65302 (d): This section of the GC requires that a general plan contain a conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force,

[38] DWR California Water Plan. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/California-Water-Plan/Docs/Update2013/Regional-Reports/Water-Plan-Update-2013-Tulare-Lake-Regional-Report.pdf Accessed February 20, 2019.

forests, soils, river and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any County-wide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the County or city for which the plan is prepared. Coordination shall include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city or County. The conservation element may also cover:

1. The reclamation of land and waters.
2. Prevention and control of the pollution of streams and other waters.
3. Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.
4. Prevention, control, and correction of the erosion of soils, beaches, and shores.
5. Protection of watersheds.
6. The location, quantity and quality of the rock, sand and gravel resources.
7. Flood control.

Sustainable Groundwater Management Act: On September 16, 2014, Governor Edmund G. Brown, Jr. signed historic legislation to strengthen local management and monitoring of groundwater basins most critical to the State's water needs. The three bills, SB 1168 (Pavley), SB 1319 (Pavley), and AB 1739 (Dickinson) together makeup the Sustainable Groundwater Management Act (SGMA). SGMA comprehensively reforms groundwater management in California. The intent of the Act is to place management at the local level, although the State may intervene to manage basins when local agencies fail to take appropriate responsibility. The Act provides authority for local agency management of groundwater and requires creation of groundwater sustainability agencies and implementation of plans to achieve groundwater sustainability within basins of high and medium-priority including the Tulare County Sub-basin. The Act took effect on January 1, 2015 and will be implemented over the course of next several years and decades. The City, along with seven other agencies, formed the Eastern Tule Groundwater Sustainability Agency and adopted their Groundwater Sustainability Plan in January 2020.

3.10.2.3 Local

2030 City of Porterville General Plan[39]: The City General Plan sets forth the following goals and policies relating to hydrology and water quality which have potential relevance to the Project's CEQA review:

- PU-G-1 Ensure an adequate supply of fresh water to serve existing and future needs of the City.
- PU-I-3 Periodically review and update development impact fees, water connection charges, and monthly service charges to ensure that adequate funds are collected to operate and maintain existing facilities and to construct new facilities.
- PU-I-3 Support efforts to expand surface water supply and storage that benefits the City.
- PU-I-5 Require that necessary water supply infrastructure and storage facilities are in place coincident with new development and approve development plans only when a dependable and adequate water supply to serve the development is assured.
- PU-I-7 Continue to require water meters in all new development.
- PU-I-19 Require new development to provide storm drainage facilities and/or pay a storm drainage impact fee, consistent with the Storm Drain Master Plan.

[39] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm ,Accessed February 13, 2019.

3.10.3 Impact Assessment

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. Implementation of the Project would include the construction of up to 46 multi-family residential units and new internal access roads. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed with an increased potential to wind and water erosion, which could result in temporary minimal increases in sediment dispersion into surrounding waterbodies.

The nearest water body to the Project is the Porter Slough, which is located 0.7 miles southwest of the site. The Project shall implement City Standards regarding grading and site drainage in order to accommodate the stormwater drainage and stormwater runoff in conjunction with construction Best Management Practices (BMPs) in order to reduce pollutant carried in the runoff.[40] Operation of the Project could result in surface water pollution associated with chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and waste that may be spilled or leaked and have the potential to be transported via runoff , however, the it is highly unlikely that the Porter Slough, or any water feature in the City, would be effected because the Project would be required to complete a SWPPP, pursuant to the NPDES. Following the completion, any impacts would be less than significant.

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

Less than Significant Impact. The Project would result in an increase of impervious surfaces on the Project site which would result in increased stormwater runoff and reduce percolation on site. However, the Project would include stormwater control features connected to the City's storm drain network, pursuant to City standards. Therefore, the Project would not substantially interfere with groundwater recharge. The Project would be subject to City site review site grading and would be connected to the City's stormwater infrastructure.

During construction of the Project, it is not anticipated that dewatering would occur during excavation related activities. In addition, construction and operation of the Project would be required to comply with all water saving policies and regulations related to the reduction of water use, including the implementation of Demand Management Measures, which provide programs for residents or businesses to reduce per capita water demands. The proposed Project would include the construction of up to 46 multi-family residences. Applying the City's average of 3.39 persons per household, this equates to approximately 156 persons. At 179 gpcd, the project would require approximately 10.19 MG per year of potable water, or 31.3 acre feet (AF) per year.[41] Additionally, the Projects proposed land use changes would change the zoning from RM-1 to RM-2. The Project is not expected to result in a significantly increased use of groundwater that was not already accounted for in the City's infrastructure planning documents. Therefore, potential impacts related to depletion of groundwater supplies would be less than significant, and no mitigation is required.

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:

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

Less than Significant Impact. Implementation of the Project would result in grading and land alteration that would potentially expose soils to wind and water erosion. As discussed in Section 3.10.3a, the Project applicant would be required to implement a SWPPP which would identify specific measures to address erosion and

[40] California Storm Water Best Management Practice Handbook for Construction Activity, https://www.casqa.org/sites/default/files/BMPHandbooks/BMP_NewDevRedev_Complete.pdf , Accessed February 19, 2019

[41] 156 residents * 179 gpcpd * 365 days = 10,192,260 gallons of potable water per year.

siltation resulting from grading and construction as well as the potential long-term water quality impacts. Implementation of the Project would result in an increase of impervious surfaces on site through the construction of new internal access roads, built structures which reduces the possibility of continued erosion on site. The Project would also include landscaping that would minimize erosion and siltation. The Project site would be designed for storm water to be captured by the storm drain system to avoid significant effects of erosion off site due to the increase of impervious surfaces and subsequent runoff. No streams or rivers would be altered. Therefore, on-site flooding, erosion, and siltation would not occur. The impacts would be less than significant.

c-ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;

Less than Significant Impact. See Section c-i, above. Implementation of the Project would not substantially increase the rate or amount of surface runoff that would result in flooding on or off site. Impacts are less than significant.

c-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

Less than Significant Impact. The Project would result in the alteration of drainage patterns that occur under the current undeveloped conditions of the Project site. In addition, the Project would result in an increase in the amount of impervious surfaces on the Project sire, resulting in an increase in surface runoff. However, the Project shall be required to install new storm drain facilities, pursuant to City review process and City Standards. These facilities would capture runoff and connect to the City's storm drain network. Additionally, the Project would be compliant with the updated Storm Drain Master Plan. In addition, as discussed in Section 3.10.3a, implementation of BMPs and compliance with the NPDES, construction impacts related to exceeding the capacity of, and providing additional sources of polluted runoff to, storm water drainage systems would be reduced to less than significant levels.

c-iv) impede or redirect flood flows?

Less than Significant Impact. The Project site is not within the 100-year flood zone; however, it is within 50 feet at the closest point (See **Figure 3-3**). Implementation of the Project would not result in housing or structures located within the 100-year flood hazard area. There would be no significant impact related to flood hazards.

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

No Impact. The Project site is located within an urbanized area of Porterville and is not immediately adjacent to any hillsides. As such, the risk from mudflow would be low. Furthermore, no enclosed bodies of water are in close enough proximity that would create a potential risk for seiche or a tsunami at the Project site. Therefore, potential hazards from inundation from seiche, tsunami, or mudflow would be less than significant.

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

No Impact. The site is currently zoned for RM-1, while the density is increasing with the zone change to RM-2, it is not a significant increase above what was analyzed in the City's General Plan. The Project would not conflict with or obstruct implementation of any water quality control plan or sustainable groundwater management plan. There would be no impact.

Figure 3-3. FEMA Map

3.11 Land Use and Planning

Table 3-20. Land Use and Planning Impacts

Land Use and Planning					
	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?	☐	☐	☐	☒

3.11.1 Environmental Setting

The Project site lies within the land use jurisdiction of the City. The parcel is designated Low Medium Density Residential by the City's General Plan and is zoned RM-1. As indicated in **Section 3.2.1**, the Project site is categorized by the DOC Farmland Mapping & Monitoring Program as Urban and Built-Up land.

Properties surrounding to the north and south of the Project site are developed uses. The property north is a welding facility and south is a medium density residential neighborhood. To the east and west are vacant land planned as Low Medium Density Residential by the City's General Plan and zoned RM-1. Topographically, the Project site is at an elevation of 452 feet above mean sea level. No forest or timber land is present at the Project site or in the Project vicinity.

3.11.1.1 General Plan Land Use and Zoning Designations

According to the Land Use Element of the Porterville General Plan and Zoning Map, a medium density residential neighborhood would not be a permissible use for RM-1. The Project proposes a General Plan Amendment from the Low-Medium Density Residential land use designation to the Medium Density Residential land use designation, and a Zone Change from RM-1 to Planned Development (PD). This designation change would allow the Project to be developed at the proposed density.
11.3 units per net acre

3.11.2 Regulatory Setting

3.11.2.1 Federal & State

There are no federal or State regulations applicable to this Project.

3.11.2.2 Local

2030 City of Porterville General Plan[42]: The City General Plan sets forth the following goals and policies that regulate Land Uses of the City and which have potential relevance to the Project's CEQA review:

[42] 2030 City of Porterville General Plan Land Use Element. http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm , Accessed February 13, 2019.

- LU-I-8 Approve development projects only after making findings that one or more of the following conditions are met:
    - No General Fund revenue would be used to replace developer funding that has or would have been committed to any other public project;
    - The development project would fully fund all public facilities and infrastructure, including streets, water, sewer and storm drainage systems, parks and public safety facilities and equipment, as necessary to directly mitigate the impact of the new development; and
    - The development project would pay impact fees for public facilities and infrastructure improvements in proportion to the development's impacts, as per the approved master plans.
- LU-I-9 Establish a comprehensive design review process for multi-family housing, commercial and industrial development with an appropriate level of review based on project type and size.
- LU-I-14 Allow residential developments to employ creative site design, landscaping, and architectural quality that blend with the characteristics of each location and its surroundings and offer superior design solutions.
- LU-I-16 Establish guidelines and incentives to promote green building techniques and materials in residential development.
- LU-I-18 Protect existing residential neighborhoods from the encroachment of incompatible activities and land uses, and environmental hazards.
- LU-I-19 Enforce zoning and development regulations through project review, construction inspections, and code enforcement, with fees to enable full-cost recovery for providing these services.

3.11.3 Impact Assessment

a) Would the project physically divide an established community?

No Impact. The Project is located within a generally urbanized area of the City. The Project site is currently undeveloped; however, it is bordered by medium density residences, commercial uses, industrial uses, and vacant land which is planned for future residential use. Although these nearby residential units are located within the vicinity of the Project site, none of these residential areas would be encroached upon or physically divided by project development. The Project site would be accessed utilizing existing adjacent thoroughfares and would not disturb or alter access to any existing adjacent residential units. Therefore, the Project would not physically divide an established community. 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?

No Impact. In order to accommodate the type of development proposed, the Project would amend the General Plan from low-medium density residential to medium density residential land use. The Project also proposes a zoning change from RM-1 to PD, see **Figure 3-4** and **Figure 3-5**. Other Project components would consist of a Conditional Use Permit, and a Tentative Subdivision Map. The proposed Zone Change and General Plan Amendment would bring the Project into compliance with the City General Plan and Municipal Code. There would be no impact.

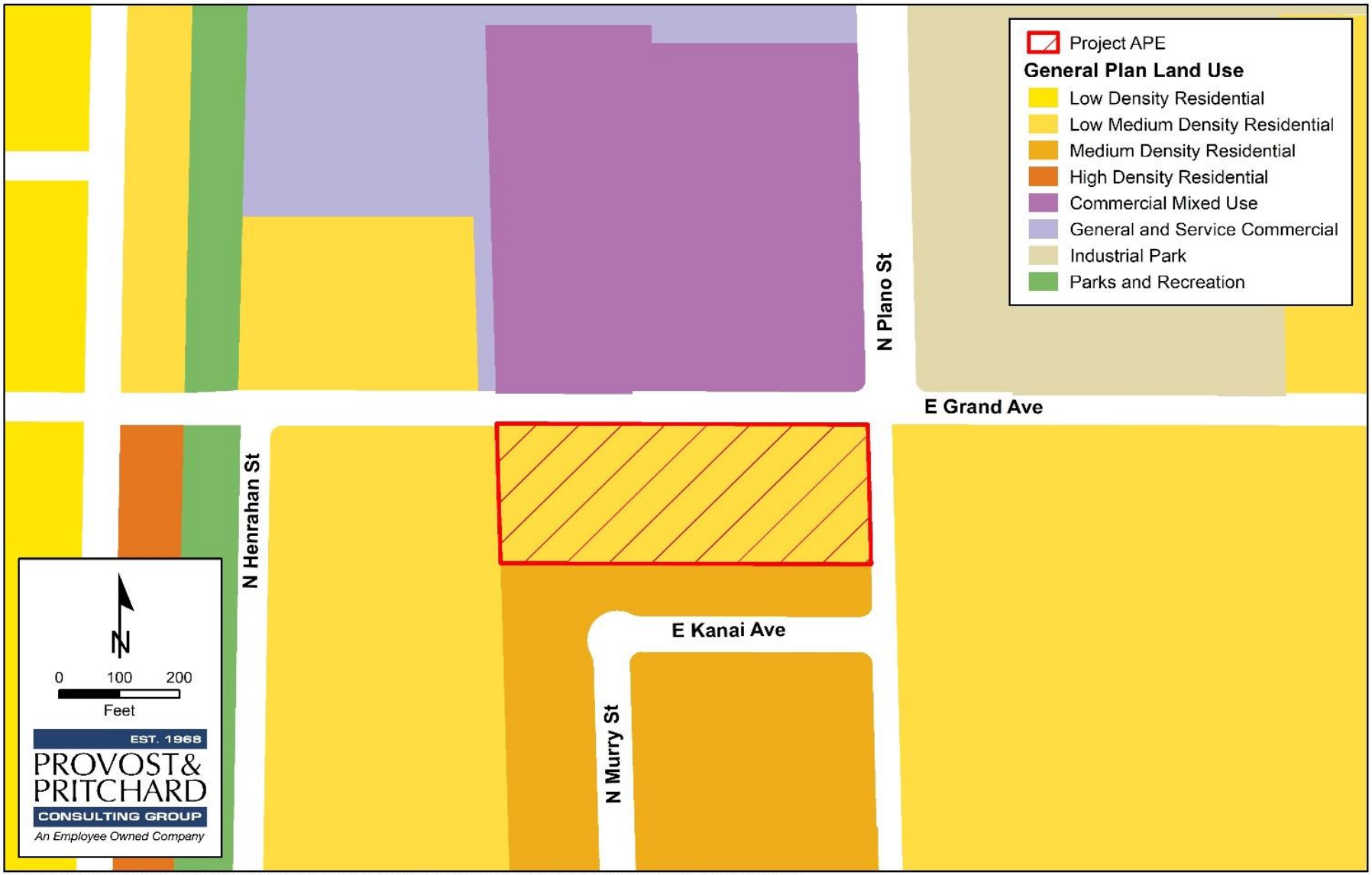

Figure 3-4. General Plan Map

Figure 3-5. Zoning Map

3.12 Mineral Resources

Table 3-21. Mineral Resources Impacts

Mineral Resources					
	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?	☐	☐	☐	☒

3.12.1 Environmental Setting

The Porterville 2030 General Plan outlines current significant mineral sources in Tulare County and within the planning area. The most economically significant mineral resources in Tulare County are sand, gravel, and crushed stone, used as sources for aggregate (road materials and other construction). The two major sources of aggregate area alluvial deposits (riverbeds and floodplains), and hard rock quarries. Consequently, most Tulare county mines are located along rivers near the base of the Sierra foothills. According to the Tulare County General Plan Background Report, all of the known potential mineral resource locations are mapped within the foothills and/or along major watercourses (e.g., Tule River).

The DOC's Division of Oil, Gas, and Geothermal Resources (DOGGR) maintains a database of oil wells in the Project. According to the DOGGR Well Finder there are two plugged and abandoned wells within two miles of the Project site. The nearest active well is approximately 3.7 miles southwest of the Project.

The Project site is not delineated on a local land use plan as a locally-important mineral recovery site.

3.12.2 Regulatory Setting

3.12.2.1 Federal

There are no federal laws or regulations that apply to the Project.

3.12.2.2 State

California Surface Mining and Reclamation Act of 1975. Surface mining in California is regulated through the Surface Mining and Reclamation Act (SMARA), a State law adopted in 1975 to address the dual goals of protecting the state's need for a continuing supply of mineral resources, while protecting public and environmental health. SMARA mandates that land be reclaimed after mining has ceased. Reclamation plans often restore land for agricultural uses or as wildlife habitat.

SMARA requires that all cities incorporate into their general plans mapped mineral resource designations approved by the State Mining and Geology Board. The State Geologist classifies land in California based on availability of mineral resources. Because available aggregate construction material is limited, five designations have been established for the classification of sand, gravel, and crushed rock resources:

- Scientific Resource areas contain unique or rare occurrences of rocks, minerals or fossils that are of outstanding scientific significance.
- Mineral Resource Zone 1 (MRZ-1) is an area where adequate information indicates that no significant mineral deposits are present or likely to be present. This zone is applied where well developed lines of reasoning, based on economic-geologic principles and adequate data, indicate that the likelihood for occurrence of significant mineral deposits is nil or slight.
- Mineral Resource Zone 2 (MRZ-2) is an area where adequate information indicates that significant mineral deposits are present or there is a high likelihood for their presence and development should be controlled.
    - MRZ-2a: Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ- 2a category is of prime importance because it contains known economic mineral deposits.
    - MRZ-2b: Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history.
- Mineral Resource Zone 3 (MRZ-3) is an area where the significance of mineral deposits cannot be determined from the available data.
    - MRZ-3a: MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits due to direct evidence of a surface exposure of a geologic unit, such as a limestone body, known to be or to contain a mineral resource elsewhere but has not been sampled or tested at the current location.
    - MRZ-3b: Land classified MRZ-3b represents areas in geologic settings which appear to be favorable environments for the occurrence of specific mineral deposits. MRZ-3b 123 Porterville General Plan is applied to land where geologic evidence leads to the conclusion that it is plausible that economic mineral deposits are present.
- Mineral Resource Zone 4 (MRZ-4) is an area where there is insufficient data to assign any other MRZ designation.[43]

3.12.2.3 Local

2030 City of Porterville General Plan[44]: The City General Plan sets forth the following goals and policies that protect the Mineral Resources of the City and which do not have potential relevance to the Project's CEQA review:

3.12.3 Impact Assessment

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? And;

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 California Geological Survey Division of Mines and Geology has not classified the Project site as a Mineral Resource Zone under the SMARA. DOGGR has no records of active oil or gas wells on the Project site. There is one plugged abandoned oil wells less than 1.6 miles southwest of the Project site. The nearest MRZ zone is approximately 1.3 miles south of the Project site. No known mineral resources are within the Project boundaries; therefore, the construction of the Project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. There would be no impact.

[43] California Department of Conservation, Guidelines for Classification and Designation of Mineral Lands, http://www.consrv.ca.gov/SMGB/Guidelines/ClassDesig.pdf , Accessed February 13, 2019.
[44] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm , Accessed February 13, 2019.

3.13 Noise

Table 3-22. Noise Impacts

Noise					
	Would the project:	**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?	☐	☐	☐	☒

3.13.1 Environmental Setting

A project would normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the project site are the criteria in the City General Plan Noise Element[45] and the Noise Ordinance.[46] The major noise sources in Porterville are related to roadways and vehicle traffic. Other noise sources include aircraft and rail transportation. Noise produced by industry has a negligible effect on the City's residential noise environment.

According to common practice, maximum noise levels of 65 decibels (dB) are considered "normally acceptable" for unshielded multifamily residential development. Noise levels from 70 dB to 75 dB fall within the "conditionally acceptable" range, and those in the 70 to 75 dB range are considered "normally unacceptable". Lastly, 80 dB and above is considered "clearly unacceptable".

Certain land uses are considered more sensitive to noise than others. Examples of these include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. Residential uses are located north of the Project site. Primary existing noise sources surrounding the Project area are traffic noises from Plano Avenue and other noise from motor vehicles generated by engine vibrations, the interaction between the tires and the road, and vehicle exhaust systems.

3.13.1.1 Traffic Noise

Vehicle noise is a combination of the noises produced by the engine, exhaust, tires, and wind generated by taller vehicles. Other factors that affect the perception of traffic noise include: distance from the highway, terrain, vegetation, and natural and structural obstacles. While tire noise from autos is generally located at ground level,

[45] Porterville General Plan Noise Element. http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter9Noise_000.pdf , Accessed February 13, 2019.
[46] Porterville Municipal Code Noise Ordinance. https://www.sterlingcodifiers.com/codebook/index.php?book_id=679 , Accessed February 13, 2019

truck noise sources can be located as high as 10 to 15 feet above the roadbed due to tall exhaust stacks and higher engines. Approximately 16 percent of single-family housing and 23 percent of multi-family housing is in areas with noise levels greater than 55 dB. Future development within the City's Planning Area will result in increased traffic volumes, thus increasing noise levels somewhat in some areas. In 2030, approximately 3,600 acres (10 percent) will be within areas with noises levels greater than 60 dB. Approximately 11 percent of the single-family housing 45 percent of the multi-family housing, and 16 percent of the educational uses will be within the 60 dB contours. Approximately 15 percent of the single-family residential, 40 percent of the multifamily residential, and 23 percent of the educational uses will be within the 55 dB contours. Locating noise-sensitive uses away from high-noise areas (e.g., major transportation routes) and buffering noise levels through design and landscaping features will help minimize future noise-related land use conflicts.[47] According to the City's General Plan, the Project site is within the 55- and 65-dB contour or normally acceptable for unshielded multifamily residential developments.

3.13.2 Regulatory Setting

3.13.2.1 Federal

There are no federal laws or regulations that apply to the Project.

3.13.2.2 State

California Building Code: The CCR Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The CBC incorporates by reference the International Building Code with necessary California amendments. The International Building Code is a widely adopted model building code in the United States published by the International Code Council.

3.13.2.3 Local

2030 City of Porterville General Plan[48]: The City General Plan sets forth the following goals and policies that regulate the Noise of the City and which have potential relevance to the Project's CEQA review:

- N-I-2 Require that all new residential development achieve interior noise level reductions through sound insulation and other measures to meet the land use compatibility standards by acoustical design and construction of the structure and building elements.
- N-I-3 Establish standards for the basic elements of noise reduction design for a new dwelling unit exposed to DNL above 65 dB, including the following:
    - All façades must be constructed with substantial weight and insulation;
    - Sound-rated windows providing noise reduction performance similar to that of the façade must be included for habitable rooms;
    - Sound-rated doors or storm doors providing noise reduction performance similar to that of the façade must be included for all exterior entries;
    - Acoustic baffling of vents is required for chimneys, fans and gable ends; and
    - Installation of a mechanical ventilation system affording comfort under closed window conditions is required.
- N-I-4 Require sound walls or other attenuation measures designed to reduce noise by a minimum of 10 dB in residential areas adjacent to State highways when additional lanes are added or when new residential development or sensitive receptors would be exposed to noise above 65 dB.
- N-I-5 Reduce noise intrusion generated by miscellaneous noise sources through conditions of approval to control noise-generating activities.
- N-I-6 Require new noise sources to use best available control technology (BACT) to minimize noise emissions.

[47] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter9Noise_000.pdf , Accessed February 13, 2019
[48] Ibid

- N-I-7 Require noise from existing mechanical equipment to be reduced by soundproofing materials and sound-deadening installation.
- N-I-9 Require the disclosure of the noise environment to prospective homebuyers where noise levels exceed "normally acceptable" standards.

3.13.3 Impact Assessment

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. The Project site is situated along North Plano Street between East Henderson and East Grand Avenues and lies within an established noise contour identified in Figure 9-2 of the City's General Plan Noise Element as having noise level greater than 55-60 dB. Noise generated from the Project would generally be from vehicles, air conditioning units, and other equipment. Since the Project site is located within an area of other similar urbanized uses, an established noise contour, and is adjacent to a heavily traveled roadway, it is not expected that the Project would result in significant long term noise increases to surrounding land uses during normal business hours. During construction, the Project may generate intermittent noise from truck deliveries and construction noise which may conflict with existing residential uses immediately north of the Project site. The City General Plan Noise Element sets the standard exterior noise threshold near residences at 60 dBA. However, there is no distinction made between permanent and temporary thresholds.

Construction activities generally involve temporary noise sources. Typical construction equipment includes graders, trenchers, small tractors, cranes and miscellaneous equipment. During construction, noise from construction activities would contribute to the noise environment in the immediate Project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in **Table 3-23**, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g. mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise control. The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources.

Although the noise generated by the type of development proposed by the Project would not substantially add to discernable noise levels due to its location within an existing noise contour, its neighboring commercial land uses, and proximity to a major arterial, implementation of the Mitigation Measures **NO-1–NO**-3 would ensure impacts remain less than significant with mitigation.

Mitigation Measures. The following measures will be implemented during construction.

NOI-1 During the construction period, construction activities and delivery trucks serving the Project will be limited to between 7:00 A.M. and 10:00 P.M. Monday through Friday and between 7:00 A.M. and 5:00 PM on Saturday or Sunday to avoid noise-sensitive hours of the day.

NOI-2 Construction activities will be prohibited on holidays.

NOI-3 The construction contract will require the contractor to ensure that construction equipment noise is minimized by muffling and shielding intakes and exhaust (in accordance with the manufacturer's specifications) and by shrouding or shielding impact tools.

Table 3-23. Typical Construction Noise Levels[49]

Type of Equipment	dBA at 50 ft.	
	Without Feasible Noise Control	With Feasible Noise Control[1]
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

[1] Feasible noise control includes the use of intake mufflers, exhaust mufflers and engine shrouds operating in accordance with manufacturers specifications.

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

Less than Significant Impact. Construction of the Project would involve site preparation and construction activities but would not involve the use of construction equipment that would result in substantial ground borne vibration or noise on properties adjacent to or near the Project site. No pile driving, blasting, or significant grading activities are proposed. In the event that, ground borne vibration may be a result of construction; construction equipment producing such vibrations are exempt from the vibration standard of the Porterville Development Code. Project operation associated with residential uses would not generate substantial ground borne noise and vibration. Therefore, the Project would not result in the exposure of persons to- or generation of excessive ground borne vibration and noise impacts would be less than significant.

c) Would the project result in 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 Porterville Municipal Airport is located 3.75 miles south/southwest of the Project site. There is not a private airstrip within a two-mile radius of the Project. Given the Project's location, implementation would not subject future residents to excessive noise levels related to the airport. Therefore, there would be no impact.

[49] U.S. Department of Transportation, Federal Transit Administration. 2006.

3.14 Population and Housing

Table 3-24. Population and Housing Impacts

Population and Housing					
	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?	☐	☐	☐	☒

3.14.1 Environmental Setting

Tulare County is located in the San Joaquin Valley, the southern portion of California's Central Valley. Tulare County has approximately 466,195 residents.[50] The City has 59,599 residents as of 2019 with an estimated 2.6% increase from 2010 to 2019.

The zoning designation for the Project site is RM-1. As part of this Project, the entire site would be rezoned to PD. The PD zone allows for the density proposed in the Project.

3.14.2 Regulatory Setting

3.14.2.1 Federal

There are no federal regulations, plans, programs, and guidelines associated with population or housing that are applicable to the Project.

3.14.2.2 State

California Housing Element Requirements: Pursuant to Government Code sections 65580 through 65589.11, each city and county must prepare and adopt a housing element in its general plan. The housing element must identify and analyze existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. Unlike other elements of the general plan, housing elements are required to be updated every eight years. State law requires that the housing element:

- *Identify adequate sites to facilitate and encourage the development of a variety of types of housing*
- *for all income levels, and housing for persons with disabilities;*
- *Assist in the development of adequate housing for extremely low, very low, low-, and moderateincome households;*
- *Address and, where appropriate and legally possible, remove governmental and nongovernmental*
- *constraints to the maintenance, improvement, and development of housing;*
- *Conserve and improve the condition of the existing affordable housing stock; and*

[50] United States Census Bureau Quick Facts, Porterville, Tulare County, CA. https://www.census.gov/quickfacts/fact/table/tularecountycalifornia,portervillecitycalifornia,US/PST045219. Accessed August 2021.

- *Promote and affirmatively further fair housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics protected by law.*

3.14.2.3 Local

Tulare County Regional Housing Needs Assessment Plan: State housing law assigns the responsibility for preparing the Regional Housing Needs Assessment (RHNA) for the Tulare County region to the Tulare County Association of Governments (TCAG). TCAG, and other California councils of governments (COGs), undertake the RHNA process prior to each housing element cycle. The Regional Housing Needs Plan (RHNP) describes the methodology developed to allocate the region's housing needs in four income categories (very low, low, moderate, and above moderate) among Tulare County's eight cities and the unincorporated county in accordance with the objectives and factors contained in State law[51].

City of Porterville Housing Element: California Housing Element law requires every jurisdiction to prepare and adopt a housing element as part of a City's General Plan. State Housing Element requirements are framed in the California Government Code, Sections 65580 through 65589, Chapter 1143, Article 10.6. The law requires the State Department of Housing and Community Development (HCD) to administer the law by reviewing housing elements for compliance with State law and by reporting its written findings to the local jurisdiction. Although State law allows local governments to decide when to update their general plans, State Housing Element law mandates that housing elements be updated every eight years. The City's Housing Element was adopted in December of 2015, and contains information on housing needs, land inventory, constraints, and a program of action.[52]

3.14.3 Impact Assessment

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

Less than Significant Impact. The General Plan designation for the Project site is currently Low-Medium Density residential. The Low-Medium Density Residential designation is typically representative of single or multi-family developments and is expressed by the RM-1 zone district. The RM-1 zone allows for a maximum density of 11.3 units per net acre. The Project includes a General Plan Amendment to change the Project site from Low-Medium Density to Medium Density. In addition, the Project will rezone the Project site from the RM-1 zone district to the PD zone district. The Medium Density Residential designation is expressed by the PD zoning district, which has a maximum density of 15 units per net acre. The Project consists of a combination of triplexes and fourplexes, resulting in 46 residential units built on an approximately 3.35-acre site, approximately 145,449 square feet. This would result in the increase of planned housing stock by approximately eight units ultimately assisting Porterville in reaching its housing needs. The Porterville Housing Element estimates that the average household size is 3.39 persons.[53] Applying this rate, the Project would result in approximately 156 people. The existing general plan designation and zone district expressed as Low-Medium Density would allow result in approximately 129 people; therefore, the Project would result in approximately 27 additional persons not previously planned for. The Porterville 2030 General Plan estimated a population buildout of 107,300 persons in 2030.[54] However, the Porterville Housing Element, published in 2015, showed that Porterville is anticipated to increase in population to approximately 74,455 persons in 2030 at an average annual rate of 1.7%.[55] The amount of growth proposed by the Project would increase this rate by approximately 0.0363 percent, which is not considered substantial growth in Porterville or the region, and is consistent with the assumed growth rates in the General Plan. All of the utilities infrastructure, including sewer and water

[51] Final Regional Housing Needs Plan Cycle 6. 2022. https://tularecog.org/sites/tcag/assets/FINAL%20RHNP%20-%20COMBINED.pdf. Accessed April 2023.
[52] City of Porterville Housing Element 2015-2023. 2023. 20151216HousingElementFinal.pdf (revize.com). Accessed April 2023.
[53] Ibid.
[54] Porterville 2030 General Plan. Introduction. 1 (revize.com). Accessed April 2023.
[55] City of Porterville Housing Element 2015-2023. 2023. 20151216HousingElementFinal.pdf (revize.com). Accessed April 2023.

facilities and storm drains, exist in the immediate vicinity of the Project site. The existing utility and service systems have enough capacity to serve the Project (See **Section 3.19)**. The Project would not increase capacity of said infrastructure that could induce additional unplanned population growth. The Project would not induce substantial population growth in an area, either directly or indirectly. Impacts would therefore be less than significant.

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

No Impact. Currently, no housing is present on the Project site. Therefore, housing displacement would not occur as a result of implementation. The Project would not displace housing and no mitigation is required. There would be no impacts.

3.15 Public Services

Table 3-25. Public Services Impacts

Public Services				
Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

3.15.1 Environmental Setting

The Project site is located in an area that is already served by public service systems by the City. Police protection services are provided to the City by the Porterville Police Department. Fire protection and emergency response services for the Project site are provided by the City Fire Department. Four school districts serve the Porterville area, including Porterville Unified School District, Burton Elementary School District, Alta Vista School District, and Tulare County Office of Education. In addition, the City provides several types of parks and other public facilities.

Fire Protection: The City's Fire Department provides fire and life safety services for residents located within the city limits while the Tulare County Fire Department provides additional services for unincorporated areas within the planning area. In order to meet the service demand of a greater population four fire stations have been proposed in by the General Plan. The closest fire department is the Porterville Fire Department, located approximately 0.8 miles south/southwest of the Project site.

Police Protection: Law enforcement services in Porterville are provided by the City Police Department. The Department currently has 57 sworn officers and 22 civilian staff members. According to the 2030 Porterville General Plan, the Police Department was operating at 1.3 officers per 1,000 residents ratio. The nearest police department is the Porterville Police Department, which is approximately 0.7 miles south/southwest of the Project site.

Schools: Four school districts are within the Porterville area, including Porterville Unified School District, Burton Elementary School District, Alta Vista School District, and Tulare County Office of Education. They

operate 28 schools, serving approximately 23,101 students in the Porterville area.[56] The nearest school is the Roche Elementary School approximately 0.29 miles south of the Project area. The school is an elementary school serving students in the area First to Sixth grade levels.

Parks: The City provides several types of parks and recreation facilities. Parks in Porterville are defined as land owned or leased by the City and used for public recreational purposes. Several parks also serve as water detention basins. Park types are classified as: Pocket Park; Neighborhood Park; Community Park; Specialized Recreation; and Trail/Parkways. Currently, Porterville has 15 parks for a total of approximately 295-acres of parkland, plus other community facilities. The 295 acres of parks consists of pocket parks, neighborhood parks, community parks, specialized recreation parks, and trail/parkways[57]. Theses parks range from the 0.1-acre North Park pocket park to the 95-acres Sports Complex. With a population of 59,145[58], the City has an approximate 5 acres of parkland per 1,000 residents ratio. The park ratio is based on Neighborhood Parks, Community Parks, and Specialized Recreation areas only. Trails, Community Facilities, and Pocket Parks do not contribute to the ratio. The nearest park, Murray Park, is approximately 1.7 miles southeast of the Project. The second nearest park, Zalud Park, is approximately one mile west of the Project.

Landfills: Disposal services are provided by the Tulare County Consolidated Waste Management Authority (CWMA). Porterville's solid waste is currently disposed at Teapot Dome Landfill. Teapot Dome Landfill is located 3.2 miles south/southwest of the Project. As of 2004, the landfill was at 84.7 percent capacity and an anticipated closure date of 2012.[59] Tulare County has indicated that they will not expand Teapot Dome Landfill. When it reaches capacity, the County anticipates setting up a transfer facility which would divert water to either the Woodville or Visalia Landfills. Both of which are below 50 percent capacity.

3.15.2 Regulatory Setting

3.15.2.1 Federal

There are no federal laws or regulations that apply to the Project.

3.15.2.2 State

California Building Code: The CCR Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. The CBC incorporates by reference the International Building Code with necessary California amendments. The International Building Code is a widely adopted model building code in the United States published by the International Code Council.

3.15.2.3 Local

2030 City of Porterville General Plan[60]: The City General Plan sets forth the following goals and policies of Public Health and Safety, Parks, Schools, and Community Facilities, and Public Utilities which have potential relevance to the Project's CEQA review:

- PHS-I-13 Maintain automatic and/or mutual aid agreements with surrounding jurisdictions for fire protection.
- PHS-I-28 Ensure that new development incorporates safety concerns into the site, circulation, building design and landscaping plans.
- PSCF-I-3 Amend the Subdivision Ordinance to require that residential developers provide a minimum of five acres of neighborhood and community parks per 1,000 residents or pay in lieu fees.

[56] California Department of Education 2019, District Enrollment 17-18. https://dq.cde.ca.gov/dataquest/ , Accessed February 13, 2019.
57 City of Porterville General Plan Parks, Schools & Community Facilities Element. http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm , Accessed February 13, 2019.
58 Porterville Census information https://www.census.gov/quickfacts/portervillecitycalifornia , Accessed February 13, 2019.
[59] Ibid
[60] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm , Accessed February 13, 2019.

- PU-I-20 Adopt programs to promote waste reduction and recycling and expand recycling programs in multi-family residential and commercial development.

3.15.3 Impact Assessment

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:

Less than Significant Impact. The Project would not require the addition or alteration of any public services. The site is within the eastern portion of Porterville and would utilize existing services provided by the City. There would be no impact.

Fire Protection – The Project would have 155 people at 100 percent occupancy. The closest department is the Porterville Fire Department, located approximately 0.8 miles south/southwest of the Project site. The City has forecasted future growth and has planned to develop four fire stations to handle the demand. In addition, the project applicant is required to submit plans to the City Fire Department for review and approval prior to the issuance of building permits to ensure the Project would conform to applicable building codes. The impacts to public fire services would be less than significant.

Police Protection – The Project site would continue to be served by the City Police Department. Implementation of the Project would result in an increase in demand for police services. This increase would be minimal compared to the number of officers currently employed by the Tulare Police Department and would not result in significant demand for additional police services or additional staffing. Implementation of the Project would not require the construction of a new police facility to serve the Project, nor would it create a negative impact to existing emergency response times and existing police protection service levels. Impacts to police services would be less than significant.

Schools –The Project is located within the Porterville Unified School District. The Project is approximately 0.29 miles north of Roche Elementary School. It is estimated that the Project would include 46 units. Based on 2005 school district generation rates 46 units would result in approximately 18.4 elementary school students, 4.6 middle school students, and 9.2 high school students. Under Senate Bill 50 – School Facilities Act of 1998 a Project's impacts on school facilities are fully mitigated via the payment of the requisite new school construction fees established pursuant to GC Section 65995. Payment of applicable impact fees by the developer, and ongoing revenue that would come from local taxes would ensure that this Project pays its share of impacts to local schools services. Therefore, any impact is less than significant.

Parks and other public facilities –The nearest park to the Project site is Murray Park, located approximately 1.7 miles southeast of the Project site. To ensure sufficient recreational opportunities, the City has established a Park Impact Fee, implemented by Chapter 19, Article III, of the Municipal Code. The Municipal Code states that parks must be constructed or expanded commensurate with growth of the City. The City Council determined that a park impact fee is required to assist in the financing of these public park improvements and to pay for new development's fair share of the acquisition and development costs of these improvements.[61] The Project would be required to comply with Article III of the municipal code as a condition of approval.

Landfill: All solid waste would be transported by the CWMA. The nearest landfill is the Teapot Dome Landfill, however, if the landfill is already at capacity, the County has indicated that they would transport waste to either

[61] Porterville Municipal Code. https://www.sterlingcodifiers.com/codebook/index.php?book_id=679 , Accessed February 13, 2019.

Woodville or Visalia Landfills. Both of which are below 50 percent capacity. The impacts would be less than significant.

3.16 Recreation

Table 3-26. Recreation Impacts

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

3.16.1 Environmental Setting

The City provides several types of parks and facilities, as defined in the Porterville 2030 General Plan. In general, parks are defined by the general plan as land owned or leased by the City and used for public recreational purposes. The Porterville 2030 General Plan outlines several types of park facilities ranging in size from 0.1 acre pocket parks up to a 95 acres Sports Complex. Each park will fall into one of five categories: Pocket Park, Neighborhood Park, Community Park, Specialized Recreation, and Trails/Parkways.

In total, the City provides 15 parks for a total of approximately 295-acres of parkland, plus other community facilities. As of 2006, the City was home to 45,220 residents and claimed a ratio of 5.1 acres of parkland per 1,000 residents, utilizing only the Neighborhood Parks, Community Parks and Specialized Recreation categories in that calculation.

The nearest park to the Project is Murray Park, located approximately 1.7 miles southeast of the Project site.

The General Plan Parks, Schools, and Community Facilities Element establishes the City's standard for community parks and specialized park facilities as 5.0 acres per 1,000 residents and 10.0 acres per 1,000 residents respectively. Within this element, the City outlines Guiding Policy PSCF-G-3 and several implementation measures which seek to ensure that the City is able to meet and maintain this standard by generating adequate funding for park and recreation facilities. In order to meet this objective, the City's Zoning Ordinance establishes a park impact fee program in which the city council sets forth appropriate fees for new development based on a reasonable relationship between the type of new development in question and the fee amount.

3.16.2 Regulatory Setting

3.16.2.1 Federal and State

There are no federal and State laws or regulations that apply to the Project.

3.16.2.2 Local

2030 City of Porterville General Plan[62]: The City General Plan sets forth the following goals and policies of Public Health and Safety which have potential relevance to the Project's CEQA review:

- PSCF-I-3 Amend the Subdivision Ordinance to require that residential developers provide a minimum of five acres of neighborhood and community parks per 1,000 residents or pay in lieu fees.

3.16.3 Impact Assessment

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? And;

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?

Less than Significant Impact. The Project would be subject to all rules and regulations outlined for new development through the Municipal Code, including compliance with the Park Impact Fee. In addition, the proposed subdivision would include a connection to the frontage of N. Grand Avenue, ultimately providing connection to the Rails to Trails active transportation trail located approximately 450 feet due west of the Project site. As a result, it is reasonable to assume that any increase in the use of existing neighborhood or regional parks or other recreational facilities due to the development of the Project would be mitigated through compliance with the Municipal Code. Any impacts would be less than significant.

[62] 2030 City of Porterville General Plan Parks, Schools, & Community Facilities Element
http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm Accessed February 13, 2019

3.17 Transportation

Table 3-27. Transportation/Traffic Impacts

Transportation/Traffic					
	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)	Would the project 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?	☐	☐	☐	☒

3.17.1 Environmental Setting

The City is served by State Routes 65 and 190 as well as a network of arterial collector and local streets. Public transit is provided by Porterville Transit and Tulare County Area Transit. Porterville Transit consists of nine fixed-routes that run Monday through Friday from 6:00 a.m. to 11:00 p.m., Saturday from 8:00 a.m. to 11:00 p.m., Sunday from 8:00 a.m. to 6:00 p.m., and a demand-response "Dial-A-Ride" service called Porterville City Operated Local Transit. The frequency between buses is approximately every 40 minutes. The Porterville Transit Center is located on D Street at Oak Avenue and serves as the transfer node for each of the nine bus routes. Tulare County Area Transit provides regional bus service from the City to surrounding communities via eight routes seven days a week.[63]

According to the General Plan, the City is in the process of developing a Class I Tule River Parkway bicycle and pedestrian path. The first two phases of the Tule River Parkway between Main Street and SR 65 are complete. In addition, the 2002 Tulare County Association of Governments Bicycle Transportation Plan identifies 110.5 miles of existing and proposed bikeways in the Porterville area, including 10 miles of the Class I Tule River Parkway from Road 224 to Success Lake. The pedestrian circulation in Porterville is mainly comprised of sidewalks. Currently, the street environment is mostly auto-oriented with roadways and discontinuous sidewalks. The City's General Plan states that all streets should be designed to accommodate pedestrians and bicyclists and new neighborhoods should be designed to be "pedestrian friendly", with wide sidewalks.

Currently, the street to the north is a two-way road (E. Grand Avenue) with a sidewalk only on the north side of the street. Adjacent (north) to the Project site does not have a sidewalk. To the east is a four-way street (N. Plano Street) and has sidewalks on each side of the street. No bus or transit stops are located in the immediate vicinity of the Project.

[63] Porterville General Plan Circulation Element. http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter4Circulation_000.pdf , Accessed February 19-2019

3.17.2 Regulatory Setting

3.17.2.1 Federal

There are no federal laws or regulations that apply to the Project.

3.17.2.2 State

Department of Transportation Concept Reports: Each District of Caltrans prepares a Transportation Concept Report (TCR) for every State highway or portion thereof in its jurisdiction. The TCR usually represents the first step in Caltrans' long-range corridor planning process. The purpose of the TCR is to determine how a highway will be developed and managed so that it delivers the targeted level of service (LOS) and quality of operations that are feasible to attain over a 20-year period, otherwise known as the "route concept" or beyond 20 years, for what is known as the "ultimate concept".

Senate Bill 743 (SB743) Transportation Impacts. Governor Brown signed SB 743 (Steinberg, 2013), which creates a process to change the way that transportation impacts are analyzed under CEQA. Specifically, SB 743 requires the OPR to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Particularly within areas served by transit, those alternative criteria must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." (PRC Section 21099(b)(1).) Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated." (Ibid.) Once the CEQA Guidelines are amended to include those alternative criteria, auto delay will no longer be considered a significant impact under CEQA. (Id. at subd. (b)(2).) Transportation impacts related to air quality, noise and safety must still be analyzed under CEQA where appropriate. (Id. at subd. (b)(3).) SB 743 also amended congestion management law to allow cities and counties to opt out of LOS standards within certain infill areas. (See GC Sections 65088.1 and 65088.4.)

3.17.2.3 Local

2030 City of Porterville General Plan[64]: The City General Plan sets forth the following goals and policies of Circulation Element which have potential relevance to the Project's CEQA review:

- C-I-2 Require all new developments to provide right-of-way and improvements consistent with the General Plan street designations and City street section standards.
- C-I-3 Provide for greater street connectivity by:
    - Incorporating in subdivision regulations requirements for a minimum number of access points to existing local or collector streets for each development;
    - Encouraging roundabouts over signals, where feasible and appropriate;
    - Requiring the bicycle and pedestrian connections from cul-de-sacs to nearby public areas and main streets; and
    - Requiring new residential communities on undeveloped land planned for urban uses to provide stubs for future connections to the edge of the property line. Where stubs exist on adjacent properties, new streets within the development should connect to these stubs.
- C-I-10 Require traffic impact studies for all General Plan amendments that will generate more than 100 peak hour trips.
- C-I-12 Continue to require that new development pay a fair share of the costs of street and other traffic and local transportation improvements based on traffic generated and impacts on traffic service levels.
- C-I-13 Use city-wide traffic impact fees to provide additional funding for transportation improvements needed to serve new development.

[64] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm Accessed February 13, 2019

- C-I-14 Require new development that will have an impact on regional transportation facilities to pay a regional transportation impact fee.
- C-I-16 Ensure that new development is designed to make transit a viable choice for residents. Design options include:
    - Have neighborhood focal points with sheltered bus stops;
    - Locate medium-high density development whenever feasible near streets served by transit; and
    - Link neighborhoods to bus stops by continuous sidewalks or pedestrian paths.
- C-I-21 Develop a series of continuous walkways within new office parks, commercial districts, and residential neighborhoods so they connect to one another.
- C-I-27 Amend the City's Parking Design Standards to promote multiple benefits, including shared parking for mixed-use projects, passive solar on parking structures to generate energy for parking lot lighting, and pervious parking paving to improve groundwater recharge.

County of Tulare SB 743 Guidelines[65]: This report provides Tulare County's Vehicle Miles Traveled Guidelines (VMT Guidelines or Guidelines) for the implementation of SB 743 in the unincorporated area of Tulare County. SB 743 was passed by the legislature and signed into law in the fall of 2013. This legislation led to a change in the way that transportation impacts will be measured under the CEQA. Starting on July 1, 2020, automobile delay and LOS may no longer be used as the performance measure to determine the transportation impacts of land development projects under CEQA and the new performance measure will be VMT. Although statewide guidance for the implementation of SB 743 has been written by the OPR, CEQA allows lead agencies, including Tulare County, the latitude to determine their own methodologies and significance thresholds for CEQA technical studies. The SB 743 Guidelines provided in this report are based on the statewide guidance provided by OPR, but they include clarifications and details tailored for and specific to local conditions in Tulare County.

SB 743 applies to both land development and transportation projects. The VMT analysis methodology for land development projects was developed in order to accomplish the following:

- Meet the requirements of CEQA, including the new SB 743 regulations that were adopted into CEQA in December 2018 and go into effect on July 1, 2020.
- Provide for transportation improvements to be built that benefit Tulare County residents and facilitate travel by walking, bicycling, and transit.
- Provide for analysis and mitigation of VMT impacts in a way that is feasible and within the scale of land development projects in Tulare County.

VMT analysis for land development projects is to be conducted by comparing a project's VMT/capita or VMT/employee to the average VMT/capita or VMT/employee for the traffic analysis zone (TAZ) in which the project is located. Projects that have a VMT/capita or VMT/employee equal to or above the average for the TAZ are required to provide mitigation in the form of relatively low-cost improvement projects that would support travel by bicycling or walking or provide justification that improvements at the regional level are sufficient to mitigate their VMT impacts. Certain projects such as small projects and local-serving retail projects would be presumed to have a less than significant impact and would not be required to do a VMT analysis. It is important to note that goods movement (e.g., the transport of raw or finished products from one location to another, for example, transfer of milk to an ice cream producing plant and then the transfer of ice cream to a distributor or directly to a retailer) is not subject to SB 743 and only passenger trips need to be considered in a VMT analysis.

Transportation projects that are focused on improvements to travel by bicycling, walking, and transit would be presumed to have a less than significant impact (as these modes of travel eliminate or reduce miles travelled by a vehicle) and would not be required to do a VMT analysis. Certain small roadway projects and all roadway projects that are consistent with the General Plan would be presumed to have a less than significant impact (as

[65] County of Tulare SB 743 Guidelines. Microsoft Word - Tulare County Draft SB 743 Guidelines 6-8-20.docx. Accessed April 6, 2023

these projects have been anticipated to accommodate projected growth and/or are planned improvements to the roadway system for safety, to meet current roadway standards, or to improve roads that are functionally obsolete). Larger roadway projects that are inconsistent with the General Plan would need to conduct a VMT analysis and would need to consider providing mitigation if the project is forecasted to cause an increase in VMT.

3.17.3 Impact Assessment

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

No Impact. The Project intends to construct up to 46 multi-family residences. Project components include interior access roads, street lighting and landscaping. Vehicle access to the Project site would be from one entrance/exit access road on Grand Avenue. The City expects the roadways in the area of the Project to maintain acceptable LOS thresholds. Street improvements on Grand Avenue would comply with City standards. There would be no impact.

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

Less than Significant Impact. CEQA Guidelines section 15064.3 describes specific considerations for evaluating a Project's transportation impacts and establishes VMT as the most appropriate method to determine those impacts. For the purposes of this analysis, VMTs associated with a land use project which exceed an established threshold of significance may indicate a significant impact. The City has adopted the County of Tulare SB743 Guidelines as the threshold for VMT impacts within the City. The County of Tulare guidelines state that projects with average daily trips (ADT) of 500 or less are considered less than significant. According to the trip generation rates from the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition, the Project would generate approximately 309 ADT, which is below the threshold of 500. Therefore, the trips generated from this Project would be considered a less than significant impact.

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 would consist of up to 46 medium density residential units and interior access roads and parking associated with those units. No sharp curves or other roadway features are proposed as a part of this Project. The internal road would be built pursuant to City design standards. Access to the Project site would be provided by E. Grand Avenue. Access to the site would be developed to comply with City standards and the City Engineer. Furthermore, the Project proposal would be required to submit plans to the City Fire Department for review and approval prior to the issuance of building permits to ensure there are no substantial hazards associated with the design of the Project. The impacts would be less than significant.

d) Would the project result in inadequate emergency access?

No Impact. Emergency access would be provided to the Project site by the new internal access roads, of which the entrance is located on E. Grand Avenue. Further, the Project's site plan would be subject to review and approval by the Porterville Fire Department to ensure the Project includes adequate emergency access. The Project would also not interfere with the Porterville Emergency Operation Plan. There would be no impact.

3.18 Tribal Cultural Resources

Table 3-28. Tribal Cultural Resources Impacts

Tribal Cultural Resources				
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 a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

3.18.1 Environmental Setting

The City has a long rich history of human habitation, including Indian tribes such as the Koyete Indian sub-tribe and the Yokuts. Archeological evidence of pre-historic cultures has been documented within the planning area. The City General Plan references research completed by the Southern San Joaquin Valley Archaeological Information Center at California State University, Bakersfield, which identifies 45 archaeological sites within the Porterville Planning Area. While human settlements have been documented in Porterville near Murray Hill north of Porter Slough as well as the Rocky Hill area, there are no archaeological sites within the City currently listed on the National Register of Historic Places.

Paleontological resources can be classified as the fossilized remains of pre-historic plant and animal life, exclusive of human remains or artifacts. The University of California Museum of Paleontology lists 25 locations within Tulare County, where fossils have been found. Identified fossil types include prehistoric mammals and vertebrates, invertebrates, and plants, however mapping of these locations has not been completed.

In 1986, the City conducted a comprehensive inventory of sites and districts with potential historic significance. The final evaluation process produced an inventory of 75 sites that may have eligibility for National Register designation. However, these properties are not currently listed on the National Register. According to the Southern San Joaquin Valley Archeological Information Center, many more properties have potential to also be listed in the national and state registries if they were formally evaluated or re-evaluated. In total, the Porterville Planning Area contains four National Register Sites and two California Historic Landmarks.

3.18.2 Native American Outreach

In August of 2019, Provost & Pritchard contacted the NAHC) in Sacramento. Provost & Pritchard provided NAHC a brief description of the project and a map showing its location and requested that the NAHC perform a search of the Sacred Lands File to determine if any Native American resources have been recorded in the immediate study area. The results were negative. Provost & Pritchard also requested NAHC provide a current list of local Native American contacts for the Project area. The 3 tribes identified by NAHC were contacted in writing via US mail with a letter dated August 13, 2019, informing them about the Project.

3.18.3 Regulatory Setting

3.18.3.1 Federal

American Indian Religious Freedom Act The American Indian Religious Freedom Act, a federal law and joint resolution of Congress was created to protect and preserve the traditional religious rights and cultural practices of American Indians, Eskimos, Aleuts and Native Hawaiians. These rights include, but are not limited to, access of sacred sites, repatriation of sacred objects held in museums, freedom to worship through ceremonial and traditional rites, including within prisons, and use and possession of objects considered sacred.

Native American Graves Protection and Repatriation Act The Native American Graves Protection and Repatriation Act requires federal agencies and institutions that receive federal funding to return Native American cultural items to lineal descendants and culturally affiliated Indian tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony.

3.18.4 Impact Assessment

a) Will the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code (PRC) 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 PRC Section 21074 states:

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

a-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, the lead agency shall consider the significance of the resource to a California Native American tribe.

a-i – a-ii) Less than Significant Impact with Mitigation Incorporated The City received a letter from the Santa Rosa Rancheria Tachi Yokut Tribe, The Tule River Indian Tribe and the Wukasache Indian Tribe pursuant to PRC Section 21080.3.1 officially requesting notification of Projects within the Santa Rosa Rancheria's geographic area of traditional and cultural affiliation. Pursuant to SB 18, Native American tribes traditionally and culturally affiliated with the project area (Santa Rosa Rancheria Tachi Yokut Tribe, the Tule River Indian Tribe and the Wuksache Indian Tribe) were invited to consult regarding the project based on a list of contacts provided by the NAHC. The City mailed notices of the proposed project to each of these tribes on August 13, 2019 which included the required 90-day time period for tribes to request consultation, which ended on November 13, 2019.

In addition, and pursuant to AB 52, the Santa Rosa Rancheria Tachi Yokut Tribe, the Tule River Indian Tribe and the Wuksache Indian Tribe were invited to consult under AB 52. The City mailed notices of the proposed

project to each of these tribes on August 13, 2019, which included the required 30-day time period for tribes to request consultation, which ended on September 13, 2019.

No request for consultation was made for the Project. Less than significant impacts to Tribal Resources are expected. **Mitigation Measures CUL-1** and **CUL-2**, described above in **Section 3.6 Cultural Resources**, are recommended in the event cultural materials or human remains are unearthed during excavation or construction.

3.19 Utilities and Service Systems

Table 3-29. Utilities and Service Systems Impacts

Utilities and Service Systems					
	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?	☐	☐	☒	☐
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 reductions goals?	☐	☐	☐	☒
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

3.19.1 Environmental Setting

The Project site is vacant land in an urban setting. There are currently no utilities servicing the site. As described in the Project Description, utilities required to serve the Project would include water, sanitary sewer, storm drainage, electricity, natural gas, and telecommunications infrastructure. Water service, sewage disposal and refuse collection would be provided by the City. Include sewer specs and location. The Project site would be graded where on-site drainage would flow into the existing stormwater drainage facilities.

3.19.1.1 Water Supply

The City's municipal wells are generally scattered west of Plano Avenue and south of Westfield Avenue and the distribution system is operated under pressure. The City receives all of its municipal water from groundwater.[66] According to the City 2020 UWMP, water demands within the City's service area are primarily residential, commercial, industrial, institutional, and landscape irrigation.[67] The City's water connections are primarily metered.

[66] City of Porterville – Hydraulic Analysis, page 1. Dee Jaspar & Associates, Inc. (May 2015).

[67] City of Porterville 2020 Urban Water Management Plan. April 2022. 2020 Urban Water Management Plant (revize.com). Accessed April 11, 2023.

3.19.1.2 Wastewater

The City owns and operates a secondary level treatment wastewater treatment plant, which provides all the City's wastewater. The City's sewer collection system consists of approximately 150 miles of six inch through 36-inch diameter sewers. The majority of the trunk lines are 12-inch pipes. The system includes 18 sewage lift stations and associated force mains.[68]

3.19.1.3 Stormwater

The City's storm drainage system consists of two natural channels, six irrigation ditches, eight major storage reservoirs, and fourteen detention/retention basins with approximately 550-AF of storage within the City limits.[69] This does not include smaller retention/detention basins constructed along with or in subdivisions.

3.19.1.4 Landfill

Disposal services are provided by the Tulare County CWMA. Porterville's solid waste is currently disposed at Teapot Dome Landfill. Teapot Dome Landfill is located 3.2 miles south/southwest of the Project. As of 2004, the landfill was at 84.7 percent capacity and had an anticipated closure date of 2012.[70]. Tulare County has indicated that they will not expand Teapot Dome Landfill. When it reaches capacity, the County anticipates setting up a transfer facility which would divert waste to either the Woodville or Visalia Landfills, both of which are below 50 percent capacity.

3.19.1.5 Electricity, Natural Gas, and Telecommunications

Southern California Edison provides electric service to Porterville residents. The electrical facilities network includes both overhead and underground lines, with new development required to install underground service lines. Natural gas service is primarily provided by the Southern California Gas Company. There are three major companies that provide communications services in Porterville: AT&T, Sprint, and Verizon. Charter Communications is the primary cable television and internet provider.[71]

3.19.2 **Regulatory Setting**

3.19.2.1 Federal

Clean Water Act: The CWA is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 CFR 1251). The regulations implementing the CWA protect waters of the U.S. including streams and wetlands (33 CFR 328.3). The CWA requires states to set standards to protect, maintain, and restore water quality by regulating point source and some non-point source discharges. Under Section 402 of the CWA, the NPDES permit process was established to regulate these discharges.

3.19.2.1.1 National Pollutant Discharge Elimination System.

The NPDES program, Section 402 of the CWA, controls direct discharges into navigable waters. Direct discharges or "point source" discharges are from sources such as pipes and sewers. NPDES permits, issued by either EPA or an authorized state/tribe, contain industry-specific, technology-based and/or water-quality-based limits, and establish pollutant monitoring and reporting requirements USEPA has authorized 40 states to administer the NPDES program). A facility that intends to discharge into the nation's waters must obtain a permit before initiating a discharge. A permit applicant must provide quantitative analytical data identifying the types of pollutants present in the facility's effluent and the permit will then set forth the conditions and effluent

[68] 2030 Porterville General Plan Public Utilities Element, http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter8PublicUtilities_000.pdf , Accessed February 20, 2019
[69] 2006 City of Porterville Storm Water Management Plan http://www.ci.porterville.ca.us/depts/CommunityDevelopment/documents/Apx5_5b_StormWaterManagementProgram_001.pdf . Accessed February 20, 2019
[70] Ibid
[71] 2006 City of Porterville Storm Water Management Plan http://www.ci.porterville.ca.us/depts/CommunityDevelopment/documents/Apx5_5b_StormWaterManagementProgram_001.pdf . Accessed February 20, 2019

limitations under which a facility may make a discharge. Implementation will be managed by the State Water Resource Control Board and Regional Water Quality Control Boards.

3.19.2.2 State

3.19.2.2.1 California Department of Resources Recycling and Recovery

CalRecycle was created January 1, 2010, through legislation merging the programs of the former California Integrated Waste Management Board and the beverage container recycling program that was previously managed by the DOC. It is a department within CalEPA. CalRecycle administers and provides oversight for all of California's state-managed waste handling and recycling programs. Known mostly for overseeing beverage container and electronic-waste recycling, CalRecycle is also responsible for organics management, used tires, used motor oil, carpet, paint, mattresses, rigid plastic containers, newsprint, construction and demolition debris, medical sharps waste, household hazardous waste, and food-scrap composting.

CalRecycle provides training and ongoing support for Local Enforcement Agencies, which regulate and inspect California's active and closed solid waste landfills, as well as materials recovery facilities, solid waste transfer stations, compost facilities, and more. The permitting and inspection processes help CalRecycle fulfill its mission to protect the health and safety of Californians and the environment.

In 2012, legislation established a goal for California to source reduce, recycle, or compost 75 percent of its waste statewide by the year 2020. And beginning in July 2012, it also put in place required mandatory recycling for most California commercial businesses and multi-family residential buildings with five or more units. More recent laws enacted are designed to increase commercial organics recycling and curtail reliance on single-use plastic bags.

California has some of the nation's most successful recycling and product-reuse programs, and as defined within the state's Integrated Waste Management Act of 1989 (IWMA), diverted an estimated 65 percent of its solid waste from landfills in 2013. With respect to the state's goal of recycling 75 percent of its waste by 2020, CalRecycle uses a recycling-rate calculation that removes from the equation certain materials and activities currently counted as "diversion," which includes green waste used as alternative daily cover at landfills and solid waste used as fuel. Using that calculation, the recycling rate for 2013 was 50 percent, well above the U.S. EPA-calculated national recycling rate of 34.5 percent.

The Waste Permitting, Compliance, and Mitigation (WPCM) Division is responsible for the CalRecycle's solid waste, waste tire, recycled content product and local government regulatory mandates and activities. This division ensures that:

- Solid waste and waste tire processing and disposal site permits are processed and issued as required.
- Waste tire haulers are registered as required.
- Solid waste landfills maintain the appropriate level of financial assurances.
- Solid waste disposal sites are properly closed and maintained.
- Solid waste management and waste tire facilities and operations are inspected, and noncompliant facilities and operations are under enforcement actions, and penalized as appropriate.
- Local governments not making a good faith effort to implement their unique waste diversion programs are evaluated and placed on compliance orders, and penalized as appropriate.
- Minimum recycled content in products (rigid plastic packaging containers (RPPC), plastic trash bags, and newsprint), and producer responsibility programs (paint and carpet) are certified in compliance, or penalized as appropriate.
- All hazards created by the illegal or inappropriate disposal of solid waste or tires are mitigated to protect the public health and safety.

- Local enforcement agencies are properly trained, certified, designated, and evaluated, and if warranted, placed on work plans or decertified as appropriate.

3.19.2.2.2 State Water Resources Control Board's Waste Discharge Requirement (WDR) Program:

In general, the Waste Discharge Requirements (WDRs) Program ("Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.The Project would be discharging Sewage and Wastewater. The following exemptions may apply for:

Sewage: Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives; treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludge or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable provisions of the CWC.

Wastewater: Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields if the following conditions are met:

(1) the applicable Regional Water Board has issued WDRs, water recycling requirements, or waived the issuance;
(2) the discharge is in compliance with the applicable water quality control plan; and
(3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

3.19.2.2.3 Assembly Bill 2882:

AB 2882 relates to water conservation programs and authorizes any public entity that supplies water at retail or wholesale for the benefit of persons within the service area or area of jurisdiction of the public entity to adopt and enforce, by ordinance or resolution, a water conservation program to reduce the quantity of water used by those persons for the purpose of conserving the water supplies of the public entity.

This bill authorizes a public entity to adopt allocation-based conservation water pricing meeting certain requirements. The bill would require that revenues derived from allocation-based conservation water pricing not exceed the reasonable cost of water service, including basic costs and incremental costs, as defined.

3.19.2.3 Local

2030 City of Porterville General Plan[72]: The City General Plan sets forth the following goals and policies of Public Health and Safety which have potential relevance to the Project's CEQA review:

- PU-G-1 Ensure an adequate supply of fresh water to serve existing and future needs of the City.
- PU-I-3 Periodically review and update development impact fees, water connection charges, and monthly service charges to ensure that adequate funds are collected to operate and maintain existing facilities and to construct new facilities.
- PU-I-3 Support efforts to expand surface water supply and storage that benefits the City.

[72] 2030 City of Porterville 2030 General Plan, Chapter 8 Public Utilities http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm Accessed February 13, 2019

- PU-I-5 Require that necessary water supply infrastructure and storage facilities are in place coincident with new development and approve development plans only when a dependable and adequate water supply to serve the development is assured.
- PU-I-7 Continue to require water meters in all new development.
- PU-I-16 Periodically review and update development impact fees, wastewater connection charges, and monthly service charges to ensure that adequate funds are collected to operate and maintain existing facilities and to construct new facilities.
- PU-I-19 Require new development to provide storm drainage facilities and/or pay a storm drainage impact fee, consistent with the Storm Drain Master Plan.
- PU-I-20 Adopt programs to promote waste reduction and recycling and expand recycling programs in multi-family residential and commercial development.
- PU-I-28 Continue to require that new development install underground all on-site utility lines.

3.19.3 Impact Assessment

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 would require the extension of existing utility services into the project area. The Project would tie into the City's water system, sewer system, and stormwater system. It is not anticipated that the Project would result in the relocation or construction of new or expanded wastewater treatment facilities, power plants, natural gas extraction facilities or telecommunication facilities. In the event that any of these facilities become required, they would be required to serve more than just the proposed project and would be subject to separate environmental review and approval. Impacts would be less than significant.

b) 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. Currently, the Project site is vacant and does not consume any water. With implementation of the Project, the Project is anticipated to consume an additional 10.19 MG per year. To determine whether the increase in water demand would be significant, the estimated demand was compared to the estimated supply through 2040. **Table 3-30** illustrates that the Project would not result in a deficit water suppy or exacerbate an existing or planned water demand. Table 3-30. Review of Project Water Demand Impacts through 2040 (MG).

Review of Project Water Demand Impacts through 2040 (MG)				
	2025	2030	2035	2040
Planned Supply	8,542	8,834	9,166	9,539
Planned Demand	5,731	6,497	7,337	8,322
plus Project	10.19	10.19	10.19	10.19
Total Demand	5,741	6,507	7,347	8,332
Surplus/(Deficit)	+2,801	+2,327	+1,819	+1,207
Significant Impact?	No	No	No	No
Source: Table 7.2 of the City of Porterville 2020 Urban Water Management Plan				

It is expected that the City would encounter dry years and, in worst case, multiple dry years. **Table 3-31** below is an analysis of the City's water supply, and its surpluses, with or without the Project. As depicted in **Table 3-31**, the Project would not cause a water supply deficiency during multiple dry years.

Table 3-31. Review of Project Water Demand Impacts during Drought Conditions through 2040 (MG)

Review of Project Water Demand Impacts during Drought Conditions through 2040 (MG)					
		2025	2030	2035	2040
First Year	Existing Surplus	4,113	3,873	3,610	3,316
	plus Project	(10.19)	(10.19)	(10.19)	(10.19)
	Surplus/(Deficit)	4,103	3,863	3,600	3,306
Second Year	Existing Surplus	3,285	2,952	2,582	2,168
	plus Project	(10.19)	(10.19)	(10.19)	(10.19)
	Surplus/(Deficit)	3,275	2,942	2,572	2,158
Third Year	Existing Surplus	3,090	2,734	2,340	1,898
	plus Project	(10.19)	(10.19)	(10.19)	(10.19)
	Surplus/(Deficit)	3,080	2,724	2,330	1,888
Fourth Year	Existing Surplus	2,873	2,498	2,081	1,613
	plus Project	(10.19)	(10.19)	(10.19)	(10.19)
	Surplus/(Deficit)	2,863	2,488	2,071	1,603
Fifth Year	Existing Surplus	3,724	3,451	3,148	2,809
	plus Project	(10.19)	(10.19)	(10.19)	(10.19)
	Surplus/(Deficit)	3,714	3,441	3,138	2,799
Significant Impact?		No	No	No	No

Source: Table 7.4 of the City of Porterville 2020 Urban Water Management Plan

Therefore, the City has sufficient water supplies available to serve the Project and its existing commitments during normal, dry, and multiple dry years. Impacts would be less than significant.

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?

Less than Significant Impact. As discussed in Section a, implementation of the Project would result in the need for additional wastewater treatment service. However, as acknowledged in the General Plan, the City will begin planning for additional wastewater treatment facility (WWTF) capacity to accommodate growth and development allowed under the General Plan when the influent flow reaches 6.4 mgd. In addition, the project applicant would be required to comply with any applicable City and WWTF regulations and would be subject to applicable development impact fees and wastewater connection charges. Therefore, with compliance to applicable standards and payment of required fees and connection charges, the Project would not result in a less than significant impact related to construction or expansion of existing wastewater treatment facilities.

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?

No Impact. Disposal services within the City are provided by the City. The Teapot Dome Landfill is approximately 3.2 miles from the Project site. As of 2004 the Teapot Dome Landfill may be at or near its capacity. When capacity is reached, either the Woodville or Visalia Landfills. Both of which are below 50 percent capacity.

According to the Porterville General Plan, solid waste generation rates are approximately 2.0 pounds per day per resident.[73] The Project would construct approximately 46 multifamily housing units, resulting in a population increase of approximately 155 people, therefore, producing approximately 310 pounds per day of solid waste.

[73] City of Porterville 2030 General Plan Chapter 8 Public Utilities Element, http://www.ci.porterville.ca.us/depts/communitydevelopment/documents/Chapter8PublicUtilities_000.pdf , Accessed February 19, 2019

Implementation of the Project would result in an increase in solid waste disposal needs. However, this increase would be minimal. Pursuant to the General Plan, the County anticipates the available landfill capacity will be sufficient through 2030. Therefore, the Project would be served by landfills with sufficient permitted capacity to accommodate the Project's solid waste needs.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. The California Integrated Waste Management Act of 1989 was enacted to reduce, recycle and reuse solid waste generated within the sates. Specifically, the act required cities and counties to identify measure to divers 25% of the total solid waste stream from landfill disposal by the year 1995 and 50% by the year 2000. Diversion strategies include such tactics as source reduction, recycling, and composting. The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. The Project would be required to comply with all Federal State, local regulations related to solid waste diversion, reduction, and recycling during Project construction and operation of the Project. The impacts would be less than significant.

3.20 Wildfire

Table 3-32. Wildfire Impacts

Wildfire					
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?	☐	☐	☐	☒

3.20.1 Environmental Setting and Baseline Conditions

The City is located in the south eastern part of the San Joaquin Valley, in close proximity to the Sierra Nevada Foothills. The fire season has over 100 days of temperatures in excess of 90 degrees Fahrenheit between the months of May and October. Figure 7-4 of the Porterville 2030 General Plan, identifies that approximately 43% of the City is considered to have a moderate fire hazard, as classified by the California Department of Forestry and Fire Protection (Cal Fire). The General Plan also identifies areas with the highest levels of risk are located in northeast sections of the planning area, due to the presence of wooded foothills. More recent data is provided by Cal Fire who produces California Fire Hazard Severity Zone (FHSZ) Maps. The Project is not located in a state responsibility area (SRA) or lands classified as Very High FHSZs.

Urban uses, which can be subject to structural fires, are considered a greater threat to life and property than wildland fires. As a result, the City requires all new development to meet or exceed the Uniform Fire Code Provisions, as outlined in the Porterville City Code: Chapter 12. This code addresses topography, geology, climate, and development conditions. New development is reviewed by the Public Works Department and Fire Department for adherence to these regulations.

The Project is not located in or near SRAs or lands classified as Very High FHSZs. The nearest SRA has a moderate rating, and it is approximately 1.02 miles east of Project. The nearest Very High FHSZ is approximately 1.7 miles northeast of the Project.

The site is surrounded by existing major roadways, Henderson Avenue and Prospect Street, providing access for emergency vehicles into and out of the site.

3.20.2 Regulatory Setting

3.20.2.1 Federal

There are no federal regulations, plans, programs, and guidelines associated with population or housing that are applicable to the Project.

3.20.2.2 State

California Department of Forestry and Fire Protection: Cal Fire is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Board of Forestry and Fire Protection is a regulatory body within Cal Fire. It is responsible for developing the general forest policy of the state, determining the guidance policies of Cal Fire, and representing the state's interest in federal forestland in California. The Board of Forestry and Fire Protection also promulgates regulations and reviews general plan safety elements that are adopted by local governments for compliance with statutes. Together, the Board and Cal Fire protect and enhance the forest resources of all the wildland areas of California that are not under federal jurisdiction.

Cal Fire Strategic Plans: Cal Fire produced the 2019 Strategic Fire Plan for California, which contains goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments. The 2019 Strategic Fire Plan for California focuses on fire prevention and suppression activities to protect lives, property, and ecosystems. In addition, Cal Fire provides regulatory oversight to enforce State fire laws and delivers a land use planning and defensible space inspection program to local governments across the state.

Cal Fire Fire Hazard Severity Zone Mapping: Cal Fire designates FHSZs as authorized under California Government Code Section 51175 et seq. Cal Fire considers many factors such as fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. The maps identify lands in California as falling within one of the following management areas: local responsibility area (LRA), SRA, or federal responsibility area (FRA). Within each of these areas, a single agency has direct responsibility: in LRAs, local fire departments or fire protection districts are responsible; in SRAs, Cal Fire is responsible; in FRAs, federal agencies, such as the US Forest Service, National Park Service, Bureau of Land Management, US Department of Defense, USFW, or Department of the Interior, are responsible.

Within the LRAs, Cal Fire designates lands as being within a Very High FHSZ or not. The LRA maps also show the Very High FHSZ and non-Very High FHSZ areas within the SRA and FRA, but do not differentiate lands within the SRA and FRA from each other (SRA and FRA areas are mapped together).

Within the SRA, Cal Fire designates Moderate FHSZs, High FHSZs, and Very High FHSZs. The SRA maps also indicate which lands are within the LRA and which are within the FRA, but do not show the hazard zones within the LRA and FRA.

California Office of Emergency Services: The California Office of Emergency Services (Cal OES) was established on January 1, 2009, and created by Assembly Bill (AB) 38, which merged the duties, powers, purposes, and responsibilities of the former Cal OES with those of the Governor's Office of Homeland Security. Cal OES is responsible for the coordination of State agency response to major disasters in support of local governments. Cal OES is responsible for ensuring the State's readiness to respond to and recover from all hazards – natural, man-made, emergencies, and disasters – and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts. In 2018, Cal OES completed a State Hazard Mitigation Plan, which designates FHSZs and Wildland Urban Interface areas.

Local

2030 City of Porterville General Plan[74]: The City General Plan sets forth the following policies of the Public Health and Safety Element which have potential relevance to the Project's CEQA review:

- PHS-G-3: Protect Porterville's residents and businesses from potential fire hazards.
- PHS-I-13: Enforce weed abatement programs and building and fire code requirements to assure adequate fire protection.

3.20.3 Impact Assessment

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project would not impair any adopted emergency response plan or emergency evacuation plan set forth by the City or the County of Tulare relative to the risk of wildfire. There would be no impact.

b) Would the project, due to slope, prevailing winds, or other factors exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire?

Less than Significant Impact. The Project is located in an area developed with rural residential and agricultural uses, which precludes the risk of wildfire. The Project area does not generally experience strong prevailing winds and is generally flat which would limit the risk of downslope flooding and landslides, and limit any wildfire spread. Therefore any impacts would be less than significant.

c) Would the project 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?

Less than Significant Impact. As discussed in b) above, the Project is located in an area developed with rural residential and agricultural uses, which precludes the risk of wildfire. The Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Any impacts would be less than significant.

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?

Less than Significant Impact. As the Project is relatively flat and is not subject to the risk of downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. There would be no impact.

[74] 2030 City of Porterville General Plan http://www.ci.porterville.ca.us/depts/communitydevelopment/generalplan.cfm Accessed April 19, 2023

3.21 CEQA Mandatory Findings of Significance

Table 3-33. Mandatory Findings of Significance Impacts

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

3.21.1 Impact Assessment

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. Implementation of the mitigation measures recommended in this Initial Study would ensure that the construction and operation of the Project would not substantially degrade the quality of the environment, reduce fish or wildlife habitat population, range of a plant or animal community, or eliminate important examples 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 Impact. The potential impacts are individually limited and not cumulatively considerable. Implementation of mitigation measures in this Initial Study would reduce potentially significant impacts that could become cumulatively considerable.

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 be constructed and operated in accordance with regulations pertaining to the Project. Since, all potentially significant impacts would be mitigated to a less than significant threshold, it would be unlikely that any environmental effects would cause substantial adverse effect on human beings, directly or indirectly.

3.22 Determination: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ 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

7/20/2023
Date

Jason Ridenour, assistant city manager
Printed Name/Position

Chapter 4 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) for the Terrazza Subdivision (Project) in Tulare County (County). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements.

Table 4-1 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 4-1** 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 would be used by the County to ensure that individual mitigation measures have been complied with and monitored.

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
Biological Resources					
Bio-1 (Avoidance):					
The Project's construction activities will occur, if feasible, between September 1 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.	During active nesting season September 1 and January 31	As determined needed by biological subconsultant during construction activities	City of Porterville with assistance of a qualified biological subconsultant	By subconsultant report to City of Porterville	
Bio-2 (Pre-construction Surveys):					
If activities must occur within nesting bird season (February 1 to August 31), a qualified biologist will conduct pre-construction surveys for active nests within 30 days prior to the start of construction. The survey will include the proposed work area and surrounding lands within 500 feet. If no active nests are observed, no further mitigation is required. Raptor nests are considered "active" upon the nest-building stage.	February 1-August 31	Once prior to initiating any ground disturbances	City of Porterville with assistance of a qualified biological subconsultant	By subconsultant report to City of Porterville	
Bio-3 (Establish Buffers):					
On discovery of any active nests near work areas, the biologist will determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction 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.	During ground disturbing activities and in the event any active nests near work areas are uncovered	Once prior to initiating any ground disturbances	City of Porterville with assistance of a qualified biological subconsultant	By subconsultant report to City of Porterville	
Cultural and Tribal Cultural Resources					
CUL-1 (Archaeological Resources)					
If, during construction, cultural resources are discovered, all work will be halted within 50 feet of the discovery. A professional archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology will be retained by the City to determine the significance of the discovery. Upon a finding of significance, the City will implement the required mitigation (if any) as determined by the archaeologist.	During ground disturbing activities and in the event potential archaeological artifacts or	Daily during ground disturbing activities	City of Porterville with assistance of a qualified cultural subconsultant	By subconsultant/contractor reports to MWD	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
	resources are uncovered				
CUL-2 (Human Remains)					
In the event human remains are encountered during construction activities, all work within the vicinity of the remains would halt in accordance with Health and Safety Code §7050.5, Public Resources Code §5097.98, and Section 15064.5 of the CEQA Guidelines, and the Fresno County coroner's office would be contacted.	During ground disturbing activities and in the event human remains are uncovered	Daily during ground disturbing activities	City of Porterville with assistance of a qualified cultural subconsultant	By subconsultant/contractor reports to the City of Porterville, Tulare County Coroner notification and report, and notification to NAHC, if applicable	
GEO-1 (Paleontological Resources)					
Should paleontological resources be encountered on the Project site, all ground disturbing activities in the area will stop. A qualified paleontologist will be contacted to assess the discovery. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations will be prepared and submitted to the City of Porterville for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology.	During ground disturbing activities and in the event human remains are uncovered	Daily during ground disturbing activities	City of Porterville with assistance of a qualified cultural subconsultant	By subconsultant/contractor reports to the City of Porterville, Tulare County Coroner notification and report, and notification to NAHC, if applicable	
Noise					
NOI-1					
During the construction period, construction activities and delivery trucks serving the Project will be limited to between 7:00 A.M. and 10:00 P.M. Monday through Friday and between 7:00 A.M. and 5:00 PM on Saturday or Sunday to avoid noise-sensitive hours of the day.	During the construction period	Daily during construction	City of Porterville	By subconsultant/contractor reports to the City of Porterville	
NOI-2					
Construction activities will be prohibited on holidays.	During the construction period	During holidays	City of Porterville	By subconsultant/contractor reports to the City of Porterville	
NOI-3					
The construction contract will require the contractor to ensure that construction equipment noise is minimized by muffling and shielding intakes and exhaust (in accordance with the manufacturer's specifications) and by shrouding or shielding impact tools.	Prior to and during the construction period	Once prior to construction	City of Porterville	By subconsultant/contractor reports to the City of Porterville	

Appendix A

CalEEMod Output Files

Tarazza Condos

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	42.00	Dwelling Unit	3.34	145,449.00	120

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	7			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot is 3.34 acres/ 145,449 sq ft from site plan

Construction Off-road Equipment Mitigation -

Energy Mitigation -

Water Mitigation -

Architectural Coating - Per rule 4601.

Fleet Mix - SJVAPCD Fleet Mix for 2022

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	150.00	50.00
tblFleetMix	HHD	0.08	0.02
tblFleetMix	LDA	0.53	0.53
tblFleetMix	LDT1	0.03	0.20
tblFleetMix	LDT2	0.17	0.17
tblFleetMix	LHD1	0.02	1.3000e-003
tblFleetMix	LHD2	5.1110e-003	9.0000e-004
tblFleetMix	MCY	4.2590e-003	2.5000e-003
tblFleetMix	MDV	0.13	0.05
tblFleetMix	MH	7.1000e-004	1.8000e-003
tblFleetMix	MHD	0.02	8.6000e-003
tblFleetMix	OBUS	1.8250e-003	0.00
tblFleetMix	SBUS	1.1120e-003	7.0000e-004
tblFleetMix	UBUS	1.2630e-003	4.4000e-003
tblLandUse	LandUseSquareFeet	42,000.00	145,449.00
tblLandUse	LotAcreage	2.63	3.34
tblWoodstoves	NumberCatalytic	3.34	0.00
tblWoodstoves	NumberNoncatalytic	3.34	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2846	2.5626	2.3366	4.0700e-003	0.1037	0.1349	0.2386	0.0470	0.1265	0.1734	0.0000	353.3308	353.3308	0.0806	0.0000	355.3454
2022	0.4685	0.1151	0.1494	2.4000e-004	2.1300e-003	5.9500e-003	8.0800e-003	5.7000e-004	5.5600e-003	6.1300e-003	0.0000	21.1468	21.1468	5.3800e-003	0.0000	21.2814
Maximum	**0.4685**	**2.5626**	**2.3366**	**4.0700e-003**	**0.1037**	**0.1349**	**0.2386**	**0.0470**	**0.1265**	**0.1734**	**0.0000**	**353.3308**	**353.3308**	**0.0806**	**0.0000**	**355.3454**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2846	2.5626	2.3366	4.0700e-003	0.0644	0.1349	0.1993	0.0259	0.1265	0.1523	0.0000	353.3304	353.3304	0.0806	0.0000	355.3450
2022	0.4685	0.1151	0.1494	2.4000e-004	2.1300e-003	5.9500e-003	8.0800e-003	5.7000e-004	5.5600e-003	6.1300e-003	0.0000	21.1468	21.1468	5.3800e-003	0.0000	21.2814
Maximum	**0.4685**	**2.5626**	**2.3366**	**4.0700e-003**	**0.0644**	**0.1349**	**0.1993**	**0.0259**	**0.1265**	**0.1523**	**0.0000**	**353.3304**	**353.3304**	**0.0806**	**0.0000**	**355.3450**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**37.10**	**0.00**	**15.91**	**44.32**	**0.00**	**11.73**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.8822	0.8822
2	4-1-2021	6-30-2021	0.6503	0.6503
3	7-1-2021	9-30-2021	0.6574	0.6574
4	10-1-2021	12-31-2021	0.6577	0.6577
5	1-1-2022	3-31-2022	0.6017	0.6017
		Highest	0.8822	0.8822

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7158	0.0193	0.3189	1.2000e-004		3.0000e-003	3.0000e-003		3.0000e-003	3.0000e-003	0.0000	18.7041	18.7041	8.4000e-004	3.3000e-004	18.8245
Energy	2.7500e-003	0.0235	0.0100	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	99.8451	99.8451	3.5200e-003	1.1200e-003	100.2667
Mobile	0.0805	0.2687	0.9250	2.6100e-003	0.2499	2.2200e-003	0.2521	0.0669	2.0600e-003	0.0689	0.0000	240.0407	240.0407	0.0127	0.0000	240.3590
Waste						0.0000	0.0000		0.0000	0.0000	3.9218	0.0000	3.9218	0.2318	0.0000	9.7161
Water						0.0000	0.0000		0.0000	0.0000	0.8682	6.6417	7.5099	0.0894	2.1600e-003	10.3902
Total	**0.7991**	**0.3115**	**1.2539**	**2.8800e-003**	**0.2499**	**7.1200e-003**	**0.2570**	**0.0669**	**6.9600e-003**	**0.0738**	**4.7900**	**365.2317**	**370.0216**	**0.3383**	**3.6100e-003**	**379.5566**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7158	0.0193	0.3189	1.2000e-004		3.0000e-003	3.0000e-003		3.0000e-003	3.0000e-003	0.0000	18.7041	18.7041	8.4000e-004	3.3000e-004	18.8245
Energy	2.7500e-003	0.0235	0.0100	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	34.1436	34.1436	8.1000e-004	5.6000e-004	34.3301
Mobile	0.0805	0.2687	0.9250	2.6100e-003	0.2499	2.2200e-003	0.2521	0.0669	2.0600e-003	0.0689	0.0000	240.0407	240.0407	0.0127	0.0000	240.3590
Waste						0.0000	0.0000		0.0000	0.0000	3.9218	0.0000	3.9218	0.2318	0.0000	9.7161
Water						0.0000	0.0000		0.0000	0.0000	0.6945	5.5808	6.2753	0.0716	1.7300e-003	8.5806
Total	**0.7991**	**0.3115**	**1.2539**	**2.8800e-003**	**0.2499**	**7.1200e-003**	**0.2570**	**0.0669**	**6.9600e-003**	**0.0738**	**4.6163**	**298.4692**	**303.0855**	**0.3177**	**2.6200e-003**	**311.8103**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.63**	**18.28**	**18.09**	**6.09**	**27.42**	**17.85**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	
2	Site Preparation	Site Preparation	1/29/2021	2/4/2021	5	5	
3	Grading	Grading	2/5/2021	2/16/2021	5	8	
4	Building Construction	Building Construction	2/17/2021	1/4/2022	5	230	
5	Paving	Paving	1/5/2022	1/28/2022	5	18	
6	Architectural Coating	Architectural Coating	1/29/2022	2/23/2022	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 294,534; Residential Outdoor: 98,178; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Tarazza Condos - Tulare County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	30.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**		**0.0155**	**0.0155**		**0.0144**	**0.0144**	**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.2000e-004	4.3100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9943	0.9943	3.0000e-005	0.0000	0.9950
Total	**6.5000e-004**	**4.2000e-004**	**4.3100e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9943**	**0.9943**	**3.0000e-005**	**0.0000**	**0.9950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**		**0.0155**	**0.0155**		**0.0144**	**0.0144**	**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.2000e-004	4.3100e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9943	0.9943	3.0000e-005	0.0000	0.9950
Total	**6.5000e-004**	**4.2000e-004**	**4.3100e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9943**	**0.9943**	**3.0000e-005**	**0.0000**	**0.9950**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
Total	**9.7200e-003**	**0.1012**	**0.0529**	**1.0000e-004**	**0.0452**	**5.1100e-003**	**0.0503**	**0.0248**	**4.7000e-003**	**0.0295**	**0.0000**	**8.3589**	**8.3589**	**2.7000e-003**	**0.0000**	**8.4265**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.3000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2983	0.2983	1.0000e-005	0.0000	0.2985
Total	**2.0000e-004**	**1.3000e-004**	**1.2900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2983**	**0.2983**	**1.0000e-005**	**0.0000**	**0.2985**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0203	0.0000	0.0203	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1012	0.0529	1.0000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	8.3589	8.3589	2.7000e-003	0.0000	8.4265
Total	**9.7200e-003**	**0.1012**	**0.0529**	**1.0000e-004**	**0.0203**	**5.1100e-003**	**0.0254**	**0.0112**	**4.7000e-003**	**0.0159**	**0.0000**	**8.3589**	**8.3589**	**2.7000e-003**	**0.0000**	**8.4265**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.3000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2983	0.2983	1.0000e-005	0.0000	0.2985
Total	**2.0000e-004**	**1.3000e-004**	**1.2900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2983**	**0.2983**	**1.0000e-005**	**0.0000**	**0.2985**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
Total	**9.1600e-003**	**0.0990**	**0.0634**	**1.2000e-004**	**0.0262**	**4.6400e-003**	**0.0309**	**0.0135**	**4.2700e-003**	**0.0177**	**0.0000**	**10.4215**	**10.4215**	**3.3700e-003**	**0.0000**	**10.5057**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.7200e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3977	0.3977	1.0000e-005	0.0000	0.3980
Total	**2.6000e-004**	**1.7000e-004**	**1.7200e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3977**	**0.3977**	**1.0000e-005**	**0.0000**	**0.3980**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0118	0.0000	0.0118	6.0600e-003	0.0000	6.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1600e-003	0.0990	0.0634	1.2000e-004		4.6400e-003	4.6400e-003		4.2700e-003	4.2700e-003	0.0000	10.4215	10.4215	3.3700e-003	0.0000	10.5057
Total	**9.1600e-003**	**0.0990**	**0.0634**	**1.2000e-004**	**0.0118**	**4.6400e-003**	**0.0164**	**6.0600e-003**	**4.2700e-003**	**0.0103**	**0.0000**	**10.4215**	**10.4215**	**3.3700e-003**	**0.0000**	**10.5057**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	1.7200e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3977	0.3977	1.0000e-005	0.0000	0.3980
Total	**2.6000e-004**	**1.7000e-004**	**1.7200e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3977**	**0.3977**	**1.0000e-005**	**0.0000**	**0.3980**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2167	1.9873	1.8896	3.0700e-003		0.1093	0.1093		0.1028	0.1028	0.0000	264.0665	264.0665	0.0637	0.0000	265.6592
Total	**0.2167**	**1.9873**	**1.8896**	**3.0700e-003**		**0.1093**	**0.1093**		**0.1028**	**0.1028**	**0.0000**	**264.0665**	**264.0665**	**0.0637**	**0.0000**	**265.6592**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0505	9.6300e-003	1.3000e-004	3.0100e-003	1.5000e-004	3.1600e-003	8.7000e-004	1.4000e-004	1.0100e-003	0.0000	12.1220	12.1220	5.4000e-004	0.0000	12.1354
Worker	0.0148	9.5400e-003	0.0982	2.5000e-004	0.0272	1.8000e-004	0.0274	7.2400e-003	1.7000e-004	7.4100e-003	0.0000	22.6708	22.6708	6.5000e-004	0.0000	22.6870
Total	**0.0163**	**0.0600**	**0.1078**	**3.8000e-004**	**0.0303**	**3.3000e-004**	**0.0306**	**8.1100e-003**	**3.1000e-004**	**8.4200e-003**	**0.0000**	**34.7928**	**34.7928**	**1.1900e-003**	**0.0000**	**34.8224**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2167	1.9873	1.8896	3.0700e-003		0.1093	0.1093		0.1028	0.1028	0.0000	264.0662	264.0662	0.0637	0.0000	265.6589
Total	**0.2167**	**1.9873**	**1.8896**	**3.0700e-003**		**0.1093**	**0.1093**		**0.1028**	**0.1028**	**0.0000**	**264.0662**	**264.0662**	**0.0637**	**0.0000**	**265.6589**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0505	9.6300e-003	1.3000e-004	3.0100e-003	1.5000e-004	3.1600e-003	8.7000e-004	1.4000e-004	1.0100e-003	0.0000	12.1220	12.1220	5.4000e-004	0.0000	12.1354
Worker	0.0148	9.5400e-003	0.0982	2.5000e-004	0.0272	1.8000e-004	0.0274	7.2400e-003	1.7000e-004	7.4100e-003	0.0000	22.6708	22.6708	6.5000e-004	0.0000	22.6870
Total	**0.0163**	**0.0600**	**0.1078**	**3.8000e-004**	**0.0303**	**3.3000e-004**	**0.0306**	**8.1100e-003**	**3.1000e-004**	**8.4200e-003**	**0.0000**	**34.7928**	**34.7928**	**1.1900e-003**	**0.0000**	**34.8224**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7100e-003	0.0156	0.0164	3.0000e-005		8.1000e-004	8.1000e-004		7.6000e-004	7.6000e-004	0.0000	2.3173	2.3173	5.6000e-004	0.0000	2.3311
Total	**1.7100e-003**	**0.0156**	**0.0164**	**3.0000e-005**		**8.1000e-004**	**8.1000e-004**		**7.6000e-004**	**7.6000e-004**	**0.0000**	**2.3173**	**2.3173**	**5.6000e-004**	**0.0000**	**2.3311**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.2000e-004	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1054	0.1054	0.0000	0.0000	0.1055
Worker	1.2000e-004	7.0000e-005	7.8000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1918	0.1918	1.0000e-005	0.0000	0.1919
Total	**1.3000e-004**	**4.9000e-004**	**8.6000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2972**	**0.2972**	**1.0000e-005**	**0.0000**	**0.2974**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7100e-003	0.0156	0.0164	3.0000e-005		8.1000e-004	8.1000e-004		7.6000e-004	7.6000e-004	0.0000	2.3173	2.3173	5.6000e-004	0.0000	2.3311
Total	**1.7100e-003**	**0.0156**	**0.0164**	**3.0000e-005**		**8.1000e-004**	**8.1000e-004**		**7.6000e-004**	**7.6000e-004**	**0.0000**	**2.3173**	**2.3173**	**5.6000e-004**	**0.0000**	**2.3311**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.2000e-004	8.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1054	0.1054	0.0000	0.0000	0.1055
Worker	1.2000e-004	7.0000e-005	7.8000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1918	0.1918	1.0000e-005	0.0000	0.1919
Total	**1.3000e-004**	**4.9000e-004**	**8.6000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2972**	**0.2972**	**1.0000e-005**	**0.0000**	**0.2974**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.7900e-003**	**0.0857**	**0.1098**	**1.7000e-004**		**4.3900e-003**	**4.3900e-003**		**4.0500e-003**	**4.0500e-003**	**0.0000**	**14.7383**	**14.7383**	**4.6300e-003**	**0.0000**	**14.8540**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.5000e-004	4.6900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1509	1.1509	3.0000e-005	0.0000	1.1517
Total	**7.2000e-004**	**4.5000e-004**	**4.6900e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1509**	**1.1509**	**3.0000e-005**	**0.0000**	**1.1517**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.7900e-003	0.0857	0.1098	1.7000e-004		4.3900e-003	4.3900e-003		4.0500e-003	4.0500e-003	0.0000	14.7383	14.7383	4.6300e-003	0.0000	14.8540
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.7900e-003**	**0.0857**	**0.1098**	**1.7000e-004**		**4.3900e-003**	**4.3900e-003**		**4.0500e-003**	**4.0500e-003**	**0.0000**	**14.7383**	**14.7383**	**4.6300e-003**	**0.0000**	**14.8540**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.5000e-004	4.6900e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1509	1.1509	3.0000e-005	0.0000	1.1517
Total	**7.2000e-004**	**4.5000e-004**	**4.6900e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1509**	**1.1509**	**3.0000e-005**	**0.0000**	**1.1517**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4551					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
Total	**0.4569**	**0.0127**	**0.0163**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.5000e-004**	**0.0000**	**2.3017**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.4100e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3453	0.3453	1.0000e-005	0.0000	0.3455
Total	**2.2000e-004**	**1.3000e-004**	**1.4100e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.3000e-004**	**1.1000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3453**	**0.3453**	**1.0000e-005**	**0.0000**	**0.3455**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4551					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0127	0.0163	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.2979	2.2979	1.5000e-004	0.0000	2.3017
Total	**0.4569**	**0.0127**	**0.0163**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.5000e-004**	**0.0000**	**2.3017**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.3000e-004	1.4100e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3453	0.3453	1.0000e-005	0.0000	0.3455
Total	**2.2000e-004**	**1.3000e-004**	**1.4100e-003**	**0.0000**	**4.3000e-004**	**0.0000**	**4.3000e-004**	**1.1000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3453**	**0.3453**	**1.0000e-005**	**0.0000**	**0.3455**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0805	0.2687	0.9250	2.6100e-003	0.2499	2.2200e-003	0.2521	0.0669	2.0600e-003	0.0689	0.0000	240.0407	240.0407	0.0127	0.0000	240.3590
Unmitigated	0.0805	0.2687	0.9250	2.6100e-003	0.2499	2.2200e-003	0.2521	0.0669	2.0600e-003	0.0689	0.0000	240.0407	240.0407	0.0127	0.0000	240.3590

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	244.02	238.14	203.28	669,055	669,055
Total	244.02	238.14	203.28	669,055	669,055

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	7.30	7.50	38.40	22.60	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.534300	0.203000	0.167300	0.054500	0.001300	0.000900	0.008600	0.020700	0.000000	0.004400	0.002500	0.000700	0.001800

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.9280	6.9280	2.9000e-004	6.0000e-005	6.9528
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	72.6296	72.6296	3.0000e-003	6.2000e-004	72.8894
NaturalGas Mitigated	2.7500e-003	0.0235	0.0100	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.2155	27.2155	5.2000e-004	5.0000e-004	27.3773
NaturalGas Unmitigated	2.7500e-003	0.0235	0.0100	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.2155	27.2155	5.2000e-004	5.0000e-004	27.3773

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	510000	2.7500e-003	0.0235	0.0100	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.2155	27.2155	5.2000e-004	5.0000e-004	27.3773
Total		**2.7500e-003**	**0.0235**	**0.0100**	**1.5000e-004**		**1.9000e-003**	**1.9000e-003**		**1.9000e-003**	**1.9000e-003**	**0.0000**	**27.2155**	**27.2155**	**5.2000e-004**	**5.0000e-004**	**27.3773**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	510000	2.7500e-003	0.0235	0.0100	1.5000e-004		1.9000e-003	1.9000e-003		1.9000e-003	1.9000e-003	0.0000	27.2155	27.2155	5.2000e-004	5.0000e-004	27.3773
Total		**2.7500e-003**	**0.0235**	**0.0100**	**1.5000e-004**		**1.9000e-003**	**1.9000e-003**		**1.9000e-003**	**1.9000e-003**	**0.0000**	**27.2155**	**27.2155**	**5.2000e-004**	**5.0000e-004**	**27.3773**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	227950	72.6296	3.0000e-003	6.2000e-004	72.8894
Total		**72.6296**	**3.0000e-003**	**6.2000e-004**	**72.8894**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	21743.8	6.9280	2.9000e-004	6.0000e-005	6.9528
Total		**6.9280**	**2.9000e-004**	**6.0000e-005**	**6.9528**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7158	0.0193	0.3189	1.2000e-004		3.0000e-003	3.0000e-003		3.0000e-003	3.0000e-003	0.0000	18.7041	18.7041	8.4000e-004	3.3000e-004	18.8245
Unmitigated	0.7158	0.0193	0.3189	1.2000e-004		3.0000e-003	3.0000e-003		3.0000e-003	3.0000e-003	0.0000	18.7041	18.7041	8.4000e-004	3.3000e-004	18.8245

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1365					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5681					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.8400e-003	0.0157	6.6900e-003	1.0000e-004		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	18.1947	18.1947	3.5000e-004	3.3000e-004	18.3028
Landscaping	9.4300e-003	3.6000e-003	0.3122	2.0000e-005		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	0.5094	0.5094	4.9000e-004	0.0000	0.5217
Total	**0.7158**	**0.0193**	**0.3189**	**1.2000e-004**		**2.9900e-003**	**2.9900e-003**		**2.9900e-003**	**2.9900e-003**	**0.0000**	**18.7041**	**18.7041**	**8.4000e-004**	**3.3000e-004**	**18.8245**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1365					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5681					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.8400e-003	0.0157	6.6900e-003	1.0000e-004		1.2700e-003	1.2700e-003		1.2700e-003	1.2700e-003	0.0000	18.1947	18.1947	3.5000e-004	3.3000e-004	18.3028
Landscaping	9.4300e-003	3.6000e-003	0.3122	2.0000e-005		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	0.5094	0.5094	4.9000e-004	0.0000	0.5217
Total	**0.7158**	**0.0193**	**0.3189**	**1.2000e-004**		**2.9900e-003**	**2.9900e-003**		**2.9900e-003**	**2.9900e-003**	**0.0000**	**18.7041**	**18.7041**	**8.4000e-004**	**3.3000e-004**	**18.8245**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.2753	0.0716	1.7300e-003	8.5806
Unmitigated	7.5099	0.0894	2.1600e-003	10.3902

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	2.73647 / 1.72517	7.5099	0.0894	2.1600e-003	10.3902
Total		**7.5099**	**0.0894**	**2.1600e-003**	**10.3902**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	2.18918 / 1.61993	6.2753	0.0716	1.7300e-003	8.5806
Total		**6.2753**	**0.0716**	**1.7300e-003**	**8.5806**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.9218	0.2318	0.0000	9.7161
Unmitigated	3.9218	0.2318	0.0000	9.7161

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	19.32	3.9218	0.2318	0.0000	9.7161
Total		**3.9218**	**0.2318**	**0.0000**	**9.7161**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	19.32	3.9218	0.2318	0.0000	9.7161
Total		**3.9218**	**0.2318**	**0.0000**	**9.7161**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

Biological Resources Report

Biological Evaluation Report – Dated December 2020

City of Porterville:
Terrazza Condominiums Project

Biological Evaluation

Prepared by:
Brooke Fletcher, Wildlife Biologist

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December 2019

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1 Introduction

The City of Porterville (City) has requested a biological evaluation report in order to assess the potential environmental effects of the Terrazza Condominium Project (Project). The Project involves development of a vacant parcel of land southwest of the intersection of North Plano Street and East Grand Avenue. The proposed impact area is surrounded by urban development and vacant fields similar in nature to the Project site.

The following technical report, prepared by Provost & Pritchard Consulting Group in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), includes a description of the biological resources present or with potential to occur within the Project site and surrounding areas and evaluates potential Project-related impacts to those resources.

1.1 Project Description

The Project proposes the development of approximately 3.35 acres of currently vacant land into the Terrazza condominium complex, which will consist of approximately 46 multifamily residential units and associated improvements, including utility connections, drive approaches, parking lots, and landscaping.

1.2 Report Objectives

Construction activities such as the development of vacant land into a residential condominium could potentially damage biological resources or modify habitats that are crucial for sensitive plant and wildlife species. In cases such as these, development may be regulated by State or federal agencies and be subject to provisions of California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA), and/or may be addressed by local regulatory agencies.

This report addresses issues related to the following:

1) The presence of sensitive biological resources onsite, or with the potential to occur onsite.
2) The federal, State, and local regulations regarding these resources.
3) 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:

1) Summarize all site-specific information related to existing biological resources.
2) Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range.
3) Summarize all State and federal natural resource protection laws that may be relevant to the Project.
4) Identify and discuss Project impacts to biological resources likely to occur onsite within the context of CEQA or State or federal laws.
5) Identify and publish a set of avoidance and mitigation measures that would reduce impacts to a less-than-significant level (as identified by CEQA) and are generally consistent with recommendations of the resource agencies for affected biological resources.

1.3 Study Methodology

Provost & Pritchard conducted a reconnaissance-level field survey of the Project site and surrounding areas on July 18, 2019. The Project's Area of Potential Effect (APE) is illustrated in **Figure 3.** The entire APE as well as potential access routes and staging areas were surveyed on foot. The survey consisted of walking through the Project area while identifying and noting land uses, biological habitats and communities, and plant and animal species encountered. Additionally, the site and surrounding areas were assessed for suitable habitats of various wildlife species.

Provost & Pritchard conducted an analysis of potential Project-related impacts to biological resources based on the resources known to exist or with potential to exist within the Project site and surrounding areas. Sources of information used in preparation of this analysis included: the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB); the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system; the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California; CalFlora's online database of California native plants; the Jepson Herbarium online database (Jepson eFlora); the USFWS Environmental Conservation Online System (ECOS); the NatureServe Explorer online database; the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Plants Database; the CDFW California Wildlife Habitat Relationships (CWHR) database; the California Herps online database; and various manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

The field investigation did not include a wetland delineation or focused surveys for special status species. The field survey conducted included an appropriate level of detail to assess the significance of potential impacts to sensitive biological resources resulting from 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 U.S. Army Corps of Engineers (USACE), CDFW, and the Regional Water Quality Control Board (RWQCB).

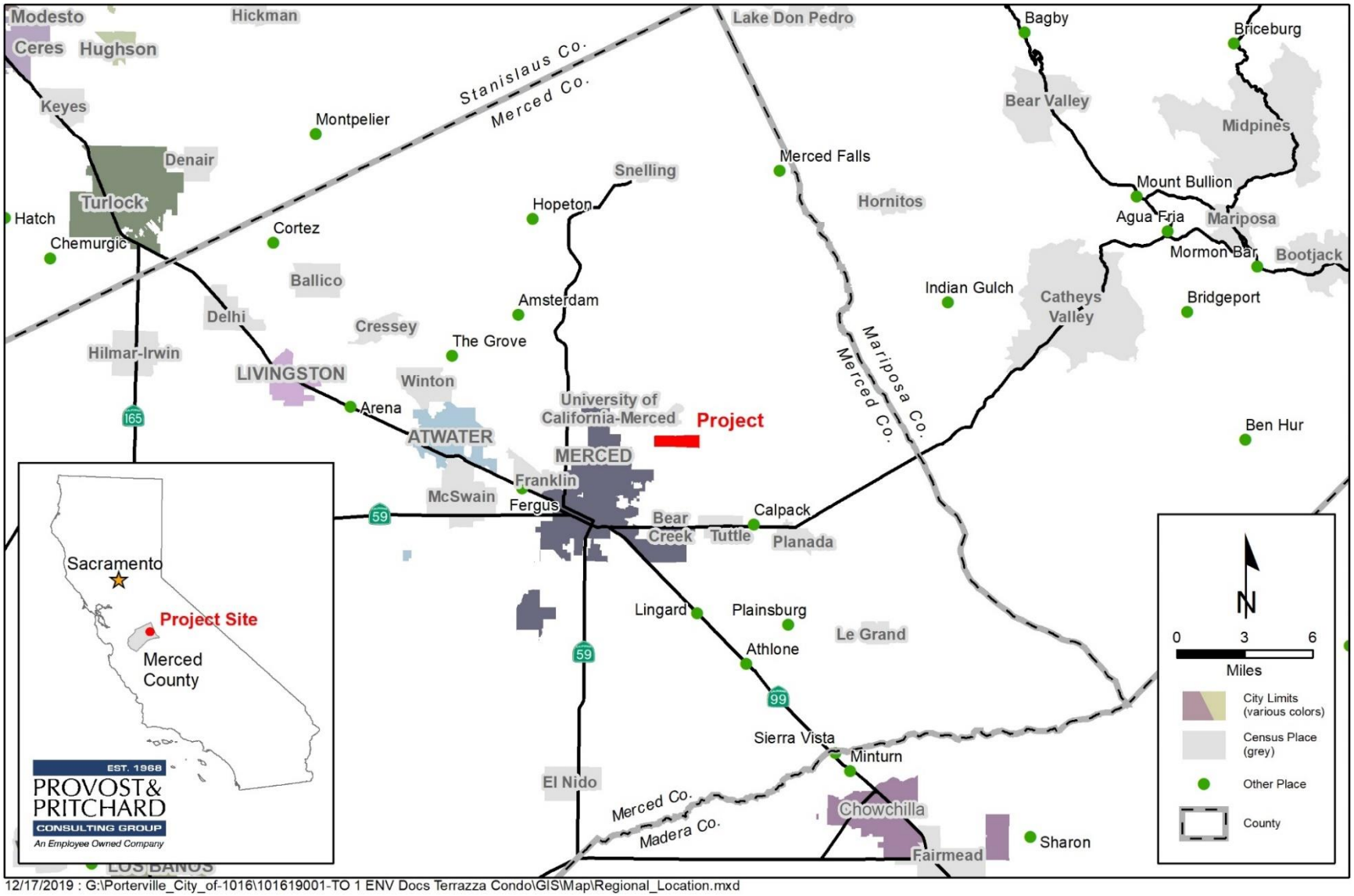

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Figure 1. Regional Location Map

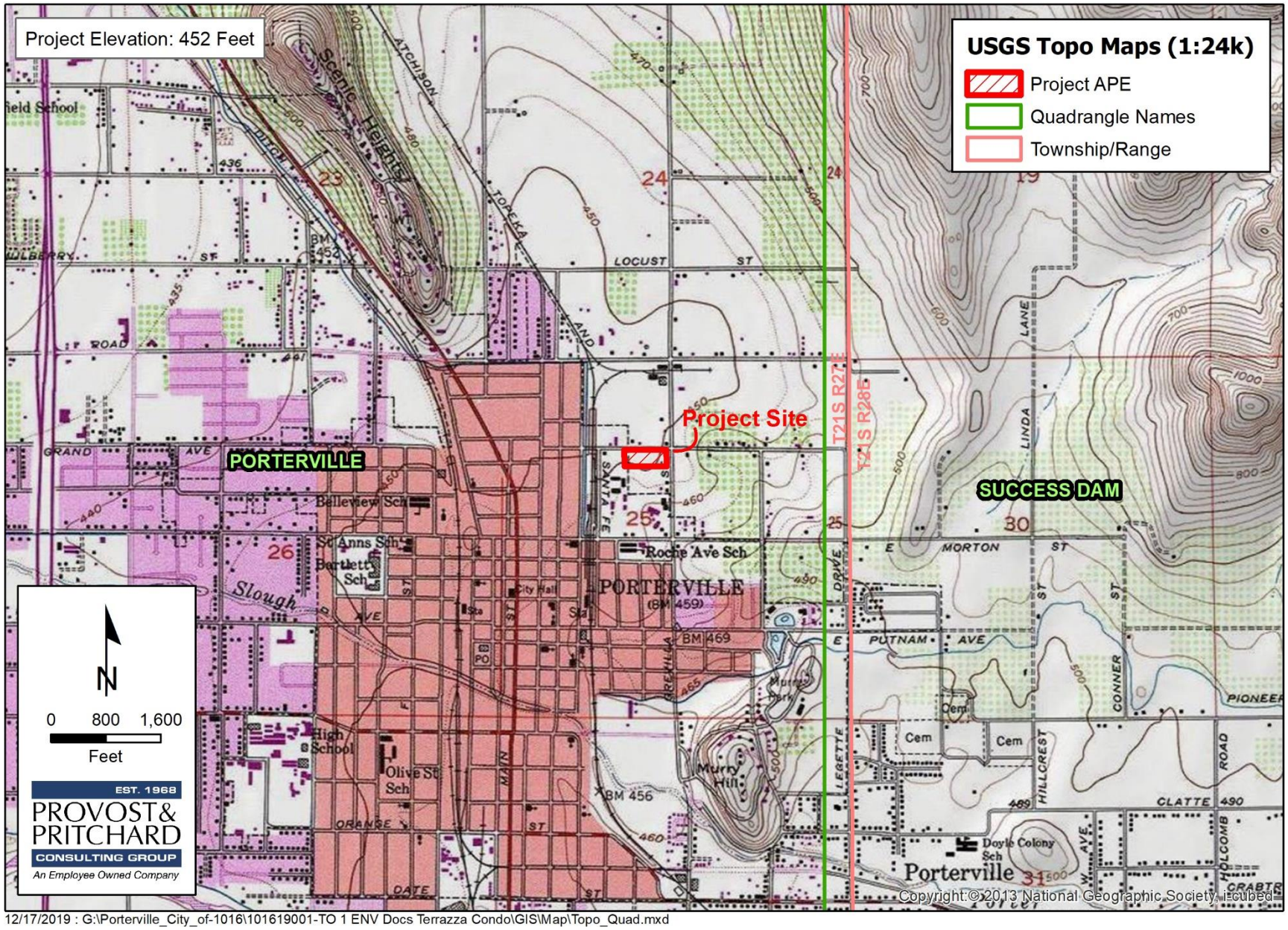

Figure 2. Topographic Quadrangle Map

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Figure 3. Area of Potential Effect (APE)

2 Existing Conditions

2.1 Regional Setting

The Project site is located within the city limits of Porterville in Tulare County within the lower San Joaquin Valley, part of the Central (or Great) Valley of California (See **Figure 1**). The Valley is bordered by the Sierra Nevada Mountain Ranges to the east, the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Transverse Ranges and Mojave Desert to the south.

Like most of California, the San Joaquin Valley experiences a Mediterranean climate. Warm, dry summers are followed by cool, moist winters. Summer temperatures often reach above 90 degrees Fahrenheit, and the humidity is generally low. Winter temperatures are often below 60 degrees Fahrenheit during the day and rarely exceed 70 degrees. On average, the Central Valley receives approximately 12 inches of precipitation in the form of rainfall yearly, most of which occurs between October and March.

The Project is located within the Middle Elk Bayou watershed; Hydrologic Unit Code (HUC): 180300060804 (EPA, 2019), approximately 5 miles west of Lake Success and 1.5 miles north of the Tule River, which is the principal drainage in the vicinity. The Project lies within the northeastern portion of the Tule Groundwater Subbasin of the San Joaquin Valley Groundwater Basin (DWR, 2019).

2.2 Project Site

The Project site is a ruderal vacant lot southwest of the intersection of Grand Avenue and Plano Street near the base of the foothills in the City of Porterville. There are similar ruderal lots adjacent to the site's western boundary and to the east beyond Plano Street. The Project's northern boundary abuts Grand Avenue. Uses north of Grand Avenue appear to consist of a junkyard and/or machine shop and scattered rural residences. Although not directly adjacent to the site, large industrial plants are visible farther north and northeast of the site. The Project's southern boundary abuts the rear fence line of an existing subdivision. The Project is accessed by paved roads and the northern portion of the site is in use as a compacted dirt parking pad. Photographs of the Project site and surrounding areas are available in **Appendix A** to this document.

2.3 Biological Communities

One biological community was identified within the Project area: ruderal non-native annual grassland. Surrounding land uses consist of developed and ruderal lands. All habitats of the Project area and surrounding lands are disturbed or frequently maintained and therefore of relatively low quality for most native wildlife species.

2.3.1 Ruderal Non-native Annual Grassland

The entire Project area is composed of ruderal non-native annual grassland. The eastern site boundary is clearly delineated by the presence of sidewalk and paved Plano Street. The northern boundary does not contain sidewalk but is defined by the presence of paved Grand Avenue. There are overhead utilities onsite within the northern boundary and this area is being used as a compacted dirt parking pad, likely for employees of businesses directly north. The western boundary is delineated by a dilapidated barbed wire fence and the southern boundary abuts the rear fence line of residential homes.

Ruderal habitats are characterized by a high level of human disturbance and absence of vegetation or are dominated by non-native plant species. The site appears to be disked at least twice per year for weed

abatement and fire control purposes. Nearly all of the vegetation observed was invasive and/or associated with areas of disturbance, such as the following species which were observed onsite: horse nettle (*Solanum elaeagnifolium*), field bindweed (*Convolvulus arvensis*), wild oats (*Avena fatua*), prickly lettuce (*Lactuca serriola*), russian thistle (*Salsola tragus*), tumbleweed (*Amarnathus albus*), hairy vetch (*Vicia villosa*), curly dock (*Rumex crispus*), common mustard (*Brassica rapa*), bluegreen saltbush (*Atriplex nummularia*), bristlegrass (*Setaria ssp.*), crabgrass (*Digitaria sanguinalis*), foxtail (*Bromus madritensis*), quack grass (*Elymus repens*), ripgut brome (*Bromus diandrus*), and milk thistle (*Silybum marianum*). The following native vegetation was observed: alkali mallow (*Malvella leprosa*), common sunflower (*Helianthus annus*), and doveweed (*Croton setiger*). At the time of the field survey, two olive trees (*Olea europaea*) were observed onsite in the eastern portion of the parcel.

The soils appeared hard and clayey in consistency, which is consistent with the Porterville Clay soil series reported by the NRCS web soil survey (**Appendix E**). Burrows were only observed within a small portion of the site where the northeast corner met with sidewalk. All of the burrow entrances were approximately 4 inches in diameter and likely of ground squirrel origin. All burrows were covered in cobwebs and determined to be inactive. No rodents were observed onsite, and burrows were absent from the remainder of the Project area.

This ruderal lot of land represents low-quality habitat for most wildlife species. At the time of the field survey, at least 10 feral cats were observed onsite and in the immediate vicinity. Large, barking, domestic dogs were present within the fenced industrial yards to the north and within the residential yards to the south. The carcasses of three domestic cats and one Virginia opossum (*Didelphis virginiana*) were observed onsite. Tracks and scat of domestic dog, coyote (*Canis latrans*), and Virginia opossum (*Didelphis virginiana*) were present throughout the surveyed area. Additional mammalian species expected to pass through the site would be those relatively tolerant of disturbance such as the red fox (*Vulpes vulpes*), striped skunk (*Mephitis mephitis*), and California ground squirrel (*Otospermophilus beecheyi*). However, the clay soils onsite are relatively unsuitable for fossorial mammals, such as the ground squirrel, and would therefore not be considered suitable foraging habitat for carnivorous species.

Avian species would likely be deterred from nesting in this area due to the absence of native trees and shrubs in conjunction with frequent human disturbance. The two olive trees onsite could represent suitable nesting habitat for passerines and ground-nesting birds such as the killdeer (*Charadrius vociferus*) could potentially nest along the bare ground or sparsely vegetated areas onsite. However, the presence of domestic dogs and cats and frequent human disturbance would make that unlikely. No active or inactive nests were observed at the time of the field survey, and observations of avian species were limited to several mourning doves (*Zenaida macroura*), northern mockingbirds (*Mimus polyglottos*), and a pair of Canada geese (*Branta canadensis*) that flew over the site.

Common reptiles and amphibians associated with urban development such as the San Joaquin fence lizard (*Sceloporus occidentalis biseriatus*) or California toad (*Anaxyrus boreas halophilus*) could occasionally pass through the site, although suitable amphibian breeding habitat was not observed during the biological survey, and refugia was limited due to clay soils and an absence of burrows throughout most of the site. Various arthropods were present at the time of the field survey, and reptiles, amphibians, birds, and bats could forage over the site. While reptiles and amphibians could occur any time of day, owls and bats would be expected to forage nocturnally.

At the time of the July 18, 2019 field survey, shallow roadside depressions in clay soils were evident onsite along the Grand Avenue right-of-way, although at that time all of the depressions were dry and unremarkable. However, during a brief site visit on March 19, 2019 these same pools were observed to be inundated due to an abnormally wet year and recent precipitation events. The purpose of that visit was not to conduct a survey, but it resulted in an incidental observation of what appeared to be a vernal pool fairy shrimp (*Branchinecta lynchi*) within one of the ephemeral pools. The fairy shrimp was not collected, handled, or examined through a microscope. The identification was based on Ms. Fletcher's previous observations and experience with this species, and the occurrence was subsequently reported to CNDDB. Photographs of the

fairy shrimp and the ephemeral pool are available in **Appendix A** to this document. Additional video documentation is available upon request.

2.4 Soils

Two soil mapping units, representing one soil series, were identified within the Project area: Porterville clay, 0 to 2 percent slopes and Porterville clay, 2 to 9 percent slopes. Porterville soils are not considered hydric, although both mapping units identified within the Project contain minor components classified as hydric soils: Clear lake and unnamed, ponded. 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 is supported.

The Porterville soil series is broadly defined as an expansive clay soil. These soils are deep and well-drained, with slow permeability and variable runoff class. Porterville soils are considered prime farmland, if irrigated, and common uses include range pasture and irrigated crops, specifically subtropical fruits such as oranges, lemons, olives, and figs. Uncultivated areas typically support a vegetative cover of annual grasses, burclover, herbs, and widely spaced shrubs.

The complete Natural Resources Conservation Service (NRCS) Web Soil Survey report is available in **Appendix E** to this document.

2.5 Natural Communities of Special Concern

Natural communities of special concern are those that are of limited distribution, distinguished by significant biological diversity, or home to special status species. CDFW is responsible for the classification and mapping of all natural communities in California. Just like the special status plant and animal species, these natural communities of special concern can be found within the CNDDB.

According to CNDDB, there are no recorded observations of natural communities of special concern with potential to occur within the Project area or vicinity. Additionally, no natural communities of special concern were observed during the biological survey.

2.6 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 and that may require special management and protection.

According to CNDDB and IPaC, designated Critical Habitat is absent from the Project area and vicinity.

2.7 Wildlife Movement Corridors

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 and ridgelines, and with rivers and creeks that support riparian vegetation.

The Project area does not contain features that would be likely to function as wildlife movement corridors. Furthermore, the Project is located in a region often disturbed by human activities related to adjacent industrial uses which would discourage dispersal and migration.

2.8 Special Status Plants and Animals

California contains several "rare" plant and animal species, defined as species known to have low populations or limited distributions. As the human population grows, resulting in urban expansion which encroaches on the already limited suitable habitat, these sensitive species become increasingly more vulnerable to extirpation. State and federal regulations have provided CDFW and USFWS with a mechanism 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 maintains a list of native plants considered rare, threatened, or endangered. Collectively, these plants and animals are referred to as "special status species."

A thorough search of the CNDDB for published accounts of special status plant and animal species was conducted for the *Porterville* 7.5-minute quadrangle that contains the Project site in its entirety, and for the 8 surrounding quadrangles: *Cairns Corner, Lindsay, Frazier Valley, Woodville, Success Dam, Sausalito School, Ducor,* and *Fountain Springs*. An official species list was obtained using the USFWS IPaC system for federally-listed species with potential to be affected by the Project. These species and their potential to occur within the Project area are listed in **Table 1** and **Table 2** on the following pages. Additionally, Section 7 determinations are made in **Table 3** in **Section 3.5**. Raw data obtained from CNDDB and IPaC are available in **Appendix B** and **Appendix C**, respectively, to this document. As described in **Section 1.3**, other sources of information utilized in the preparation of this analysis included the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California, CalFlora's online database of California native plants, the Jepson Herbarium online database (Jepson eFlora), U.S. Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS), the NatureServe Explorer online database, the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Plants Database, the California Department of Fish and Wildlife (CDFW) California Wildlife Habitat Relationships (CWHR) database, ebird.org, and the California Herps online database. **Figure 2** shows the Project's 7.5-minute quadrangle, according to USGS Topographic Maps.

Table 1. List of Special Status Animals with Potential to Occur Onsite and/or in the Vicinity

Species	Status	Habitat	Occurrence on Project Site
American badger (*Taxidea taxus*)	CSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Most abundant in drier open spaces of shrub and grassland. Burrows in soil.	**Absent.** Suitable burrows were absent during the biological survey. The disturbed habitats and clay soils onsite are unsuitable for this species. There has been one recorded observation of this species in the vicinity of the Project which corresponds to an undated historic collection in the area of Porterville Airport. The Project site is isolated from any patches of remaining suitable habitat, separated by urban and agricultural development. Frequent human disturbance and vehicle traffic along roadways would further preclude this species from reaching the site.
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 expanse of open savannah, grassland, and/or foothill chaparral in mountain ranges of moderate altitude. Forages up to 100 miles from roost/nest site.	**Unlikely.** This species is known to occur in the vicinity of Springville and Blue Ridge National Wildlife Refuge in eastern Tulare County. However, nesting, roosting, and foraging habitat are absent from the Project area and the vicinity. At most, this species could occasionally fly over the Project site.
blunt-nosed leopard lizard (*Gambelia sila*)	FE, CE, CFP	Inhabits semi-arid grasslands, alkali flats, low foothills, canyon floors, large washes, and arroyos, usually on sandy, gravelly, or loamy substrate, sometimes on hardpan. Often found where there are abundant rodent burrows in dense vegetation or tall grass. Cannot survive on lands under cultivation. Known to bask on kangaroo rat mounds and often seeks shelter at the base of shrubs, in small mammal burrows, or in rock piles. Adults may excavate shallow burrows, but rely on deeper pre-existing rodent burrows for hibernation and reproduction.	**Absent.** The Project area does not provide suitable habitat for this species and is outside of its current distribution range. There are no recorded observations of this species in the vicinity of the Project.
California red-legged frog (*Rana draytonii*)	FT	Inhabits perennial rivers, creeks, and stock ponds with vegetative cover within the Coast Range and northern Sierra foothills.	**Absent.** The Project area does not provide suitable habitat for this species and is outside of its current known range.
Delta smelt (*Hypomesus transpacificus*)	FT, CE	This pelagic and euryhaline species is Endemic to the Sacramento-San Joaquin River Delta, upstream through Contra Costa, Sacramento, San Joaquin, and Solano Counties.	**Absent.** Suitable perennial aquatic habitat for this species is absent from the Project area and surrounding lands.

Species	Status	Habitat	Occurrence on Project Site
giant gartersnake (*Thamnophis gigas*)	FT, CT	Occurs in marshes, sloughs, drainage canals, irrigation ditches, rice fields, and adjacent uplands. Prefers locations with emergent vegetation for cover and open areas for basking. This species uses small mammal burrows adjacent to aquatic habitats for hibernation in the winter and to escape from excessive heat in the summer.	**Absent.** Habitats required by this species are absent from the Project area and surrounding lands. The Project is outside of the known distribution range of this species.
northern California legless lizard (*Anniella pulchra*)	CSC	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.	**Unlikely.** The highly disturbed habitats and clay soils of the Project area are unsuitable for this species. There is one historic (1940) observation recorded at an unknown location mapped non-specifically to the center of Porterville, and there are additional recent (2002, 2016, and 2017) observations approximately 3 miles and 4 miles southeast of the Project.
pallid bat (*Antrozous pallidus*)	CSC	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 man-made structures.	**Unlikely.** Roosting habitat is absent onsite. Individuals could potentially roost in trees or crevices of structures in the vicinity, although frequent disturbance in this region would make this unlikely. At most, this species could forage on flying arthropods over the Project site or other ruderal vacant lots in the vicinity. The only recorded regional occurrence of this species corresponds to a historic collection from 1946 at a location approximately 6 miles southeast of the Project site.

Species	Status	Habitat	Occurrence on Project Site
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Underground dens with multiple entrances in alkali sink, valley grassland, and woodland in valleys and adjacent foothills.	**Unlikely.** Burrows and suitable refugia are absent. Ground squirrels and rodents or associated sign were not observed, and therefore, foraging habitat is absent. The highly disturbed habitats and clay soils of the Project area in addition to fragmentation of the surrounding lands are generally unsuitable for this species. The Project is located within Satellite Recovery Area 8 and is approximately 60 miles northeast of the nearest known Core Population in Western Kern County (USFWS, 2010). There are 28 recorded observations of this species in the vicinity of the Project; however, 25 of these observations correspond to Morrell and Swick records from the 1972-1975 San Joaquin kit fox distribution and range studies. There has been only one recorded observation in the vicinity in the past 25 years, and it occurred approximately 13 miles north-northwest of the Project site. Although some populations of San Joaquin Kit Fox in other parts of California have adapted to an urbanized environment, modern kit fox occurrences are locally scarce. At most, this species could conceivably pass through the Project area during dispersal movements
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.** Swainson's hawks are uncommon in this portion of Tulare County. There are two recorded nesting occurrences approximately 15 miles northwest of the Project. Nesting habitat is absent onsite and foraging habitat is marginal, at best. The clay soils of the Project area are unsuitable for rodent populations.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	FE, CE	Burrows in soil. Often found in grassland and shrubland.	**Absent.** The Project site is outside of the accepted current range for this species, according to the USFWS 5 year review (2010). NatureServe database also lists this species as "extirpated/possibly extirpated" from the Upper Tule watershed (HUC: 18030006). The nearest recorded observation of this species was made in 1943 approximately 12 miles west of the Project area.

Species	Status	Habitat	Occurrence on Project Site
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSC	Occurs in a variety of habitats, but prefers cool, dark roost sites, and are often found in caves and mines. They roost in the open, hanging from walls and ceilings. Western populations typically forage on moths in areas of dense foliage.	**Absent.** Roosting and foraging habitat is absent from the Project area. There have been two recorded observations of this species in the Project's vicinity: one historic (1941) observation at an unknown location near "Mine Hill," and one observation in 1988 at an unknown location, possibly within "Porterville Mine."
tricolored blackbird (*Agelaius tricolor*)	CCE, CSC	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 on dairy farm forage fields.	**Unlikely.** Suitable nesting habitat is absent from the Project area and surrounding lands. Foraging habitat is marginal, at best.
valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs of the Central Valley and foothills. Adults are active March to June.	**Absent.** The Project is not located within the presumed historical range or presumed current distribution of this species. In 2014 USFWS published findings suggesting that previous CNDDB observations of this species within Tulare County should be discounted. (See expanded discussion in **Section 3.4.2**).
vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occupies vernal pools, clear to tea-colored water, in grass or mud-bottomed swales, and basalt depression pools.	**Possible.** Traditional vernal pools are absent. However, the clay soils onsite are conducive to seasonal pooling, and a fairy shrimp, thought to be an individual of this species, was observed within a roadside pool during a site visit on March 19, 2019. Although the species was not handled or collected, the observation was reported to CNDDB, but it has not been added to the online database, yet. According to CNDDB records, this species reportedly occurs in roadside pools along Highway 65 which runs north-south, approximately 1.5 miles west of the Project area. The nearest recorded observation was reported near the intersection of Scranton Avenue and Highway 65, approximately 3 miles southwest of the Project site (CNDDB, 2019). Even though a fairy shrimp was recently observed onsite, frequent disturbance, including ground disturbance associated with disking, and vehicular traffic makes the site generally unsuitable for this species.

Species	Status	Habitat	Occurrence on Project Site
western mastiff bat (*Eumops perotis californicus*)	CSC	Found in open, arid to semi-arid habitats, including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas, where it feeds on insects in flight. Roosts most commonly in crevices in cliff faces, but may also use high buildings and tunnels.	**Unlikely.** Suitable roosting and **b**reeding habitat is absent from the Project area and surrounding lands. At most, the ruderal field could be used for nocturnal foraging. The only recorded observation of this species in the vicinity of the Project was reported in 1994 over Lake Success, approximately 5 miles east of the Project site.
western spadefoot (*Spea hammondii*)	CSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Vernal pool s or temporary wetlands, lasting a minimum of three weeks, which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	**Unlikely.** Typical vernal pools and wetlands required for breeding are absent from the Project site and surrounding lands. Although the clay soils onsite are conducive to seasonal pooling, **t**he highly disturbed habitats of the Project area and surrounding lands are unsuitable for this species. The nearest recorded observation of this species occurred within a vernal pool reserve approximately 13 miles southwest of the Project site. There are two recent (2001 and 2010) observations recorded. One was within an ecological reserve; the other within undeveloped lands in the foothills. Both of these observations were located approximately 14 miles from the Project site.

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

Species	Status	Habitat	Occurrence on Project Site
brittlescale (*Atriplex depressa*)	CNPS 1B	Found in the San Joaquin Valley and Sacramento Valley in alkali or clay soils in shadescale scrub, valley grassland, alkali sink, and riparian communities at elevations below 1050 feet. Equally likely to occur in wetlands and non-wetlands. Blooms June – October.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. This species was not observed onsite during the field survey, which was performed during the blooming season. The only recorded observation of this species in the vicinity was reported in 1965, approximately 13 miles southwest of the Project site.
calico monkeyflower *(Diplacus pictus / Mimulus pictus / Eunanus pictus*)	CNPS 1B	Found in the Sierra Nevada foothills and the Tehachapi mountains in bare, sunny, shrubby areas, and around granite outcrops within foothill woodland communities at elevations between 450 feet and 4100 feet. Blooms March – May.	**Absent.** Habitats required by this species are absent from the Project site. The nearest recorded observation of this species was reported in 1983, approximately 4 miles east of the Project.
California alkali grass (*Puccinellia simplex*)	CNPS 1B	Found in the San Joaquin Valley and other parts of California in saline flats and mineral springs within valley grassland and wetland-riparian communities at elevations below 3000 feet. Blooms March – May.	**Absent.** Habitats required by this species are absent from the Project area and surrounding lands. The only recorded observation of this species in the vicinity was reported in 1998, approximately 14 miles west-northwest of the Project site.
California jewelflower (*Caulanthus californicus*)	FE, CE, CNPS 1B	Found in the San Joaquin Valley and Western Traverse Ranges. Occurs on flats and slopes, generally in non-alkaline grassland at elevations between 230 feet and 3280 feet. Blooms February – April.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. According to CNDDB and CNPS, this species is presumed extirpated from the Porterville region.
Chaparral ragwort (*Senecio aphanactis*)	CNPS 2B	Found in chaparral, cismontane woodland, and coastal scrub, typically within drying alkaline flats at elevations between 65 feet – 2800 feet. Blooms February – May.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. The only recorded observation of this species was reported in 1982 at an elevation of approximately 1200 feet on Mine Hill, approximately 6 miles east of the Project site.

Species	Status	Habitat	Occurrence on Project Site
Earlimart orache (*Atriplex cordulata var. erecticaulis*)	CNPS 1B	Found in the San Joaquin Valley in saline or alkaline soils, typically within valley or foothill grassland, at elevations below 325 feet. Blooms August – September.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. There are two recorded observations of this species in the vicinity; one reported in 1999 approximately 14 miles west-northwest and one reported in 1989 approximately 13 miles west-southwest of the Project.
Keck's checkerbloom (*Sidalcea keckii*)	FE, CNPS 1B	Occurs in cismontane woodland, valley and foothill grassland, typically on grassy slopes in clay soils at elevations between 275 feet – 1650 feet. Blooms April – May.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. According to CNDDB and CNPS, this species is presumed extirpated from the Porterville region.
lesser saltscale (*Atriplex minuscula*)	CNPS 1B	Found in the San Joaquin Valley in playas; sandy, alkaline soils in shadescale scrub, valley grassland, and alkali sink communities at elevations below 300 feet. Blooms April – October.	**Absent.** The disturbed habitats and clay soils onsite are generally unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. The only recorded observation of this species in the vicinity was reported in 2010 approximately 14 miles west-northwest of the Project site.
Lost Hills crownscale (*Atriplex coronata var. vallicola*)	CNPS 1B	Found in the San Joaquin Valley in chenopod scrub, valley and foothill grassland, and vernal pools at elevations below 1400 feet. Typically found in dried ponds on alkaline soils. Blooms April – September.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. The only recorded observation of this species was reported in 1965 within vernal pool grassland approximately 13 miles southwest of the Project site.
Madera leptosiphon (*Leptosiphon serrulatus*)	CNPS 1B	Found in openings in foothill woodland, often yellow-pine forest, and chaparral at elevations between 1000 feet and 4300 feet. Blooms April – May.	**Absent.** The Project area is outside of the elevational range of this species and suitable habitat is absent. The only recorded observation in the vicinity was reported in 1935 approximately 5 miles south-southeast of the Project.
recurved larkspur (*Delphinium recurvatum*)	CNPS 1B	Found in the San Joaquin Valley and other parts of California. Occurs in poorly drained, fine, alkaline soils in grassland at elevations between 100 feet and 1965 feet. Most often found in non-wetlands, but occasionally found in wetlands. Blooms March – June.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. In the Project's vicinity, there are four recorded observations of this species, two of which have been determined to be extirpated. The remaining two observations were reported in 1969 and 2010, both located more than 12 miles from the Project site.

Species	Status	Habitat	Occurrence on Project Site
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 in valley grassland and foothill woodland communities at elevations between 325 feet and 2950 feet. Blooms March – May.	**Absent.** The disturbed habitats of the Project site are unsuitable for this species. The nearest recorded observation of this species was reported in 1990 approximately 1.5 miles east-northeast of the Project site.
San Joaquin woollythreads (*Monolopia congdonii*)	FE, CNPS 1B	Occurs in the San Joaquin Valley in sandy soils in shadescale shrub and grasslands at elevations between 300 feet and 2300 feet. Found primarily in non-wetlands, but occasionally found in wetlands. Blooms February – May.	**Absent.** The disturbed habitats and clay soils of the Project site are unsuitable for this species. The only recorded observation of this species in the vicinity corresponds to a historic collection from 1881 in an unknown location along Deer Creek in Tulare County.
shining navarretia (*Navarretia nigelliformis ssp. radians*)	CNPS 1B	Found in cismontane woodland and valley and foothill grassland communities, sometimes in vernal pools. Occurs at elevations between 200 feet and 3200 feet. Blooms May – July.	**Absent.** The disturbed habitats of the Project area are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. A population of this species occurs in the Lake Success area approximately 4.5 miles east of the Project.
spiny-sepaled button-celery (*Eryngium spinosepalum*)	CNPS 1B	Found in the Sierra Nevada Foothills and portions of the San Joaquin Valley. Occurs in vernal pools, swales, and roadside ditches at elevations between 325 feet and 4160 feet in valley grassland, freshwater wetlands, and riparian communities. Blooms April – July.	**Absent.** The disturbed habitats of the Project area are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. The nearest observation of this species was reported in 2016 near Lake Success, approximately 4 miles northeast of the Project site.
Springville clarkia (*Clarkia springvillensis*)	FT, CE, CNPS 1B	Found in chaparral, cismontane woodland, valley and foothill grassland. Most often occurs in cutbanks and openings in blue oak woodland in decomposed granite loam soils at elevations between 675 feet – 7400 feet. Blooms May.	**Absent.** The Project site is below the accepted altitudinal range of this species and suitable habitat is absent. The nearest recorded observation of this species was reported in 2002 in the foothills, approximately 2 miles north of the Project area.
striped adobe-lily (*Fritillaria striata*)	CT, CNPS 1B	Found in the Sierra Nevada foothills in adobe soil within valley grassland and foothill woodland communities at elevations below 3300 feet. Blooms February – April.	**Absent.** The disturbed habitats of the Project area are unsuitable for this species. There is one recorded observation of this species which intersects the Project area. However, this record corresponds to a historic collection from 1927 at an unknown location in the vicinity of Porterville. The

Species	Status	Habitat	Occurrence on Project Site
			status of this population has since been updated to extirpated. The nearest presumed extant observation record of this species was reported in 2007 in the foothills approximately 2 miles north of the Project site.
subtle orache (*Atriplex subtilis*)	CNPS 1B	Found in the San Joaquin Valley in saline depressions at elevations below 230 feet. Blooms June – October.	**Absent.** The disturbed habitats of the Project area are unsuitable for this species. This species was not observed during the field survey, which was conducted during the blooming season. There are three recorded observations of this species in the vicinity. Observations were reported in 1975, 1971, and 1999, all of which were located more than 13 miles from the Project site.
vernal pool smallscale *(Atriplex persistens*)	CNPS 1B	Occurs in San Joaquin Valley and Sacramento Valley in alkaline vernal pools at elevations below 375 feet. Usually found in wetlands, but occasionally found in non-wetlands. Blooms June – September.	**Absent.** The Project site is above the accepted altitudinal range of this species, and the disturbed onsite are unsuitable. This species was not observed during the field survey, which was conducted during the blooming season. The only recorded observation of this species in the vicinity was reported in 1985 at Pixley Vernal Pool Preserve, approximately 13 miles southwest of the Project site.

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
FT	Federally Threatened
FPE	Federally Endangered (Proposed)
FPT	Federally Threatened (Proposed)
FC	Federal Candidate
CE	California Endangered
CT	California Threatened
CCT	California Threatened (Candidate)
CFP	California Fully Protected
CSC	California Species of Special Concern
CWL	California Watch List
CCE	California Endangered (Candidate)
CR	California Rare

CNPS LISTING

1A	Plants Presumed Extinct in California
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2	Plants Rare, Threatened, or Endangered in California, but more common 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 state and/or federally listed as threatened or endangered 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 *California Environmental Quality Act, Statute and Guidelines* (AEP 2012), "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 the 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 (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, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

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 (CFR 1508.27).

Context means that the significance of an action must be analyzed in terms of the affected environment in which a proposed action would occur. For the purposes of assessing effects of an action on biological resources, the relevant context is often local, which means the analysis requires a comparison of the action area's biological resources to the biological resources of the local area. However, the analysis may also require a comparison of the action area's biological resources with the biological resources of an entire region.

Intensity refers to the severity of impact. In considering intensity of impact to biological resources, it is necessary to address the unique qualities of wetlands and ecologically critical areas that may be affected, the degree to which the action will be controversial, the degree to which the effects will be controversial, the degree to which the effects will be uncertain, the degree to which the action will establish a precedent for future actions with potentially significant effects, and the potential for the action to result in cumulatively significant effects.

The effects of an action on some biological resources are generally considered to be "significant." An action that adversely affects federally listed threatened or endangered species, waters of the United States, or migratory movements of fish and wildlife are some examples of significant effects.

NEPA requires disclosure of feasible mitigation measures for the effects of an action on the environment. Suitable measures include the following:

a) Avoidance of the effect by not taking a certain action or parts of an action.
b) Mitigation of the effect by limiting the degree or magnitude of the action and its implementation.
c) Rectifying the effect by repairing, rehabilitating, or restoring the affected environment.
d) Reducing or eliminating the effect over time by preservation and maintenance operations throughout the life of the action.
e) Compensating for the effect by replacing or providing substitute resources or environments.

This report identifies likely effects of an action, identifies those that may be considered significant pursuant to the provisions of NEPA, and provides mitigation measures to avoid adverse effects to biological resources.

3.2 Relevant Goals, Policies, and Laws

3.2.1 City of Porterville 2030 General Plan

The City of Porterville 2030 General Plan sets forth the following goals and policies that protect biological resources and that have potential relevance to the Project's environmental review:

LU-I-17: Require that all new subdivisions preserve natural, cultural, and biological resources, including stands of large trees and rock outcroppings, to the maximum extent feasible.

OSC-G-7: protect habitat for special status species, designated under State and federal law.

OSC-I-28: Require protection of sensitive habitat areas and special status species in new development site designs in the following order: 1) avoidance; 2) onsite mitigation; 3) offsite mitigation, and 4) purchase of mitigation credits.

OSC-I-30: Adopt regulations to promote water-conserving landscape plans, including the use of drought tolerant plants.

OSC-I-32: Identify and protect wildlife movement corridors that serve critical habitats to minimize wildlife-urban conflicts.

OSC-I-34: Continue to require street tree planting in new development and support the City's tree planting fund.

OSC-I-35: Consult with all responsible agencies about wetland and vernal pool habitat potentially affected by development.

OSC-I-39: Adopt the Regional Water Quality Control Board's policies on soil disturbance activities in order to minimize the disturbance of soil, vegetation, organic debris, and other materials that control runoff.

OSC-I-45: Continue to require use of feasible and practical best management practices (BMPs) and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Regional Water Quality Control Board.

3.2.2 Threatened and Endangered Species

Permits may be required from the USFWS and/or CDFW if activities associated with a project have the potential to result in the "take" of a species listed as threatened or endangered under the federal and/or State Endangered Species Acts. "Take" is defined by the State of California 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 federal Endangered Species Act to include "harm" (16 USC Section 1532(19), 50 CFR Section 17.3). The CDFW and the USFWS are responding agencies under CEQA. Both agencies review CEQA documents in order to determine the adequacy of their 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 federal Endangered Species Act (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 Federal 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 actually covers almost all birds 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 bird covered by the MBTA (Section 3513), as well as any other native non-game bird (Section 3800).

3.2.5 Birds of Prey

Birds of prey are protected in California under provisions of 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 federal Bald and Golden Eagle Protection Act (16 USC 668), which makes it unlawful to kill birds or their eggs.

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 CDFW.

3.2.7 Wetlands and other "Jurisdictional Waters"

Natural drainage channels and adjacent wetlands may be considered "waters of the United States" or "jurisdictional waters" subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As determined by the United States Supreme Court in its 2001 *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (*SWANCC*) decision, 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 Supreme Court ruled that a significant nexus between a wetland and other navigable waters must exist for the wetland itself to be considered a navigable and therefore jurisdictional water. Furthermore, the Supreme Court clarified that the

Environmental Protection Agency (EPA) and the USACE will not assert jurisdiction over ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The USACE regulates the filling or grading of Waters of the U.S. under the authority of Section 404 of the Clean Water Act. 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 U.S. 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 State Water Resources Control Board has regulatory authority to protect the water quality of all surface water and groundwater in the State of 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 Waters of the U.S. require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 Clean Water Act permit. Discharges into all Waters of the State, even those that are not also Waters of the U.S., 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 Pollution 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 Water of the U.S. may require a 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 of any material from their bed or bank, or the deposition of debris require a Notification of 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 measures will be implemented to protect the habitat values of the lake or drainage in question.

3.3 Potentially Significant Project-Related Impacts and Mitigation

Species identified as candidate, sensitive, or special status species in local or regional plans policies or regulations by CDFW or the USFWS that have the potential to be impacted by the Proposed Project are identified below with corresponding mitigation measures.

3.3.1 Project-Related Mortality and/or Disturbance of Nesting Raptors, Migratory Birds, and Special Status Birds

Although rodents were not observed at the time of the field survey and the clay soils are generally unsuitable for burrowing, there was an abundance of flying arthropods which makes the site marginally suitable foraging habitat for a variety of avian species, including raptors. Trees onsite were limited to two shrubby olive trees, neither of which were large enough to house a raptor nest. However, smaller avian species could nest within the olive trees and ground nesting birds, particularly those tolerant of disturbance, such as the killdeer (*Charadrius vociferous*) could nest on the bare ground onsite. Even though trees onsite are not suitable for raptor nesting, there are large trees in the vicinity which could support a large stick nest.

Birds foraging within the Project site during construction activities would be expected to fly away from disturbance, subsequently eliminating the risk of injury or mortality while foraging. However, birds nesting

within the Project site could be injured or killed by Project activities. Furthermore, construction activities could disturb birds nesting within or adjacent to work areas, resulting in nest abandonment. Project construction activities that adversely affect the nesting success of raptors and migratory birds or result in the mortality of individual birds constitutes a violation of State and federal laws and is considered a significant impact under CEQA and NEPA.

The Project does not propose the removal of potential raptor nest trees, and foraging habitat for raptors onsite is marginal, at best given the frequent human disturbance and absence of rodents. Habitat of higher foraging and nesting value is regionally abundant. Therefore, the development resulting from implementation of the Project would not be considered a significant loss of foraging or nesting habitat under CEQA or NEPA.

Implementation of the following measures will reduce potential impacts to nesting raptors, migratory birds, and special status birds to a less than significant level under CEQA and NEPA and will ensure compliance with State and federal laws protecting these avian species.

Mitigation. The following measures will be implemented prior to the start of construction:

> ***Mitigation Measure 3.3.1a (Avoidance):*** The Project's construction activities shall occur, if feasible, between September 1 and January 31 (outside of nesting bird season) in an effort to avoid impacts to nesting birds.
>
> ***Mitigation Measure 3.3.1b (Pre-construction Surveys):*** If activities must occur within nesting bird season (February 1 to August 31), a qualified biologist shall conduct pre-construction surveys for active nests within 30 days prior to the start of construction. The survey shall include the proposed work area and surrounding lands within 500 feet. If no active nests are observed, no further mitigation is required. Raptor nests are considered "active" upon the nest-building stage.
>
> ***Mitigation Measure 3.3.1c (Establish Buffers):*** On discovery of any active nests near work areas, the biologist shall determine appropriate construction setback distances based on applicable CDFW and/or USFWS guidelines and/or the biology of the species in question. Construction buffers shall be identified with flagging, fencing, or other easily visible means, and shall be maintained until the biologist has determined that the nestlings have fledged.

3.3.2 Project-Related Impacts to Vernal Pool Fairy Shrimp

The Project area consists of a ruderal, vacant lot of land at an elevation of approximately 450 feet above mean sea level. The site is relatively flat, and topographical features such as depressions typical of wetlands, vernal pools, or streams were not observed onsite. The lot is subject to regular ground-disturbance, as it is disked at least twice per year for vegetation management and fire prevention. In addition, the northern portion of the site, along Grand Avenue is used as a parking area for vehicles associated with businesses and residences in the vicinity.

According to the NRCS Soils Report, which is available in **Appendix E** at the end of this document, soils onsite consist of Porterville clay, an expansive clay soil common in the Project's vicinity. Although a formal aquatic resources delineation has not been conducted in accordance with USACE guidelines, and fieldwork did not include the excavation of a soil pit, the soils onsite did appear clayey, consistent with those predicted by the NRCS web soil survey. During the site visit in March, which was conducted shortly after recent precipitation events and during an abnormally wet year, several tire ruts along the northern site boundary were filled with standing pools of turbid water. During the field survey in July, these tire ruts were observed again, but they were dry and unremarkable at that time. These areas of the site did not display a "bathtub ring" of vegetation, a prevalence of hydrophytic vegetation, nor were any typical vernal pool plant species

observed. Furthermore, a review of National Wetlands Inventory (NWI) data and aerial imagery from 1946 to present did not reveal the presence of visible wetlands, vernal pools, or other aquatic features onsite.

A fairy shrimp, thought to be a vernal pool fairy shrimp (*Branchinecta lynchi*), was observed within an ephemeral roadside puddle during a site visit on March 19, 2019. Typical vernal pools were absent both in March during the site visit and in July during the biological survey of the Project site. As discussed in **Section 2.3.1**, the fairy shrimp was not collected, handled, or examined through a microscope. The identification was based on Ms. Fletcher's previous observations and experience with this species, and the occurrence was subsequently reported to CNDDB. Photographs of the fairy shrimp and the ephemeral pool are available in **Appendix A** at the end of this document. Additional video documentation is available upon request.

Vernal pool fairy shrimp are a federally threatened species, protected by the Federal Endangered Species Act (FESA). The vernal pool fairy shrimp is distinguished from other similar species by the morphology of the male's second antenna and the female's third thoracic segment. Both of these features are often only visible under close inspection with a microscope or hand lens. Therefore, it is possible that the fairy shrimp that was observed on March 19, 2019 was potentially misidentified as the federally protected vernal pool fairy shrimp (*Branchinecta lynchi*) instead of the more common and unregulated versatile fairy shrimp (*Branchinecta lindahli*). It is also possible that this fairy shrimp individual or cyst was carried by waterfowl or a shorebird and deposited at this location. All of the roadside tire ruts were inspected in March and again in July, and no additional fairy shrimp individuals were observed. Unfortunately, the initial observation was made in Spring, after the suitable time period to conduct protocol-level wet season surveys, which was initially thought to be the desired approach in order to prove presence or absence of this species onsite. Generally, wet-season surveys are conducted by a qualified and permitted vernal pool biologist in order to detect the presence of this species within a geographic area. However, after several discussions with USFWS staff and under the suggestion of vernal pool expert Dr. Brent Helm, it was decided that dry season surveys would be more appropriate for this particular site based on the absence of typical vernal pool habitat and the arid climate of the region. Dry season surveys can be conducted any time of year and are not reliant on precipitation levels. Soil samples are taken and if cysts are found, they can be hatched in a laboratory and/or identified using genetic analysis.

In order to ensure protection of this species and/or compensate for the potential loss of individuals, it is recommended that the Project proponent proceed with focused surveys for vernal pool fairy shrimp and initiate formal consultation with USFWS if this species is detected onsite. These recommendations are not necessarily considered mitigation measures, because they should be completed well in advance of Project implementation, concurrent with the analysis of potential environmental impacts. Recommendations regarding next steps are outlined below:

> ***Recommendation 1 (Focused Survey):*** Prior to construction, mobilization, or staging, a qualified vernal pool biologist shall conduct a protocol-level survey of the Project area, according to USFWS's 2015 *Survey Guidelines for the Listed Large Branchiopods*, in order to determine the presence or absence of special status vernal pool branchiopods and/or the extent of suitable habitat. If the qualified vernal pool biologist determines an alternate method is appropriate for detecting presence/absence of the species, he/she shall include an explanation regarding variance from the standard approved methodology in the corresponding report which will be reviewed by USFWS to determine adequacy of the study. The biologist conducting the survey shall possess the minimum qualifications and appropriate recovery permit as described in the USFWS's 2017 *Pacific Southwest Region (Region 8) and Pacific Region (Region 1) Minimum Qualifications for Obtaining and Maintaining a Section 10(a)(1)(A) Recovery Permit for Conducting Surveys for the Listed Large Branchiopod Species.*
>
> ***Recommendation 2 (Formal Consultation):*** If vernal pool fairy shrimp individuals or cysts are detected during the protocol-level wet season survey, the Project proponent shall initiate formal consultation with USFWS, which includes but is not limited to submittal of an application for an incidental take permit along with a biological assessment and development of a habitat conservation plan.

It should be noted that the formal consultation can be expedited through a Section 7 consultation if it is initiated by a federal agency. The Project described in this report is a non-federal project and would not be allowed to consult directly under Section 7. However, there are many ways to make a nexus between a non-federal project and a federal agency, which would allow a non-federal party to consult through that agency.

As discussed above, typical vernal pool habitat was not observed onsite. In fact, the disturbed nature of the roadside tire ruts would typically be considered unsuitable for vernal pool fairy shrimp (*Branchinecta lynchi).* Therefore, development of the site would not be considered a reduction in suitable habitat for this species, and mitigation or compensation for loss of habitat may not be required by USFWS.

3.4 Less Than Significant Project-Related Impacts

3.4.1 Project-Related Impacts to Special Status Plant Species

19 special status plant species have been documented in the Project vicinity, including brittlescale (*Atriplex depressa*), calico monkeyflower (*Diplacus pictus/Mimulus pictus/Eunanus pictus*), California alkali grass (*Puccinellia simplex*), California jewelflower (*Caulanthus californicus*), Chaparral ragwort (*Senecio aphanactis*), Earlimart orache (*Atriplex cordulata var. erecticaulis*), Keck's checkerbloom (*Sidalcea keckii*), lesser saltscale (*Atriplex miniscula*), Lost Hills crownscale (*Atriplex coronata var. vallicola*), Madera leptosiphon (*Leptosiphon serrulatus*), recurved larkspur (*Delphinium recurvatum*), San Joaquin adobe sunburst (*Pseudobahia peirsonii*), San Joaquín woollythreads (*Monolopia congdonii*), shining navarretia (*Navarretia nigelliformis ssp. radians*), spiny-sepaled button-celery (*Eryngium spinosepalum*), Springville clarkia (*Clarkia springvillensis*), striped adobe-lily (*Fritillaria striata),* subtle orache (*Atriplex subtilis*), and vernal pool smallscale (*Atriplex persistens*). None of these species were observed during the biological survey, which was conducted in Summer, during the typical blooming season for many of these species. In fact, the biological survey revealed a heavily disturbed lot of land overgrown with weedy invasive plant species. As explained in **Table 2**, all of the aforementioned special status plant species are absent from the Project area due to past and ongoing disturbance and/or the absence of suitable habitat. Therefore, the implementation of the Project will have no effect on individual plants or regional populations of these special status plant species. Mitigation measures are not warranted.

3.4.2 Project-Related Impacts to Special Status Animal Species Absent From, or Unlikely to Occur on, the Project Site

After completing a biological survey, 8 of the 17 published accounts of special status animal species were declared absent from the Project area, one of which is the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

In 2014, USFWS published *Withdrawal of the Proposed Rule To Remove the Valley Elderberry Longhorn Beetle From the Federal List of Endangered and Threatened Wildlife*, in which the presumed historical range and the presumed extant range of the valley elderberry longhorn beetle is redefined. Very few of the records involve observation of an adult valley elderberry longhorn beetle; the majority are based exclusively on observation of exit holes, which may not be an accurate depiction of occupancy. There are several problems with recording an observation of a sensitive species based on an ambiguous sign, such as an exit hole. Two subspecies of elderberry longhorn beetle exist: the valley elderberry longhorn beetle and the California elderberry longhorn beetle. These two subspecies are so similar that experts are only able to distinguish between the two with certainty by adult male coloration. Thus, species accounts may be unreliable in areas where range overlaps and the sex of the subject is not specified. The document further states that all observations within Tulare County should be discounted as they likely represent the California elderberry longhorn beetle.

Of the 17 regionally occurring special status species, 16 are considered absent or unlikely to occur within the Project area due to past or ongoing disturbance and/or absence of suitable habitat. As explained in **Table 1**, the following 8 species were deemed absent from the Project area: American badger (*Taxidea taxus*), blunt-

nosed leopard lizard (*Gambelia sila*), California red-legged frog (*Rana draytonii*), Delta smelt (*Hypomesus transpacificus*), giant gartersnake (*Thamnophis gigas*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), Townsend's big-eared bat (*Corynorhinus townsendii*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*); and the following 8 species were deemed unlikely to occur within the Project area: California condor (*Gymnogyps californianus*), northern California legless lizard (*Anniella pulchra*), pallid bat (*Antrozous pallidus*), San Joaquin kit fox (*Vulpes macrotis mutica*), Swainson's hawk (*Buteo swainsoni*), tricolored blackbird (*Agelaius tricolor*), western mastiff bat (*Eumops perotis californicus*), and western spadefoot (*Spea hammondii*). Since it is highly unlikely that these species would occur onsite, implementation of the Project should have no impact on these 16 special status species through construction mortality, disturbance, or loss of habitat. Mitigation measures are not warranted.

3.4.3 Project-Related Impacts to Jurisdictional Waters, Wetlands, Navigable Waters, Wild and Scenic Rivers, or other Water Features, and Riparian Habitat

The only potential aquatic features onsite are dry, isolated, depressions in clay soils along the Grand Avenue right-of-way. These ephemeral pools have no apparent connection to navigable waters or a natural drainage channel with a bed or bank, and therefore it can be reasonably assumed that jurisdictional waters are absent. Riparian habitat was absent at the time of the field survey. Furthermore, the site is disked and cleared at least twice per year for weed abatement and fire control and therefore not considered optimal habitat. The Project does not propose impacts or discharge to any surface waters. Regardless, due to proposed ground disturbance of an area greater than one acre in size, the Project will implement a SWPPP. For all of these reasons, implementation of the Project should have no impact on jurisdictional waters, wetlands, navigable waters, wild and scenic rivers, or other water features, and riparian habitat. Furthermore, the Project will not impact any bodies of water and will not require compliance with the Fish and Wildlife Coordination Act. Mitigation measures are not warranted.

3.4.4 Project-Related Impacts to Wildlife Movement Corridors

The Project area does not contain features that would be likely to function as wildlife movement corridors. Furthermore, the Project is located in a region often disturbed by human activities related to adjacent industrial uses which would discourage dispersal and migration. Therefore, implementation of the Project will have no impact on wildlife movement corridors. Mitigation is not warranted.

3.4.5 Project-Related Impacts to Critical Habitat

Designated critical habitat is absent from the Project area and surrounding lands. Therefore, there will be no impact to critical habitat, and mitigation is not warranted.

3.4.6 Local Policies or Habitat Conservation Plans

Proposed Project design appears to be consistent with the goals and policies of the City of Porterville 2030 General Plan. There are no known habitat conservation plans in the Project vicinity. Mitigation is not warranted.

3.4.7 Coastal Zone and Coastal Barriers Resources Act

The Project is not located within the coastal zone. The Project will 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 is not warranted.

3.4.8 Project-Related Impact to Essential Fish Habitat

Essential Fish Habitat (EFH) and Habitat Areas of Particular Concern (HAPC) are absent from the Project area and surrounding lands, and consultation with the National Marine Fisheries (NMFS) Service will not be required. Query results of the NMFS EHF Mapper can be found in **Appendix D** at the end of this document. Mitigation is not warranted.

3.5 Section 7 Determinations

In addition to the effects analysis performed in Sections 2 and 3 of this document, **Table 3** summarizes Project effect determinations for Federally Listed Species found on the USFWS IPaC list generated on July 8, 2019 (**Appendix C**), in accordance with Section 7 of the Endangered Species Act.

Table 3. Section 7 Determinations

Species	Determination	Rationale for Determination
blunt-nosed leopard lizard (*Gambelia sila*)	**No effect**	Habitat absent. Project area is outside of the known distribution range of this species.
California red-legged frog (*Rana draytonii*)	**No effect**	Habitat absent. Project area is outside of the known distribution range of this species.
Delta smelt (*Hypomesus transpacificus*)	**No effect**	Habitat absent. Water features absent from the site and surrounding areas. The Project does not include lake or streambed altering activities. Therefore, there is no potential for indirect downstream effects.
giant gartersnake (*Thamnophis gigas*)	**No effect**	Habitat absent. Project area is outside of the known distribution range of this species.
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	**No effect**	Habitat absent.
San Joaquin kit fox (*Vulpes macrotis mutica*)	**No effect**	Habitat absent.
Springville clarkia (*Clarkia springvillensis*)	**No effect**	Habitat absent. Project area is outside of the accepted altitudinal range of this species.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)	**No effect**	Habitat absent. Project area is outside of the known distribution range of this species.
vernal pool fairy shrimp (*Branchinecta lynchi*)	**Unable to make a determination at this time**	Typical vernal pool habitat is absent. Degraded habitat in the form of roadside ephemeral pools is present. Recommend focused surveys to determine the presence or absence of this species onsite.

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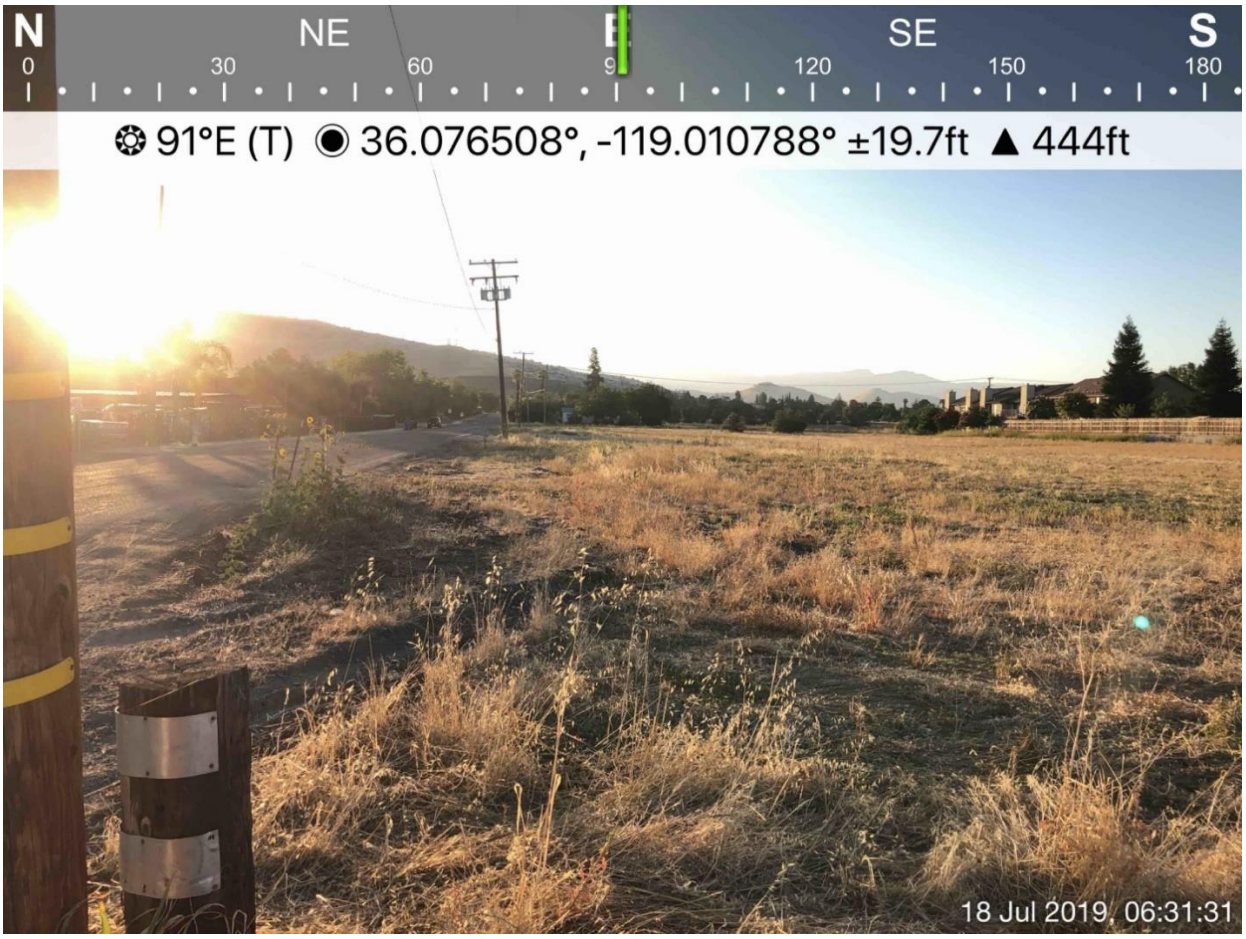
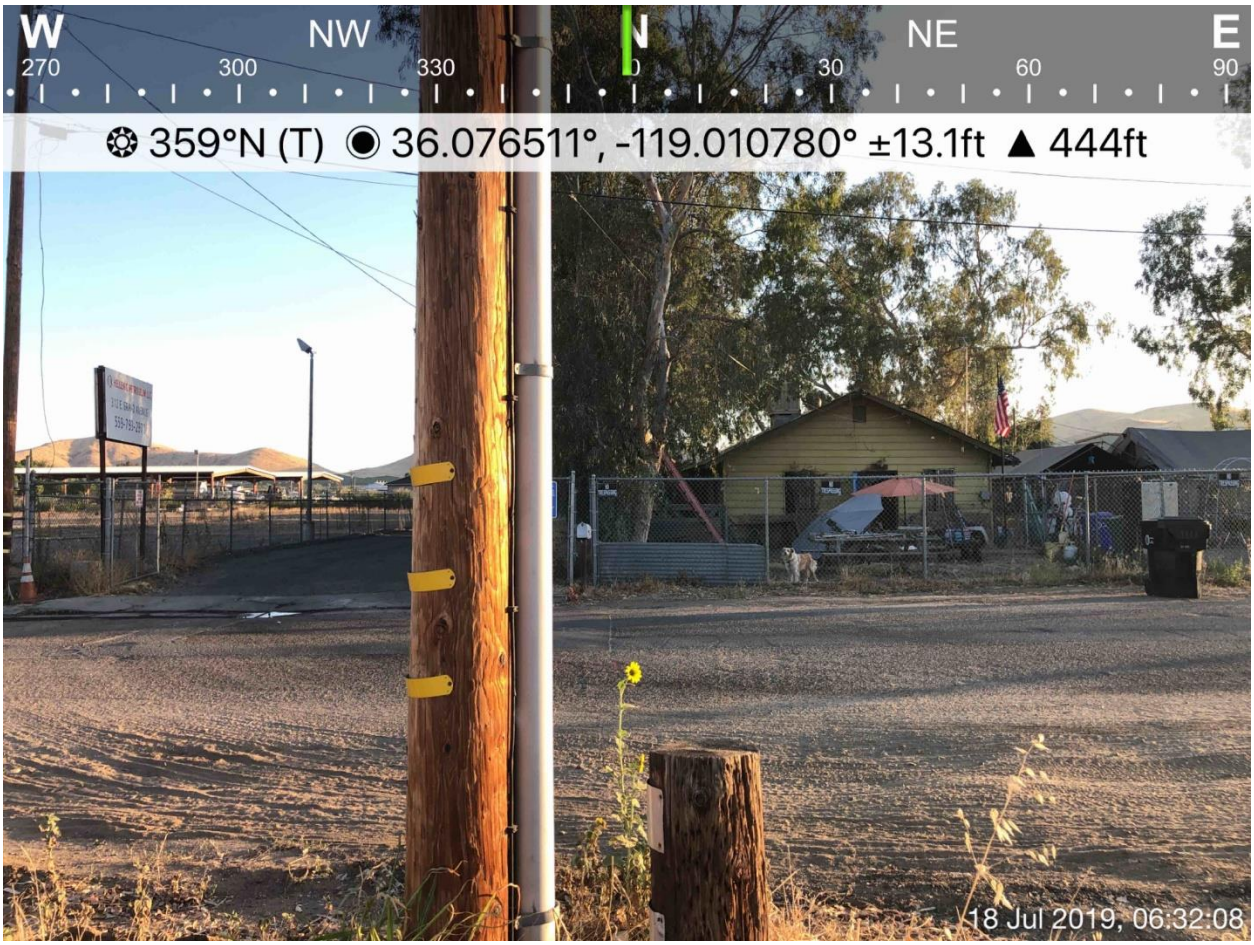
Appendix A. Selected Photographs of the Project Site



Photograph 1: Overview of the northern site boundary. Grand Avenue is visible to the left of the power lines in this photograph.

Photograph 2: Overview of the Project area from the northwest site boundary.

Photograph 3: Overview of the western site boundary.



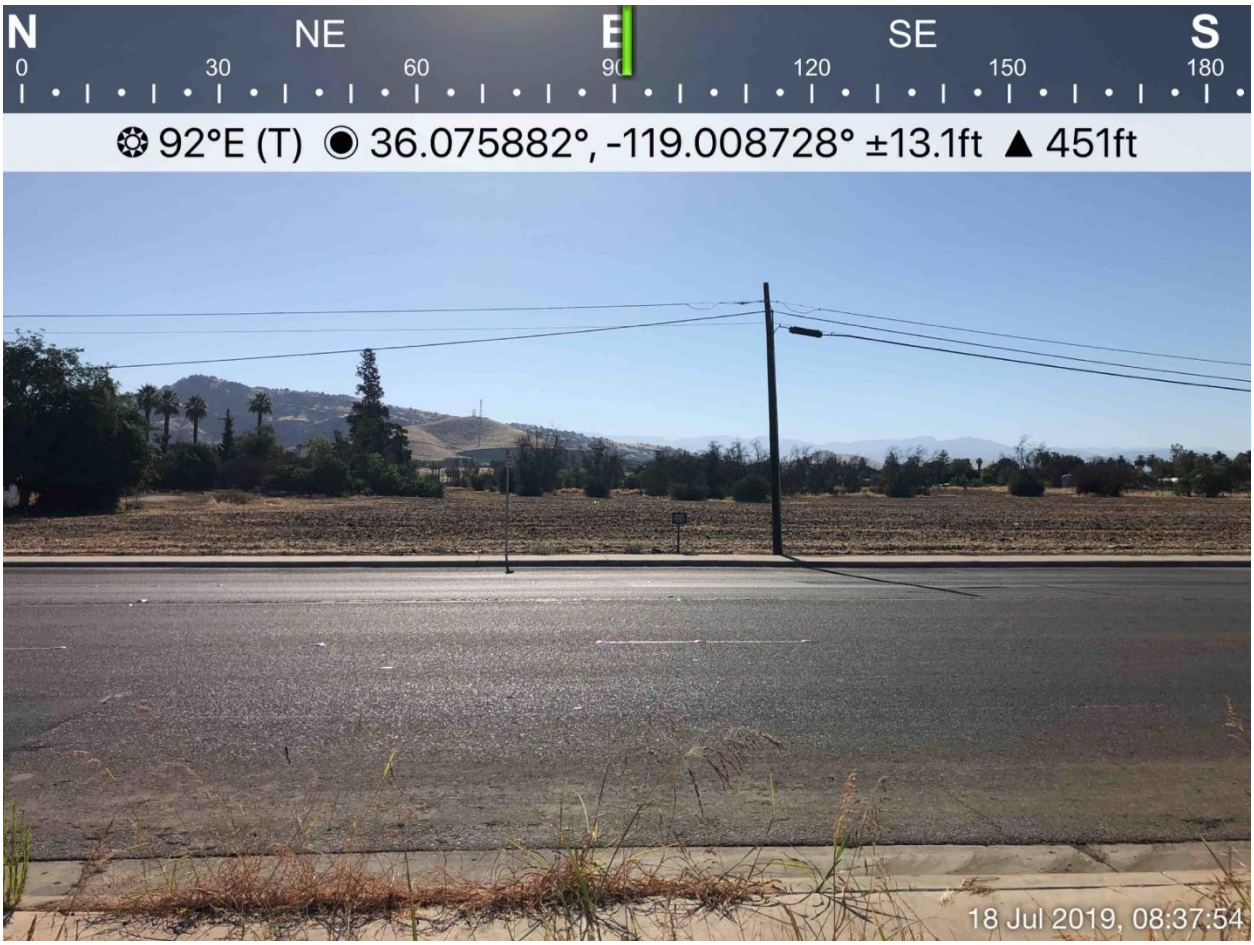
Photograph 4: Overview of adjacent residences and industrial uses north of the Project area, across Grand Avenue. Large, barking, domestic dogs and an abundance of feral cats were present at the time of the field survey.

Photograph 5: Two shrubby olive trees onsite.

Photograph 6: Overview of the southern site boundary.

Photograph 7: Overview of the Project area from the southeast site boundary.

Photograph 8: Overview of the eastern site boundary.



Photograph 9: Overview of the ruderal fallow field east of the Project area, across Plano Street.

Photograph 10: One of the inactive burrows where the eastern site boundary meets the sidewalk along Plano Street. This burrow is covered in cobwebs which are visible in this photo.

Photograph 11: Overview of the northeast corner of the Project site, showing the area where inactive burrows were observed. The remainder of the site lacked any burrows and soils were hard and clayey, unsuitable for burrowing.

Photograph 12: Overview of the northern site boundary and areas used as parking for residences and businesses in the vicnity.

Photograph 13: Dried tire ruts in clay soils along the northern site boundary within the Grand Avenue right-of-way. This is the location of the pool containing the fairy shrimp, observed in March 2019.

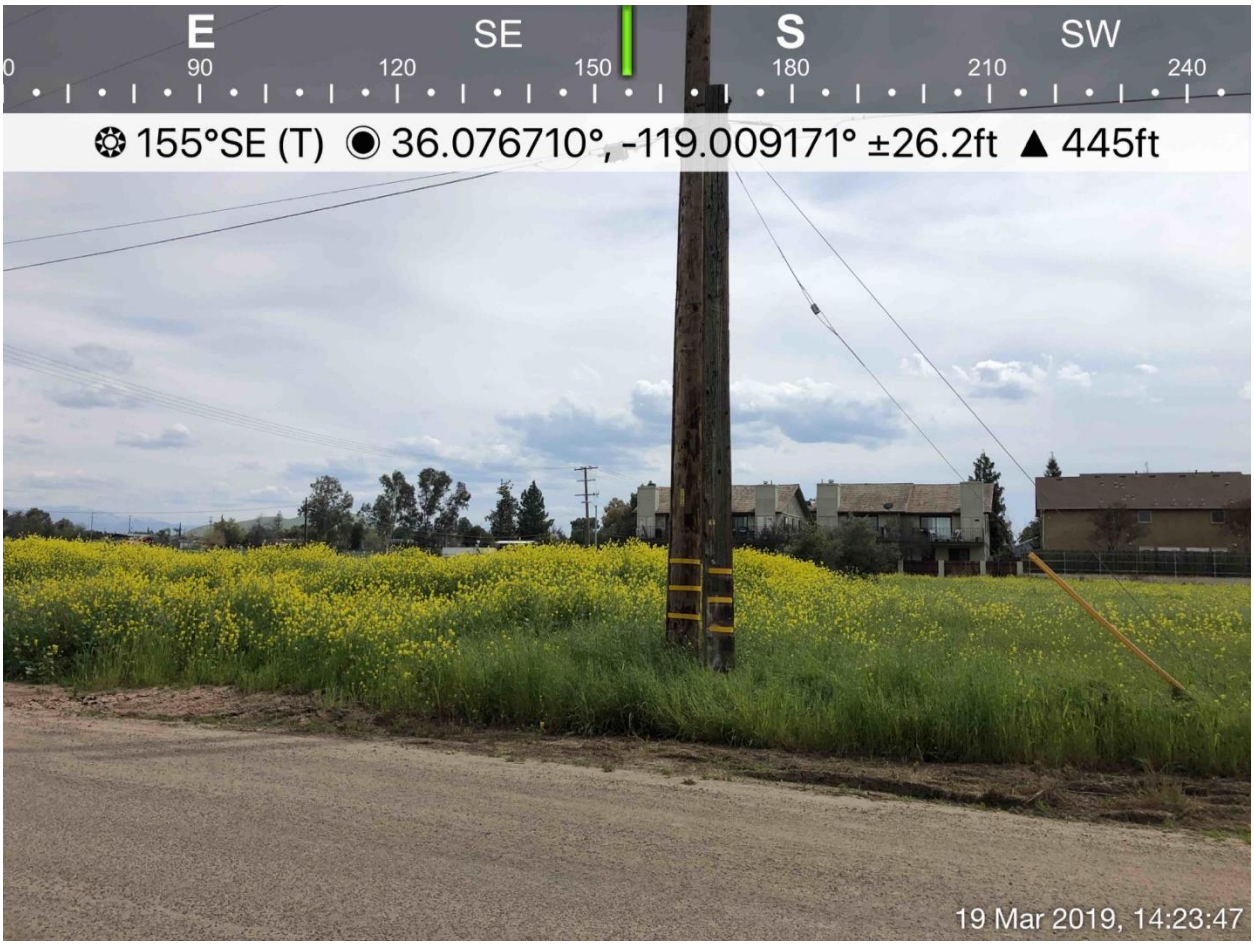
Photograph 14: Overview of northern site boundary along Grand Avenue. In March 2019, several pools of turbid water were observed in tire ruts and roadside depressions in this region.

Photograph 15: Overview of northern site boundary along Grand Avenue. In March 2019, several pools of turbid water were observed in tire ruts and roadside depressions in this region.

Photograph 16: Overview of the Project area from the southwest site boundary.

Photograph 17: Overview of the adjacent fallow field to the west.

Photograph 18: Overview of the Project area from Grand Avenue, taken in March 2019. Tire ruts are visible in the soil.



Photograph 19: Overview of the Project area from Grand Avenue, taken in March 2019. Tire ruts are visible in the soil.

Photograph 20: Tire ruts along Grand Avenue right-of-way during site visit in March 2019.

Photograph 21: Tire ruts along Grand Avenue right-of-way during site visit in March 2019.

Photograph 22: Overview of the northern site boundary during the site visit in March 2019. Standing pools of water are evident along the Grand Avenue right-of-way.

Photograph 23: Tire rut filled with turbid water and one fairy shrimp with an enlarged brood pouch, observed in March 2019.

Photograph 24: One fairy shrimp with an enlarged brood pouch was observed swimming within the roadside tire rut pictured above in Photograph 23. Water was turbid and contained mosquito larvae.

Appendix B. CNDDB Query Results

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Porterville (3611911) OR Cairns Corner (3611922) OR Lindsay (3611921) OR Frazier Valley (3611828) OR Woodville (3611912) OR Success Dam (3611818) OR Sausalito School (3511982) OR Ducor (3511981) OR Fountain Springs (3511888))

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
brittlescale *Atriplex depressa*	PDCHE042L0	None	None	G2	S2	1B.2
calico monkeyflower *Diplacus pictus*	PDSCR1B240	None	None	G2	S2	1B.2
California alkali grass *Puccinellia simplex*	PMPOA53110	None	None	G3	S2	1B.2
California condor *Gymnogyps californianus*	ABNKA03010	Endangered	Endangered	G1	S1	FP
California jewelflower *Caulanthus californicus*	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
chaparral ragwort *Senecio aphanactis*	PDAST8H060	None	None	G3	S2	2B.2
Crotch bumble bee *Bombus crotchii*	IIHYM24480	None	None	G3G4	S1S2	
Earlimart orache *Atriplex cordulata var. erecticaulis*	PDCHE042V0	None	None	G3T1	S1	1B.2
hoary bat *Lasiurus cinereus*	AMACC05030	None	None	G5	S4	
Hopping's blister beetle *Lytta hoppingi*	IICOL4C010	None	None	G1G2	S1S2	
Keck's checkerbloom *Sidalcea keckii*	PDMAL110D0	Endangered	None	G2	S2	1B.1
lesser saltscale *Atriplex minuscula*	PDCHE042M0	None	None	G2	S2	1B.1
Lost Hills crownscale *Atriplex coronata var. vallicola*	PDCHE04250	None	None	G4T2	S2	1B.2
Madera leptosiphon *Leptosiphon serrulatus*	PDPLM09130	None	None	G3	S3	1B.2
molestan blister beetle *Lytta molesta*	IICOL4C030	None	None	G2	S2	
Morrison's blister beetle *Lytta morrisoni*	IICOL4C040	None	None	G1G2	S1S2	
northern California legless lizard *Anniella pulchra*	ARACC01020	None	None	G3	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Northern Claypan Vernal Pool *Northern Claypan Vernal Pool*	CTT44120CA	None	None	G1	S1.1	
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G5	S3	SSC
recurved larkspur *Delphinium recurvatum*	PDRAN0B1J0	None	None	G2?	S2?	1B.2
San Joaquin adobe sunburst *Pseudobahia peirsonii*	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
San Joaquin kit fox *Vulpes macrotis mutica*	AMAJA03041	Endangered	Threatened	G4T2	S2	
San Joaquin Pocket Mouse *Perognathus inornatus*	AMAFD01060	None	None	G2G3	S2S3	
San Joaquin woollythreads *Monolopia congdonii*	PDASTA8010	Endangered	None	G2	S2	1B.2
shining navarretia *Navarretia nigelliformis ssp. radians*	PDPLM0C0J2	None	None	G4T2	S2	1B.2
spiny-sepaled button-celery *Eryngium spinosepalum*	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Springville clarkia *Clarkia springvillensis*	PDONA05120	Threatened	Endangered	G2	S2	1B.2
striped adobe-lily *Fritillaria striata*	PMLIL0V0K0	None	Threatened	G1	S1	1B.1
subtle orache *Atriplex subtilis*	PDCHE042T0	None	None	G1	S1	1B.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S3	
Sycamore Alluvial Woodland *Sycamore Alluvial Woodland*	CTT62100CA	None	None	G1	S1.1	
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	AMAFD03152	Endangered	Endangered	G3T1T2	S1S2	
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G3G4	S2	SSC
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T2	S2	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool smallscale *Atriplex persistens*	PDCHE042P0	None	None	G2	S2	1B.2
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G5T4	S3S4	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
western spadefoot *Spea hammondii*	AAABF02020	None	None	G3	S3	SSC

Record Count: 40

Appendix C. USFWS 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: July 08, 2019
Consultation Code: 08ESMF00-2019-SLI-2401
Event Code: 08ESMF00-2019-E-07647
Project Name: City of Porterville- Terrazza Condominiums

Subject: List of threatened and endangered species that may occur in your proposed project location, and/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, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) 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 Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

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 ECOS-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 ECOS-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:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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 Tracking Number 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

Consultation Code: 08ESMF00-2019-SLI-2401

Event Code: 08ESMF00-2019-E-07647

Project Name: City of Porterville- Terrazza Condominiums

Project Type: DEVELOPMENT

Project Description: The City of Porterville is reviewing an application for a proposed General Plan Amendment, Zone Change, and Planned Development (CUP), in addition to a subdivision into 13 parcels for a proposed 42 unit condominium project at the southwest corner of Plano Street and Grand Avenue in eastern Porterville. The subject site is roughly 3.35 acres and is surrounded by a variety of uses including single and multi-family residential, and heavy commercial/industrial uses.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/36.07619747163853N119.00973233412697W

Counties: Tulare, CA

Endangered Species Act Species

There is a total of 9 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
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered
Tipton Kangaroo Rat *Dipodomys nitratoides nitratoides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7247 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/40/office/11420.pdf	Endangered

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard *Gambelia silus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/625	Endangered
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
San Joaquin Adobe Sunburst *Pseudobahia peirsonii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2931	Threatened
Springville Clarkia *Clarkia springvillensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8309	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix D. NOAA EFH Mapping Query Results

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
Alaska Regional Office

Query Results

Degrees, Minutes, Seconds: Latitude = 36°4'49" N, Longitude = 120°59'25" W
Decimal Degrees: Latitude = 36.08, Longitude = -119.01

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

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,
Pelagic Thresher Shark - North 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 -->
Swordfish - North Pacific, **West Coast Salmon**, All species and stocks

EFH View Tool | Data Query Tool

Activate Location Query

Print This 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.

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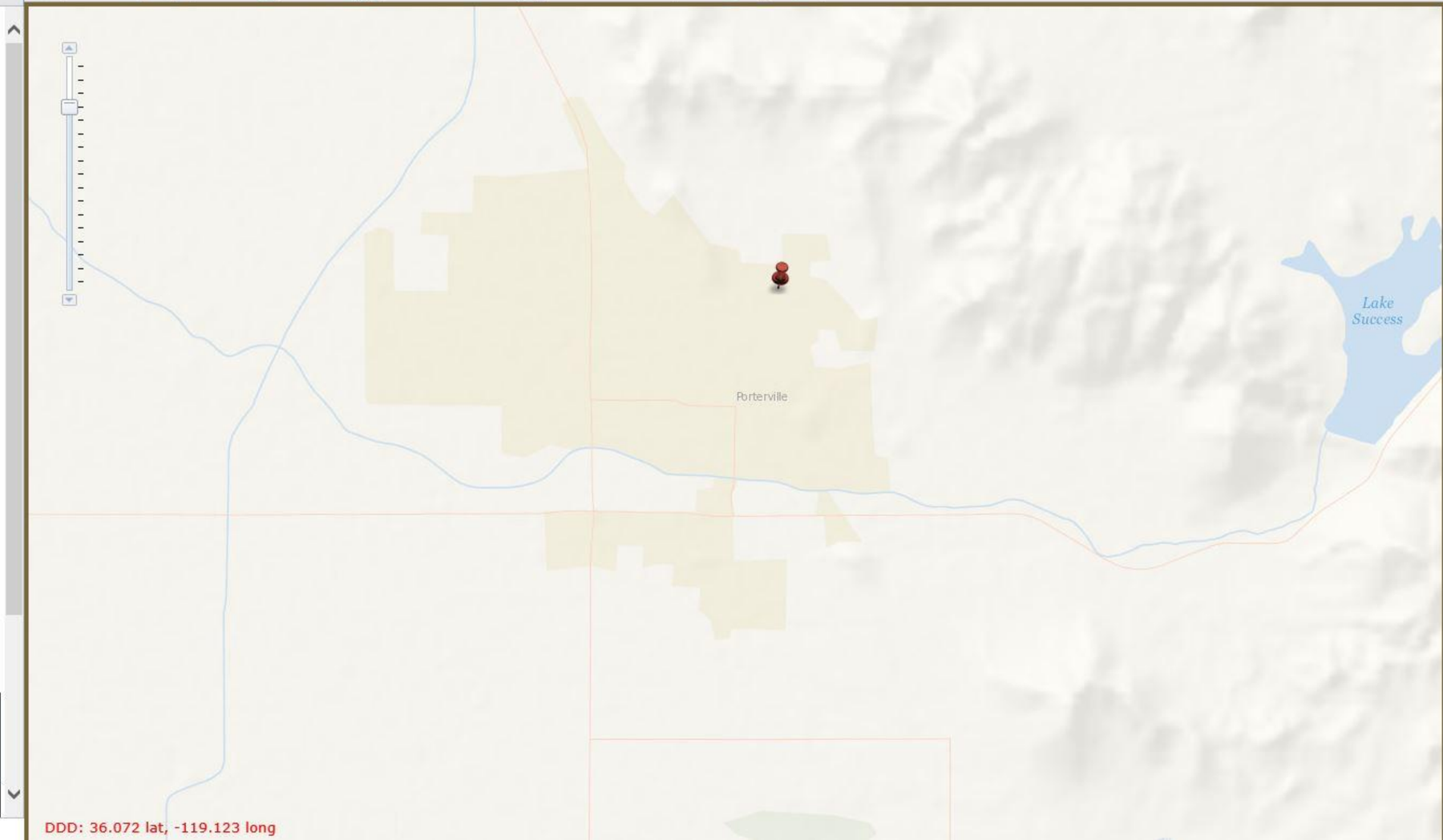
****For links to all EFH text descriptions see the complete data inventory: open data inventory -->**

Pacific Coastal Pelagic Species,

Zoom: | Extent: | Location Query: | 10 Min sq.: | Help:



Appendix E. Soils Report

United States Department of Agriculture

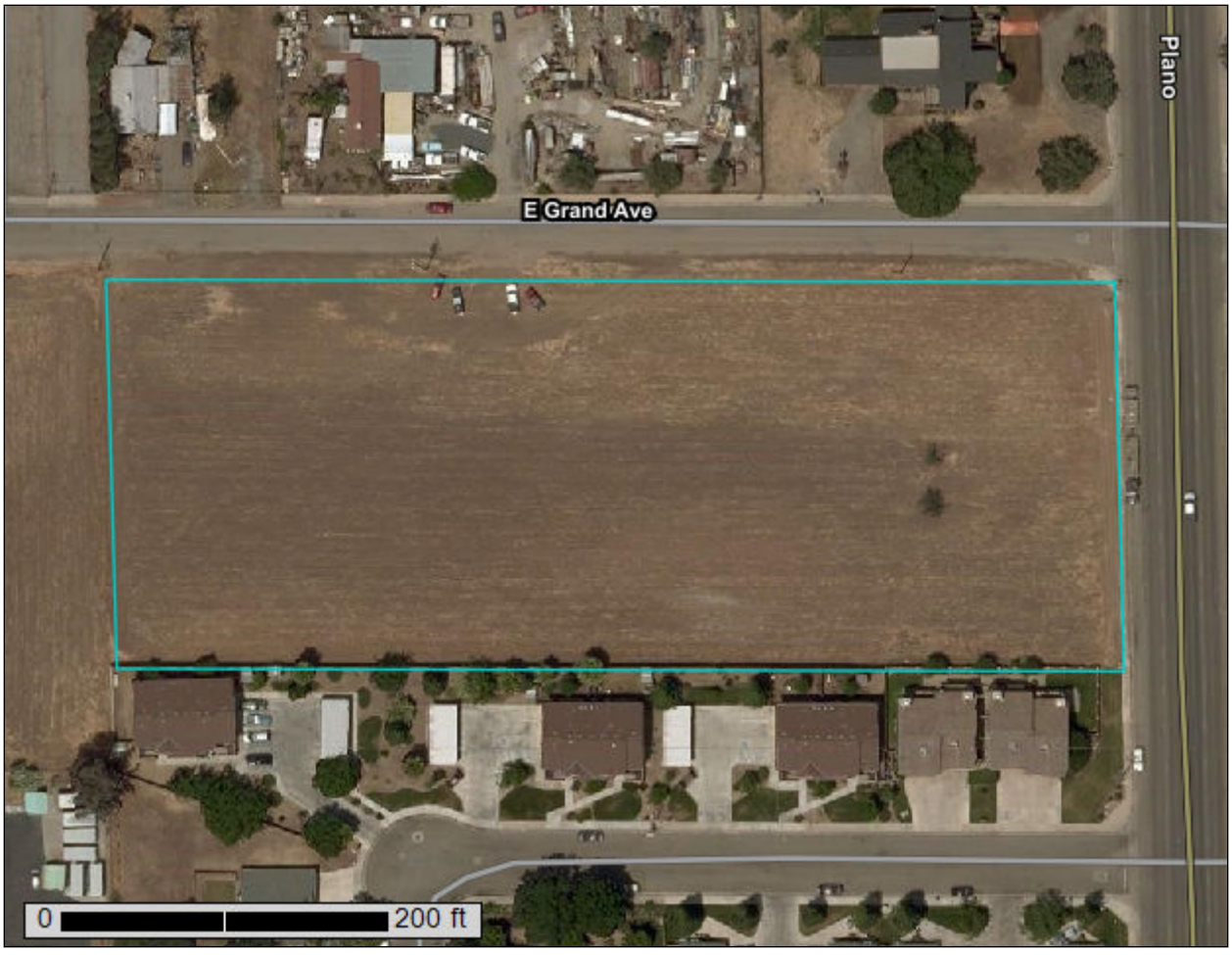
NRCS

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 Tulare County, California, Central Part

Terrazza Condominiums



July 8, 2019

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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Contents

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.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,040 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

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: Tulare County, California, Central Part
Survey Area Data: Version 12, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 5, 2015—May 10, 2015

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
147	Porterville clay, 0 to 2 percent slopes	3.0	88.7%
148	Porterville clay, 2 to 9 percent slopes	0.4	11.3%
Totals for Area of Interest		**3.4**	**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.

Tulare County, California, Central Part

147—Porterville clay, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hkf7
Elevation: 50 to 300 feet
Mean annual precipitation: 9 to 20 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Porterville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Porterville

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Typical profile

Ap - 0 to 32 inches: clay
C - 32 to 72 inches: sandy clay, clay
C - 32 to 72 inches:

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural 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: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Centerville

Percent of map unit: 4 percent

Hydric soil rating: No

Clear lake

Percent of map unit: 4 percent
Landform: Alluvial fans
Hydric soil rating: Yes

Seville

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, wet

Percent of map unit: 3 percent
Hydric soil rating: No

148—Porterville clay, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hkf8
Elevation: 50 to 300 feet
Mean annual precipitation: 9 to 20 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Porterville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Porterville

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Typical profile

Ap - 0 to 32 inches: clay
C - 32 to 72 inches: sandy clay, clay
C - 32 to 72 inches:

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural 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: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: CLAYEY (R017XE001CA)
Hydric soil rating: No

Minor Components

Centerville

Percent of map unit: 4 percent
Hydric soil rating: No

Seville

Percent of map unit: 4 percent
Hydric soil rating: No

Clear lake

Percent of map unit: 4 percent
Landform: Alluvial fans
Hydric soil rating: Yes

Unnamed, wet

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, ponded

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

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United States Fish and Wildlife Service (USFW) Request Letter and Response

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

October 8, 2020

Dr. Samantha Lantz
U.S. Fish and Wildlife Service (USFWS)
Listing and Recovery Division
2800 Cottage Way, W-2605
Sacramento, CA 95825-1846

RE: NOTIFICATION TO CONDUCT PROTOCOL-LEVEL DRY-SEASON SAMPLING, FOLLOWED BY PROTOCOL-LEVEL WET-SEASON SAMPLING, FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE TERRAZZA CONDOMINIUM PROJECT, PORTERTVILLE, TULARE COUNTY, CALIFORNIA

Dear Dr. Lantz:

This letter requests your approval to conduct protocol-level dry-season sampling, followed by protocol-level wet-season sampling for federally-listed large branchiopods at the Terrazza Condominium Project (hereafter "Project"). Surveys will be conducted by Dr. Brent Helm and/or Mr. Sean O'Brien under recovery permit TE-795930-10.2 of Section 10(a)(1)(A) of the federal Endangered Species Act, 16 U.S.C. 1531 et seq., and its implementing regulations.

The approximately 3.35 acre Project is currently a ruderal vegetated vacant lot located southwest of the intersection of Grand Avenue and Plano Street near the base of the foothills in the City of Porterville, Tulare County, California (Exhibit A). Additionally, the Project is located in the southeastern ¼ of the northwestern ¼ of Section 25, Township 21 South, Range 27 East, of the Potterville U.S. Geological Survey 7.5-minute quadrangle maps (Exhibit B).; approximate center coordinates (World Geodetic System 1984 [WGS84]) are: 36.076230°, -119.009863°).

A single fairy shrimp species belonging to the genus *Branchinecta*, was observed within an ephemeral roadside puddle (i.e., tire rut) during a site visit on March 19, 2019 by biologist Brooke Fletcher (Provost & Pritchard Consulting Group 2019*). HBC intends to sample this habitat along with any other potential listed large branchiopod habitats observed within the Project. If you need additional information, please call me at (530) 633-0220. Thank you for your time and consideration in this matter.

*Provost & Pritchard Consulting Group. 2019. City of Porterville: Terrazza Condominiums Project: Biological Evaluation. Prepared by Brooke Fletcher, Wildlife Biologist. 92 pp. Dated: December 2019.

Sincerely,

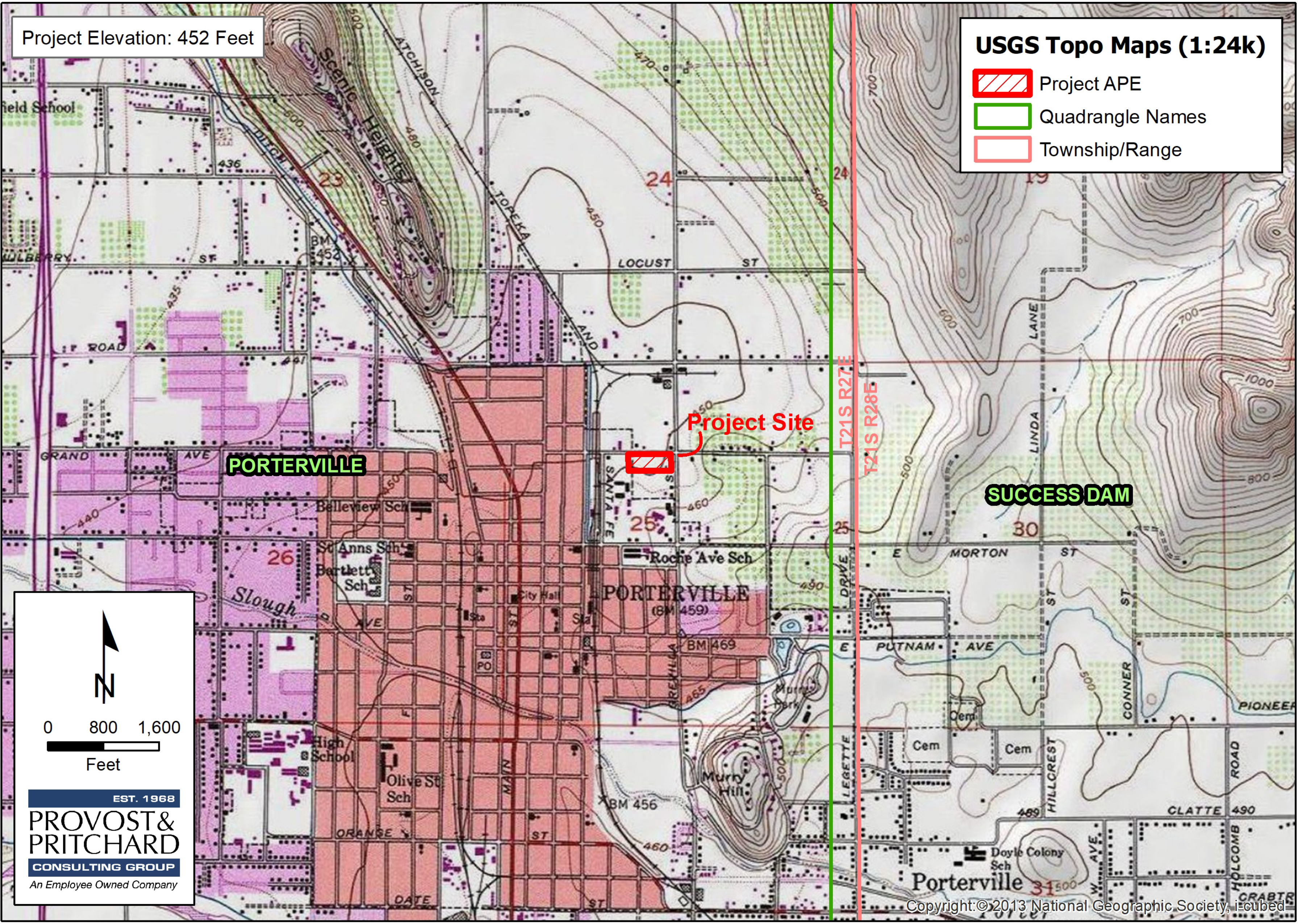
Brent Helm
President/ Principal Ecologist

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

EXHIBIT A.
LOCATION OF PROJECT ON AERIAL PHOTOGRAPHY

12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\APE.mxd

EXHIBIT B.
LOCATION OF PROJECT ON
USGS TOPOGRAPHIC QUADRANGLE MAP



12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\Topo_Quad.mxd

From: Lantz, Samantha M
To: Sean O"Brien
Cc: Brent Helm; Dena Giacomini; Cole, Patricia
Subject: Re: [EXTERNAL] USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)
Date: Monday, October 19, 2020 8:51:32 AM

Brent Helm,

By this email message, you are authorized to conduct protocol-level vernal pool branchiopod surveys per the conditions of recovery permit TE-795930 and as specified in your request dated October 8, 2020. The surveys will be conducted at the Terrazza Condominium Project site near Porterville in Tulare County, California.

Please remember to carry a copy of your permit while doing the work, and to follow the terms and conditions of the permits, including the reporting requirements. Let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. This authorization does not include access to the property which must be arranged with the landowner or manager.

Please send electronic copies of the report(s) to myself and Patricia Cole (cc'd). **We ask that you use UTM coordinates for all spatial data and that you use Service reference number 2021-TA-0145 in future correspondence regarding these surveys.** In your report, please include which surveys were authorized, the names of all persons involved in the surveys, their recovery permit numbers, if applicable, and the date of this authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization.

Sam

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Samantha Lantz, PhD
Fish and Wildlife Biologist
USFWS, Sacramento Field Office
Listing and Recovery Division
2800 Cottage Way W-2605
Sacramento, CA 95825-1888
Phone: 916-414-6526
Pronouns: she/her/hers

In an effort to slow the spread of the coronavirus (COVID-19), staff in the Sacramento Fish and Wildlife Office have implemented an aggressive telework schedule. At this time, we are responding to requests for information via email or phone as often as possible as we do not have the in-office capacity to support regular mail service. We appreciate your understanding.

From: Sean O'Brien <sobrien@tansleyteam.com>
Sent: Thursday, October 8, 2020 11:54 AM
To: Lantz, Samantha M <samantha_lantz@fws.gov>
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Cc: Brent Helm <bhelm@tansleyteam.com>; Dena Giacomini <DGiacomini@ppeng.com>
Subject: [EXTERNAL] USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)

Hi Dr. Lantz,

I hope your week is going well. Attached is a request to conduct protocol-level dry-season sampling, followed by protocol-level wet-season sampling for federally-listed large branchiopods at the Terrazzo Condominium Project located in the City of Porterville, Tulare County, California. Please let us know if you have any questions.

Much appreciated,

Sean

Tansley Team, Inc.
DBA Helm Biological Consulting
4600 Karchner Rd
Sheridan, CA 95681
Phone: (530) 633-0220
Fax: (530) 633-0230
Email: sobrien@tansleyteam.com

Biological Resources Report – Dated November 2020

PROTOCOL-LEVEL DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE TERRAZZA CONDOMINIUM PROJECT, TULARE COUNTY, CALIFORNIA

(USFWS# 2021-TA-0145)

Prepared for:

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

PROVOST & PRITCHARD CONSULTING GROUP
1800 30th Street, Suite 280
Bakersfield, CA 93301
Contact: **Dena Giacomini**
(661) 616-5900 Ext. 710

Prepared by:

HELM BIOLOGICAL CONSULTING
A Tanley Team Division
4600 Karchner Rd, Sheridan, CA 95681

HELM BIOLOGICAL CONSULTING
4600 Karchner Road
Sheridan, CA 95681
***Contact*: Dr. Brent Helm**
(530) 633-0220

November 2020

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

PROTOCOL-LEVEL DRY-SEASON SAMPLING FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE TERRAZZA CONDOMINIUM PROJECT, TULARE COUNTY, CALIFORNIA

(USFWS# 2021-TA-0145)

INTRODUCTION

Helm Biological Consulting (HBC), a division of Tansley Team, Inc., was contracted by Provost & Pritchard Consulting Group to conduct protocol-level dry-season sampling for large branchiopods (fairy shrimp, tadpole shrimp) that are listed as threatened or endangered under the federal Endangered Species Act (e.g., vernal pool fairy shrimp [*Branchinecta lynchi*] and vernal pool tadpole shrimp [*Lepidurus packardi*]) at the Terrazza Condominium Project (hereafter "Project").

The approximately 3.35-acre Project is currently a ruderal vegetated vacant lot located southwest of the intersection of Grand Avenue and Plano Street near the base of the foothills in the City of Porterville, Tulare County, California (Exhibit A). Additionally, the Project is located in the southeastern ¼ of the northwestern ¼ of Section 25, Township 21 South, Range 27 East, of the Potterville U.S. Geological Survey 7.5-minute quadrangle maps (Exhibit B); approximate center coordinates (World Geodetic System 1984 [WGS84]) are: 36.076230°, -119.009863°).

The remainder of this report discusses the methods and results of the dry-season sampling for the presence of federally-listed large branchiopods at the Project.

"We certify that the information in this survey report and attached exhibits fully and accurately represents our work."

Brent P. Helm Signature _____ Date 11-17-2020
(TE-795930-10.2)

Sean M. O'Brien Signature _____ Date 11-17-2020
(TE-795930-10.2)

METHODS

Mr. Sean O'Brien of HBC conducted dry-season sampling on October 21, 2020 as authorized by the U.S. Fish and Wildlife Service (USFWS) (Appendix A) under recovery permit TE-795930-10.2 of Section 10(a)(1)(A) of the federal Endangered Species Act, 16 U.S.C. 1531 et seq., and its implementing regulations. Mr. O'Brien was assisted by Ms. Gummo of Provost & Pritchard Consulting Group. Dry-season sampling methods followed USFWS's (2017) *Survey Guidelines for the Listed Large Branchiopods* (hereafter "Survey Guidelines") for dry-season sampling as described below.

Dry sampling was conducted in all basins (habitats) within the Project with the potential to support federally-listed large branchiopods.

Habitat characteristics of large branchiopods are based on the life history of Central Valley endemics (Eriksen and Belk 1999; Helm 1998, 1999; Helm and Vollmar 2002; Helm and Noyes 2016). The presence of water marks, algae mats, driftlines, hydrophytic vegetation ("water-loving plants"), slope, contributing watershed, maximum potential ponding depth, and aquatic arthropods (i.e., crustaceans and insects) exoskeletons were helpful indicators for evidence of ponding depth and duration. Habitats that swiftly flow water (e.g., creeks, streams, and ephemeral drainages), semi-to-permanently inundated areas that support population of predators (e.g., bullfrogs, fish, and crayfish), and habitats that receive water during the dry season (i.e., artificial water sources) were not generally considered suitable habitat for federally listed large branchiopods.

Soil samples were collected mainly from the lowest topographic areas within each sampled basin. Soil samples were placed in liter-size plastic sealable bags and marked with the project name, basin number, and date. Representative photographs were taken of the basins sampled (Appendix B). The soil was then transported to HBC for processing and analysis as described below.

In HBC's laboratory, a brine solution was prepared by mixing table salt (NaCl) with lukewarm tap water in a large container. The collected soil material was placed in the brine solution. The soil material was then gently worked by hand to breakdown any persistent soil structure. The organic material rising to the top of the brine solution was skimmed off and placed in a 600-micron diameter pore-size sieve stacked atop a 75-micron diameter pore-size sieve. The soil material was processed through the top sieve by flushing it with lukewarm tap water while gently rubbing it with a soft-bristle brush. The soil retained from the 75-micron diameter pore size sieve was then removed and thinly (≈1.0 mm) spread into plastic petri dishes.

The contents of each petri dish were examined under a 10 to 252-power zoom binocular microscope. A minimum of 0.5-hour was spent searching the contents of each petri dish for

large branchiopod cysts (embryonic eggs). Dr. Helm's large branchiopod cyst reference collection and scanning electron micrographs of cysts (Belk 1989, Brendock *et al*. 2008, Gilchrist 1978, Hill and Shepard 1998, Mura 1991, and Rabet 2010) were used to identify and compare any cysts observed within the soil samples. This processing method (described above) favors the detection of cysts belonging to the genera *Branchinecta*, *Lepidurus*, and *Streptocephalus* since these three genera have species that are federally listed. Evidence of other macroscopic aquatic invertebrates encountered was also noted on the laboratory data sheet.

RESULTS

Soils were collected from a total of seven basins (Exhibit C). Basins 1, 2, 3, and 4 were road-ruts located just north of or along the northern boundary of the Project. Basin 5 was a slightly concave (< 3 inches potential maximum inundation depth) depressional area displaying facultative hydrophytic vegetation. Basins 6 and 7 were depressional areas located along the fence line of the southern boundary, which receive water during the dry-season from anthropogenic sources associated with the housing development located south of the Project. Due to these summer water inputs, Basins 6 and 7 would likely not be considered federally-listed large branchiopod habitat; however, were conservatively sampled nonetheless.

Visual examinations of the soils revealed the presence of cysts belonging to the genus *Branchinecta* in four of the seven habitats sampled (Basins 1, 2, 3 and 4) (Table 1). No evidence of cysts or carapaces belonging to the genus *Lepidurus* were observed in the soils collected. Representative photographs of the basins sampled are provided in Appendix B.

Table 1. Results of Soil Examinations

Basin No.	Invertebrates Present (X)						
	Insects Exo-skeletons	Micro-turbellarian Cysts	Cladocera Ephippia	Ostracod Cysts/ Carapaces	Hydracarina	Collembola	Abundance* of *Branchinecta* sp. cysts
1	X	X	X	X	X	X	Low
2	X	X	X	X			Low
3	X	X	X	X		X	High
4	X	X	X				Low
5	X						
6	X	X					
7	X						

*Abundance categories are derived from USFWS's Survey Guidelines for the Listed Large Branchiopods - Section VI(d) (none = no cysts found in sample; low abundance = estimate of 1-10 cysts/100 ml soil; medium abundance = estimate of 11-50 cysts/100 ml soil; high abundance = estimate of more than 50 cysts/100 ml soil)

DISCUSSION

Based upon the Project's location (Tulare County) and the types of habitats sampled (road-ruts), the cysts belonging to the genus *Branchinecta* most likely belong to either the vernal pool fairy shrimp or the versatile fairy shrimp (*B. lindahli*). According to California Department Fish and Wildlife's (CDFW 2020) California Natural Diversity Database (CNDDB), the closest known occurrence of vernal pool fairy shrimp is located approximately 3 miles southwest of the Project (Occurrence # 317). The vernal pool fairy shrimp is listed as threatened under the federal Endangered Species Act and the versatile fairy shrimp has no state or federal listing status. Both of these species have cysts with similar external morphologies. Therefore, positive species identification would consist of: 1) Hatching the cysts and raising the cysts to maturity; 2) Genetic analysis of the cysts, or 3) Conducting wet-season sampling when the shrimp are active.

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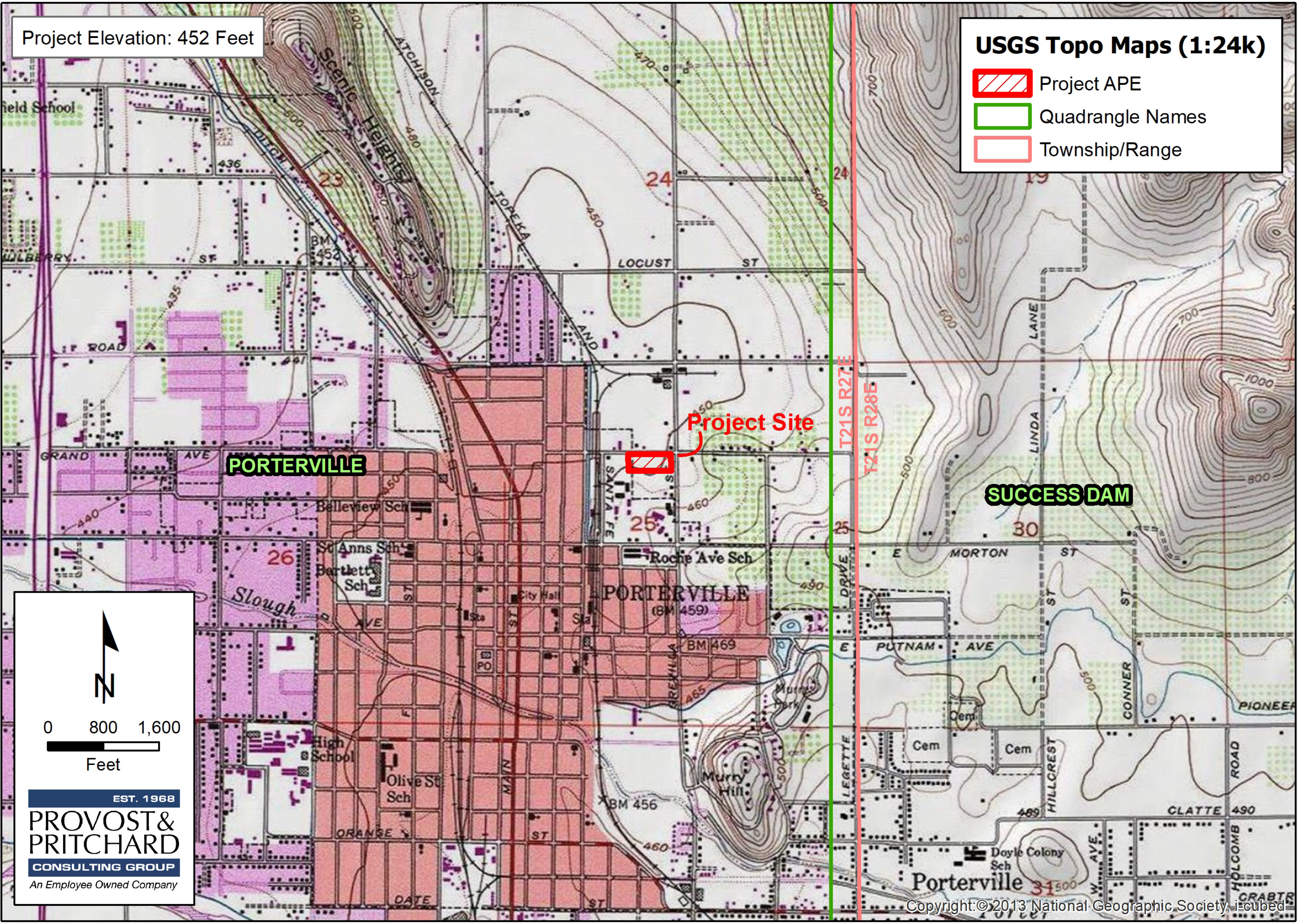
U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS). 2017. Survey guidelines for the listed large branchiopods. 24 pp. Dated: 31 May 2015 (Revised November 13, 2017).

EXHIBIT A.
LOCATION OF PROJECT ON AERIAL PHOTOGRAPHY

12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\APE.mxd

EXHIBIT B.
LOCATION OF PROJECT ON AERIAL PHOTOGRAPHY



12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\Topo_Quad.mxd

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

EXHIBIT C.
BASINS DRY-SEASON SAMPLED FOR FEDERALLY LISTED LARGE BRANCHIOPODS AT THE TERRAZZA CONDOMINIUM PROJECT

Ph: (530) 633-0220
Fax: (530) 633-0230

Project Boundary (approximate, 3.4 acres)

Pool (0.123 acre total)

0 50 100 Feet

1 inch = 100 feet

Data Sources:
- Microsoft Bing accessed Nov 2020
- Provost & Pritchard 2019

Prepared by:

HELM BIOLOGICAL CONSULTING
4600 Karchner Rd, Sheridan, CA 95681

Date: 11-1-20

C:\SRM\Helm\Terrazza\Fig1 Pools.mxd

Exhibit C. Basins Dry-season Sampled for Federally Listed Large Branchiopods at the Terrazza Condominium Project

APPENDIX A.
USFWS AUTHORIZATION

Tansley Team, Inc. Mail

Sean O'Brien <sobrien@tansleyteam.com>

USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)

Lantz, Samantha M <samantha_lantz@fws.gov> Mon, Oct 19, 2020 at 8:51 AM
To: Sean O'Brien <sobrien@tansleyteam.com>
Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>, "Cole, Patricia" <Patricia_Cole@fws.gov>

Brent Helm,

By this email message, you are authorized to conduct protocol-level vernal pool branchiopod surveys per the conditions of recovery permit TE-795930 and as specified in your request dated October 8, 2020. The surveys will be conducted at the Terrazza Condominium Project site near Porterville in Tulare County, California.

Please remember to carry a copy of your permit while doing the work, and to follow the terms and conditions of the permits, including the reporting requirements. Let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. This authorization does not include access to the property which must be arranged with the landowner or manager.

Please send electronic copies of the report(s) to myself and Patricia Cole (cc'd). **We ask that you use UTM coordinates for all spatial data and that you use Service reference number 2021-TA-0145 in future correspondence regarding these surveys.** In your report, please include which surveys were authorized, the names of all persons involved in the surveys, their recovery permit numbers, if applicable, and the date of this authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization.

Sam

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Samantha Lantz, PhD
Fish and Wildlife Biologist
USFWS, Sacramento Field Office
Listing and Recovery Division
2800 Cottage Way W-2605
Sacramento, CA 95825-1888
Phone: 916-414-6526
Pronouns: she/her/hers

In an effort to slow the spread of the coronavirus (COVID-19), staff in the Sacramento Fish and Wildlife Office have implemented an aggressive telework schedule. At this time, we are responding to requests for information via email or phone as often as possible as we do not have the in-office capacity to support regular mail service. We appreciate your understanding.

From: Sean O'Brien <sobrien@tansleyteam.com>
Sent: Thursday, October 8, 2020 11:54 AM
To: Lantz, Samantha M <samantha_lantz@fws.gov>
Cc: Brent Helm <bhelm@tansleyteam.com>; Dena Giacomini <DGiacomini@ppeng.com>
Subject: [EXTERNAL] USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

APPENDIX B.
REPRESENTATIVE PHOTOGRAPHS

Representative photograph of the Project's conditions taken from the southeast corner of the Project (facing north) on October 21, 2020.

Representative photograph of the Project's conditions taken from the southeast corner of the Project (facing northwest) on October 21, 2020.

Photograph of Basin 1 taken facing east on October 21, 2020.

Photograph of Basin 2 taken facing east on October 21, 2020.

Photograph of Basin 3 taken facing east on October 21, 2020.

Photograph of Basin 4 taken facing west on October 21, 2020.

Photograph of Basin 6 taken facing west on October 21, 2020.

Biological Resources Report – Dated December 2020, revised April 2021

DRY-SEASON SAMPLING AND CYST CULTURING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE TERRAZZA CONDOMINIUM PROJECT, TULARE COUNTY, CALIFORNIA

(USFWS# 2021-TA-0145)

Prepared for:

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

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***Contact*: Dr. Brent Helm**
(530) 633-0220

December 2020
(Revised April 2021)

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

DRY-SEASON SAMPLING AND CYST CULTURING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE TERRAZZA CONDOMINIUM PROJECT, TULARE COUNTY, CALIFORNIA

(USFWS# 2021-TA-0145)

INTRODUCTION

Helm Biological Consulting (HBC), a division of Tansley Team, Inc., was contracted by Provost & Pritchard Consulting Group to conduct protocol-level dry-season sampling for large branchiopods (fairy shrimp, tadpole shrimp) that are listed as threatened or endangered under the federal Endangered Species Act (e.g., vernal pool fairy shrimp [*Branchinecta lynchi*] and vernal pool tadpole shrimp [*Lepidurus packardi*]) at the Terrazza Condominium Project (hereafter "Project"). In addition, HBC was contracted by Provost & Pritchard Consulting Group to culture large branchiopod cysts (hatch cysts and rear hatchlings to maturity for positive identification of species) obtained from the dry-season sampling.

The approximately 3.35-acre Project is currently a ruderal vegetated vacant lot located southwest of the intersection of Grand Avenue and Plano Street near the base of the foothills in the City of Porterville, Tulare County, California (Exhibit A). Additionally, the Project is located in the southeastern ¼ of the northwestern ¼ of Section 25, Township 21 South, Range 27 East, of the Potterville U.S. Geological Survey 7.5-minute quadrangle maps (Exhibit B); approximate center coordinates (World Geodetic System 1984 [WGS84]) are: 36.076230°, -119.009863°).

The remainder of this report discusses the methods and results of the dry-season sampling and cyst culturing for the presence of federally-listed large branchiopods at the Project.

"We certify that the information in this survey report and attached exhibits fully and accurately represents our work."

Brent P. Helm Signature _____ Date 04-06-2021
(TE-795930-10.2)

Sean M. O'Brien Signature _____ Date 04-06-2021
(TE-795930-10.2)

METHODS

Methods followed U.S. Fish and Wildlife Service's (USFWS 2017) *Survey Guidelines for Listed Large Branchiopods* (hereafter "Survey Guidelines") for dry-season sampling and consisted of first soil collection, second soil processing and analysis, and last cyst culturing as described below.

SOIL COLLECTION

Mr. Sean O'Brien of HBC conducted dry-season sampling on October 21, 2020 as authorized by the U.S. Fish and Wildlife Service (USFWS) (Appendix A) under recovery permit TE-795930-10.2 of Section 10(a)(1)(A) of the federal Endangered Species Act, 16 U.S.C. 1531 et seq., and its implementing regulations. Mr. O'Brien was assisted by Brittany Gunmo of Provost & Pritchard Consulting Group.

Dry sampling was conducted in all basins (habitats) within the Project with the potential to support federally-listed large branchiopods.

Habitat characteristics of large branchiopods are based on the life history of Central Valley endemics (Eriksen and Belk 1999; Helm 1998, 1999; Helm and Vollmar 2002; Helm and Noyes 2016). The presence of water marks, algae mats, driftlines, hydrophytic vegetation ("water-loving plants"), slope, contributing watershed, maximum potential ponding depth, and aquatic arthropods (i.e., crustaceans and insects) exoskeletons were helpful indicators for evidence of ponding depth and duration. Habitats that swiftly flow water (e.g., creeks, streams, and ephemeral drainages), semi-to-permanently inundated areas that support population of predators (e.g., bullfrogs, fish, and crayfish), and habitats that receive water during the dry season (i.e., artificial water sources) were not generally considered suitable habitat for federally-listed large branchiopods.

Soil samples were collected mainly from the lowest topographic areas within each sampled basin. Soil samples were placed in liter-size plastic sealable bags and marked with the project name, basin number, and date. Representative photographs were taken of the basins sampled (Appendix B). The soil was then transported to HBC for processing and analysis as described below.

SOIL PROCESSING AND ANALYSIS

In HBC's laboratory, a brine solution was prepared by mixing table salt (NaCl) with lukewarm tap water in a large container. The collected soil material was placed in the brine solution. The soil material was then gently worked by hand to breakdown any persistent soil structure. The organic material rising to the top of the brine solution was skimmed off and placed in a 600-

micron diameter pore-size sieve stacked atop a 75-micron diameter pore-size sieve. The soil material was processed through the top sieve by flushing it with lukewarm tap water while gently rubbing it with a soft-bristle brush. The soil retained from the 75-micron diameter pore size sieve was then removed and thinly (≈1.0 mm) spread into plastic petri dishes.

The contents of each petri dish were examined under a 10 to 252-power zoom binocular microscope. A minimum of 0.5-hour was spent searching the contents of each petri dish for large branchiopod cysts (embryonic eggs). Dr. Helm's large branchiopod cyst reference collection and scanning electron micrographs of cysts (Belk 1989, Brendock *et al*. 2008, Gilchrist 1978, Hill and Shepard 1998, Mura 1991, and Rabet 2010) were used to identify and compare any cysts observed within the soil samples. This processing method (described above) favors the detection of cysts belonging to the genera *Branchinecta*, *Lepidurus*, and *Streptocephalus* since these three genera have species that are federally listed. Evidence of other macroscopic aquatic invertebrates encountered was also noted on the laboratory data sheet.

CYST CULTURING

Petri dishes containing soils with *Branchinecta* cysts were placed into individual 6-quart plastic containers. The soils were saturated with 50º F well water (non-chlorinated) and allowed to dry. This saturation and drying process was repeated three times. The soils were then inundated completely with 50º F well water. The containers containing the inundated soils were inserted into an environmental chamber. The environmental chamber controls were set to mimic the surface weather conditions of the Project's winter (i.e., light, humidity, and temperature fluctuations). The contents of the containers were monitored daily for fairy shrimp hatchlings (instars).

If no hatchlings were observed after ten (10) days, the containers were removed from the environmental chamber and the soils were allowed to completely dry before reinitiated the hatching process. A total of three hatching attempts were performed on each soil sample.

Fairy shrimp hatchlings were fed ground fish food and reared in the environmental chamber until they were mature enough to be identified using dichotomous keys and diagrams from "Fairy Shrimps of California's Puddles, Pools, and Playas" (Eriksen and Belk 1999) and compared to Dr. Helm's large branchiopod reference collection. Representative mature specimens were obtained from each container and preserved in 95% ethanol as species vouchers.

RESULTS

SOIL COLLECTION

Soils were collected from a total of seven basins (Exhibit C). Basins 1, 2, 3, and 4 were road-ruts located just north of or along the northern boundary of the Project. Basin 5 was a slightly concave (< 3 inches potential maximum inundation depth) depressional area supporting facultative hydrophytic vegetation. Basins 6 and 7 were depressional areas located along the fence line of the southern boundary, which receive water during the dry-season from anthropogenic sources associated with the housing development located south of the Project. Due to these summer water inputs, Basins 6 and 7 would likely not be considered federally-listed large branchiopod habitat; however, were conservatively sampled nonetheless.

SOIL PROCESSING AND ANALYSIS

Visual examinations of the soils revealed the presence of cysts belonging to the genus *Branchinecta* in four of the seven habitats sampled (Basins 1, 2, 3 and 4) (Table 1). No evidence of cysts or carapaces belonging to the genus *Lepidurus* were observed in the soils collected. Representative photographs of the basins sampled are provided in Appendix B.

Table 1. Results of Soil Examinations

Basin No.	Invertebrates Present (X)						
	Insects Exo-skeletons	Micro-turbellarian Cysts	Cladocera Ephippia	Ostracod Cysts/ Carapaces	Hydracarina	Collembola	Abundance* of *Branchinecta* sp. cysts
1	X	X	X	X	X	X	Low
2	X	X	X	X			Low
3	X	X	X	X		X	High
4	X	X	X				Low
5	X						
6	X	X					
7	X						

*Abundance categories are derived from USFWS's Survey Guidelines for the Listed Large Branchiopods - Section VI(d) (none = no cysts found in sample; low abundance = estimate of 1-10 cysts/100 ml soil; medium abundance = estimate of 11-50 cysts/100 ml soil; high abundance = estimate of more than 50 cysts/100 ml soil)

CYST CULTURING

After three hatching attempts, a total of one (1), six (6), and eleven (11) individual versatile fairy shrimp (*Branchinecta lindahli*) were hatched and raised to maturity from the soils of Basins 1, 2, and 3, respectively (Table 2). The versatile fairy shrimp has no state or federal listing status. No fairy shrimp were hatched from the soils of Pool 4. This was not surprising due to the low abundance of cysts belonging to the genus *Branchinecta* observed in the collected soils.

Table 2. Results of Cyst Culturing from Dry-season Sampling Conducted at the Terrazza Condominium Project

Basin #	Number of *Branchinecta lindahli* Identified per Hatching Round Number							
	1		2		3		All Rounds Combined	
	Male	Female	Male	Female	Male	Female	Male	Female
1	0	0	0	1	0	0	0	1
2	0	0	2	2	0	2	2	4
3	0	0	2	4	3	2	5	6
4	0	0	0	0	0	0	0	0
Total	**0**	**0**	**4**	**7**	**3**	**4**	**7**	**11**

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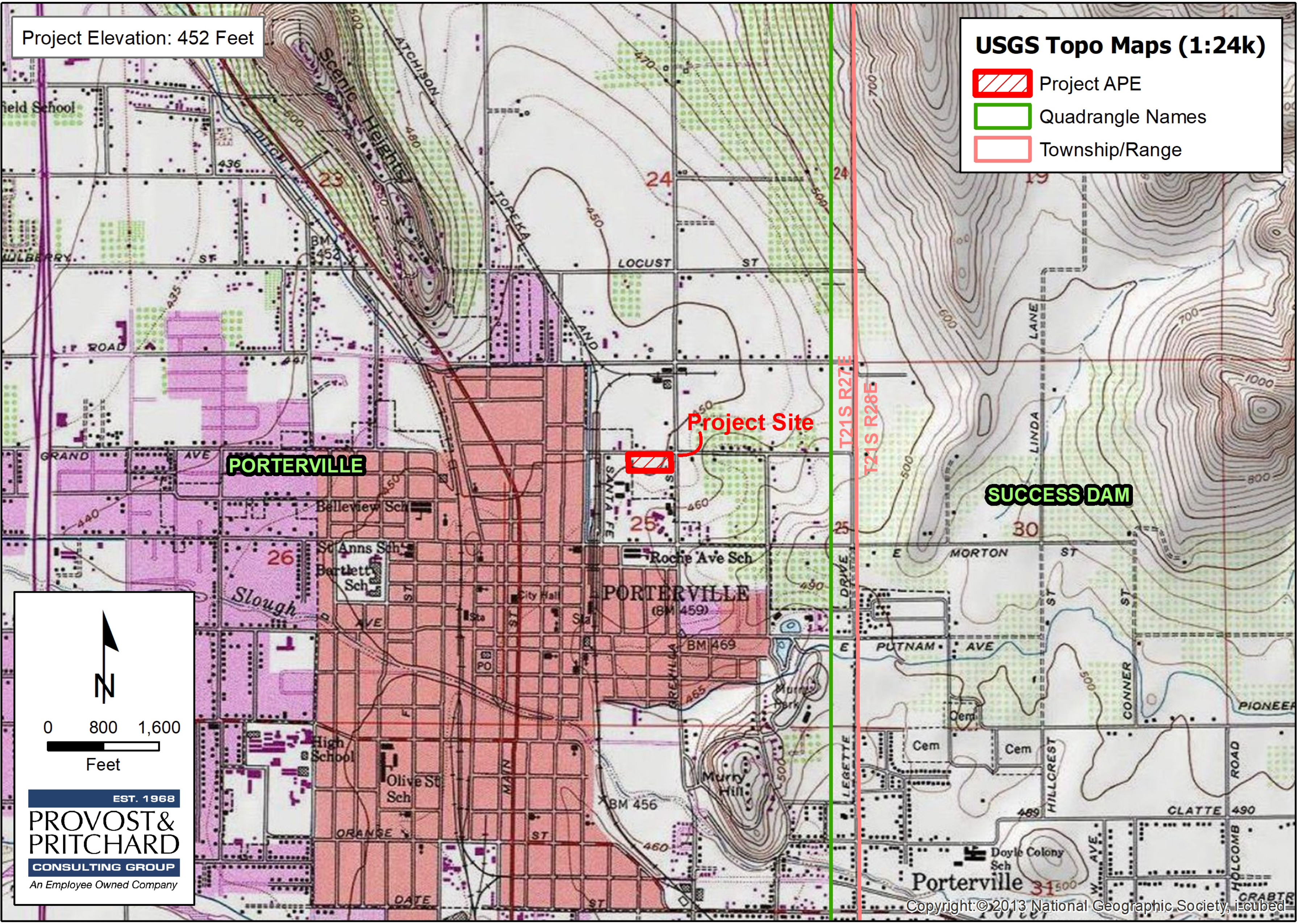
U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS). 2017. Survey guidelines for the listed large branchiopods. 24 pp. Dated: 31 May 2015 (Revised November 13, 2017).

EXHIBIT A.
LOCATION OF PROJECT ON AERIAL PHOTOGRAPHY

12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\APE.mxd

EXHIBIT B.
LOCATION OF PROJECT ON AERIAL PHOTOGRAPHY



12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\Topo_Quad.mxd

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

EXHIBIT C.
BASINS DRY-SEASON SAMPLED
FOR
FEDERALLY-LISTED LARGE BRANCHIOPODS
AT THE
TERRAZZA CONDOMINIUM PROJECT

Project Boundary (approximate, 3.4 acres)

Pool (0.123 acre total)

0 50 100 Feet

1 inch = 100 feet

Data Sources:
- Microsoft Bing accessed Nov 2020
- Provost & Pritchard 2019

Prepared by:

HELM BIOLOGICAL CONSULTING
4600 Karchner Rd, Sheridan, CA 95681

Date: 11-1-20

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Exhibit C. Basins Dry-season Sampled for Federally Listed Large Branchiopods at the Terrazza Condominium Project

APPENDIX A.
USFWS AUTHORIZATION

Tansley Team, Inc. Mail

Sean O'Brien <sobrien@tansleyteam.com>

USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)

Lantz, Samantha M <samantha_lantz@fws.gov> Mon, Oct 19, 2020 at 8:51 AM
To: Sean O'Brien <sobrien@tansleyteam.com>
Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>, "Cole, Patricia" <Patricia_Cole@fws.gov>

Brent Helm,

By this email message, you are authorized to conduct protocol-level vernal pool branchiopod surveys per the conditions of recovery permit TE-795930 and as specified in your request dated October 8, 2020. The surveys will be conducted at the Terrazza Condominium Project site near Porterville in Tulare County, California.

Please remember to carry a copy of your permit while doing the work, and to follow the terms and conditions of the permits, including the reporting requirements. Let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. This authorization does not include access to the property which must be arranged with the landowner or manager.

Please send electronic copies of the report(s) to myself and Patricia Cole (cc'd). **We ask that you use UTM coordinates for all spatial data and that you use Service reference number 2021-TA-0145 in future correspondence regarding these surveys.** In your report, please include which surveys were authorized, the names of all persons involved in the surveys, their recovery permit numbers, if applicable, and the date of this authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization.

Sam

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Samantha Lantz, PhD
Fish and Wildlife Biologist
USFWS, Sacramento Field Office
Listing and Recovery Division
2800 Cottage Way W-2605
Sacramento, CA 95825-1888
Phone: 916-414-6526
Pronouns: she/her/hers

In an effort to slow the spread of the coronavirus (COVID-19), staff in the Sacramento Fish and Wildlife Office have implemented an aggressive telework schedule. At this time, we are responding to requests for information via email or phone as often as possible as we do not have the in-office capacity to support regular mail service. We appreciate your understanding.

From: Sean O'Brien <sobrien@tansleyteam.com>
Sent: Thursday, October 8, 2020 11:54 AM
To: Lantz, Samantha M <samantha_lantz@fws.gov>
Cc: Brent Helm <bhelm@tansleyteam.com>; Dena Giacomini <DGiacomini@ppeng.com>
Subject: [EXTERNAL] USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

APPENDIX B.
REPRESENTATIVE PHOTOGRAPHS

Representative photograph of the Project's conditions taken from the southeast corner of the Project (facing north) on October 21, 2020.

Representative photograph of the Project's conditions taken from the southeast corner of the Project (facing northwest) on October 21, 2020.

Photograph of Basin 1 taken facing east on October 21, 2020.

Photograph of Basin 2 taken facing east on October 21, 2020.

Photograph of Basin 3 taken facing east on October 21, 2020.

Photograph of Basin 4 taken facing west on October 21, 2020.

Photograph of Basin 6 taken facing west on October 21, 2020.

Biological Resources Report – Dated May 2021

PROTOCOL-LEVEL
WET-SEASON SAMPLING
FOR
FEDERALLY-LISTED LARGE BRANCHIOPODS
AT THE
TERRAZZA CONDOMINIUM PROJECT,
TULARE COUNTY, CALIFORNIA
(USFWS# 2021-TA-0145)

Prepared for:

EST. 1968
PROVOST& PRITCHARD
CONSULTING GROUP
An Employee Owned Company

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***Contact*: Dr. Brent Helm**
(530) 633-0220

May 2021

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PROTOCOL-LEVEL WET-SEASON SAMPLING FOR FEDERALLY-LISTED LARGE BRANCHIOPODS AT THE TERRAZZA CONDOMINIUM PROJECT, TULARE COUNTY, CALIFORNIA

(USFWS# 2021-TA-0145)

INTRODUCTION

Helm Biological Consulting (HBC), a division Tansley Team, Inc., was contracted by Provost & Pritchard Consulting Group to conduct protocol-level wet-season sampling for large branchiopods (fairy shrimp, tadpole shrimp, and clam shrimp) that are listed as threatened or endangered under the federal Endangered Species Act (e.g., vernal pool fairy shrimp [*Branchinecta lynchi*] and vernal pool tadpole shrimp [*Lepidurus packardi*]) at the Terrazza Condominium Project (hereafter "Project").

The approximately 3.35-acre Project is currently a ruderal vegetated vacant lot located southwest of the intersection of Grand Avenue and Plano Street near the base of the foothills in the City of Porterville, Tulare County, California (Exhibit A). Additionally, the Project is located in the southeastern ¼ of the northwestern ¼ of Section 25, Township 21 South, Range 27 East, of the Potterville U.S. Geological Survey 7.5-minute quadrangle maps (Exhibit B); approximate center coordinates (World Geodetic System 1984 [WGS84] are: 36.076230°, -119.009863°).

Background

HBC conducted dry-season sampling at the Project, during the fall of 2020 (HBC 2021). Cysts belonging to the genus *Branchinecta* were observed in soils collected from four of the seven habitats sampled (Pools 1, 2, 3, and 4). Mature versatile fairy shrimp (*B. lindahli*) were raised from cyst culturing of the soils from three of the four habitats (Pools 1, 2, and 3).

Following dry-season sampling and culturing efforts, the City of Porterville requested that the Project be expanded to include areas along Grande Avenue and Henrahan Street, which mostly consists of roads, curbs, gutters, and sidewalks (Exhibits C and D).

The remainder of this report discusses the methods and results of the wet-season sampling for the presence of federally-listed large branchiopods at the expanded Project.

"We certify that the information in this survey report and attached exhibits fully and accurately represents our work."

Brent P. Helm Signature _____ Date 05-06-2021
(TE-795930-10.2)

Sean M. O'Brien Signature _____ Date 05-06-2021
(TE-795930-10.2)

METHODS

Dr. Brent Helm and/or Mr. Sean O'Brien of HBC conducted three rounds of protocol-level wet-season sampling during the 2020/2021 wet-season on February 4 (1st round), February 12 (2nd round), and February 22 (3rd round). Additionally, Dena Giacomini conducted hydrology monitoring at the Project before wet-season sampling (December 2020 and January 2021) and after (March 2021).

The wet-season sampling was conducted under permit TE-795930-10.2 of Section 10(a)(1)(A) of the federal Endangered Species Act, 16 U.S.C. 1531 et seq., and its implementing regulations as authorized by the U.S. Fish and Wildlife Service (USFWS) (Appendix A). Methods generally followed USFWS's (2017) *Survey Guidelines for Listed Large Branchiopods* (hereafter "Survey Guidelines") for wet-season sampling.

Wet sampling was conducted in all habitats (i.e., basins, pools) at the Project that had potential to support federally-listed large branchiopods. A map of these basins utilized during prior dry-season surveys (HBC 2021) and aerial imagery of the Project obtained from Google Earth© (2021) were utilized to target appropriate habitats for sampling.

Potential habitat for federally-listed large branchiopods is defined as any seasonal inundated depression that on average ponds water at a sufficient depth and duration for a listed large branchiopod to complete its lifecycle (generally 2.0 inches or greater in depth for 14 or more consecutive days for fairy shrimp and 30 or more consecutive days for tadpole shrimp) (USFWS 2017). Generally these habitats occur within the California Floristic Province at elevations below 1,707 meters in the Coast Ranges (CNDDB #178) and below 914 meters for the rest of California and Oregon (CNDDB #244) and Oregon (USFWS 2017). Habitats that swiftly flow water (e.g., creeks, streams, and ephemeral drainages), semi-to-permanently inundated areas that support perennial population of predators (e.g., bullfrogs, fish, and crayfish), and habitats that receive water during the dry season (i.e., artificial water sources) were not generally considered suitable habitat for federally listed large branchiopods (USFWS 2017).

According the Survey Guidelines, the Project is within Survey Zone B (San Joaquin Valley, Central and Southern Sierra Nevada foothills and Tehachapi Mountains) (USFWS 2017). Therefore wet-season sampling was initiated 10 days after any of the habitats on site (determined to potential large branchiopod habitat) ponded a minimum of 3 centimeters (cm) of standing water. The habitats were first inundated following a storm event on January 29, 2021 (Weather Underground 2021), therefore wet-season sampling was initiated on February 4, 2021. Wet-season sampling was then continued at a minimum of 10-day intervals until the habitats were dry or 90 continuous ponding days had occurred. In cases when the habitats dried and refilled the 90 days would start over. Specific sampling methods are described below.

Each habitat was viewed for active large branchiopods prior to entering the water. Any large branchiopods observed were quickly netted, viewed with the aid of a 30x hand lens to determine species, and released unharmed back into the environment from which they were obtained. If no large branchiopods were observed, then a semi-quantitative sample was taken to determine the relative abundance of large branchiopods as follows.

A dip net was lowered vertically into the deepest portion of the inundated habitat (usually the center) and rested on the bottom. The 80-µm mesh size dip net was then moved in the direction of the longest axis of the habitat for approximately one-meter. In instances where half of the habitat length is less than one meter in length, the dip net was repositioned in the deepest portion of the habitat and moved in the opposite direction for the remainder of the one-meter sample. Given the aperture of the dip net of 0.025 m^2 and distance the dip net was moved, roughly 0.025 m^3 or 25 liters of the water column was sampled horizontally each time. In those cases when the water column was shallower than the dip net aperture height, the volume of water per sweep was calculated by the horizontal distance the net is moved multiplied by the width of the dip net (25-cm) multiplied by the depth of water. After the completion of each sample sweep, the contents of the net were examined for large branchiopods. All large branchiopods captured in the dip net were identified to the lowest justifiable taxon in the field, and recorded on standardized data sheets. The relative numbers of individuals observed within each taxonomic group was recorded in one of five categories: rare (≤2 individuals), not common (3-10 individuals), common (11-50 individual), very common (51 -100 individuals), and abundant (>100 individuals). This method allows for the relative abundances and richness of large branchiopods to be compared between and among wetlands through time. Additionally, this method allows for concentration estimates of large branchiopods to be calculated as number of individuals per liter of water (= number of individuals/net aperture area x length of sweep).

If federally-listed large branchiopods were not detected during the semi-quantified sampling method, then the entire habitat was sampled as follows. Starting at one end of the habitat, the net was moved from one side of the habitat to the other in a zigzag fashion, until the opposite end of the habitat was reached. During this procedure, the net was often bounced along the habitat bottom (to encourage large branchiopods to move up into the water column from hiding places for easier capture) and viewed often for evidence of large branchiopods. If still no federally listed large branchiopods were captured, then additional netting took place in specific locations within the habitat that may have not been sampled during prior efforts. Additional taxonomic groups of large branchiopods detected using this alternative method is noted as present by an "X" on the standardized field data sheet. After the taxonomic identification and enumeration were completed, the contents of the net were placed back into the habitat from which they were collected.

Data concerning air and water temperatures, present depths (maximum and average [ft]), present ponding surface area (percent inundation), and habitat conditions were collected during each field visit. The potential depths (maximum and average [ft]) and potential ponding surface area

percentage were visually estimated. Additionally, presence and abundance data were recorded for all other aquatic species using the same methods as described above for large branchiopod sampling. Representative photographs were taken of the habitats sampled and species observed.

RESULTS AND DISCUSSION

A total of 16 habitats occurring within the Project were considered potential habitat for federally-listed large branchiopods (Exhibit E). No federally-listed large branchiopods were detected within the sampled habitats. The versatile fairy shrimp (*Branchinecta lindahli*), which has no state or federal listing status, was detected in three habitats (Pools 2, 3, and 14). Field data forms from each wet-season sampling date are provided in Appendix B. Representative photographs of the potential large branchiopod habitats and species observed are provided in Appendix C.

Following negative survey results from both protocol-level wet-season sampling and dry-season sampling (HBC 2021), no additional large branchiopod wet-season surveys are recommended. However, nine habitats (Pools 8-16) located in the expanded Project area that were sampled using wet-season techniques, but not sampled using dry season techniques (HBC 2021) would need to be.

LITERATURE CITED

Google Earth©. 2021. V 7.3.3.7786. Available at http://www.earth.google.com.

Helm Biological Consulting (HBC). 2021. Dry-season Sampling for Federally-listed Large Branchiopods at the Mariposa Industrial Park Project, San Joaquin County, California (USFWS# 2021-TA-0271). 22 pp. Dated: December 2020 (Revised April 2021).

U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS). 2017. Survey guidelines for the listed large branchiopods. 24 pp. Dated: 31 May 2015 (Revised November 13, 2017).

Weather Underground. 2021. Weather History for Visalia, CA. Visalia Muni Station. Available online: https://www.wunderground.com/history/monthly/us/ca/visalia/KVIS/date/2021-1

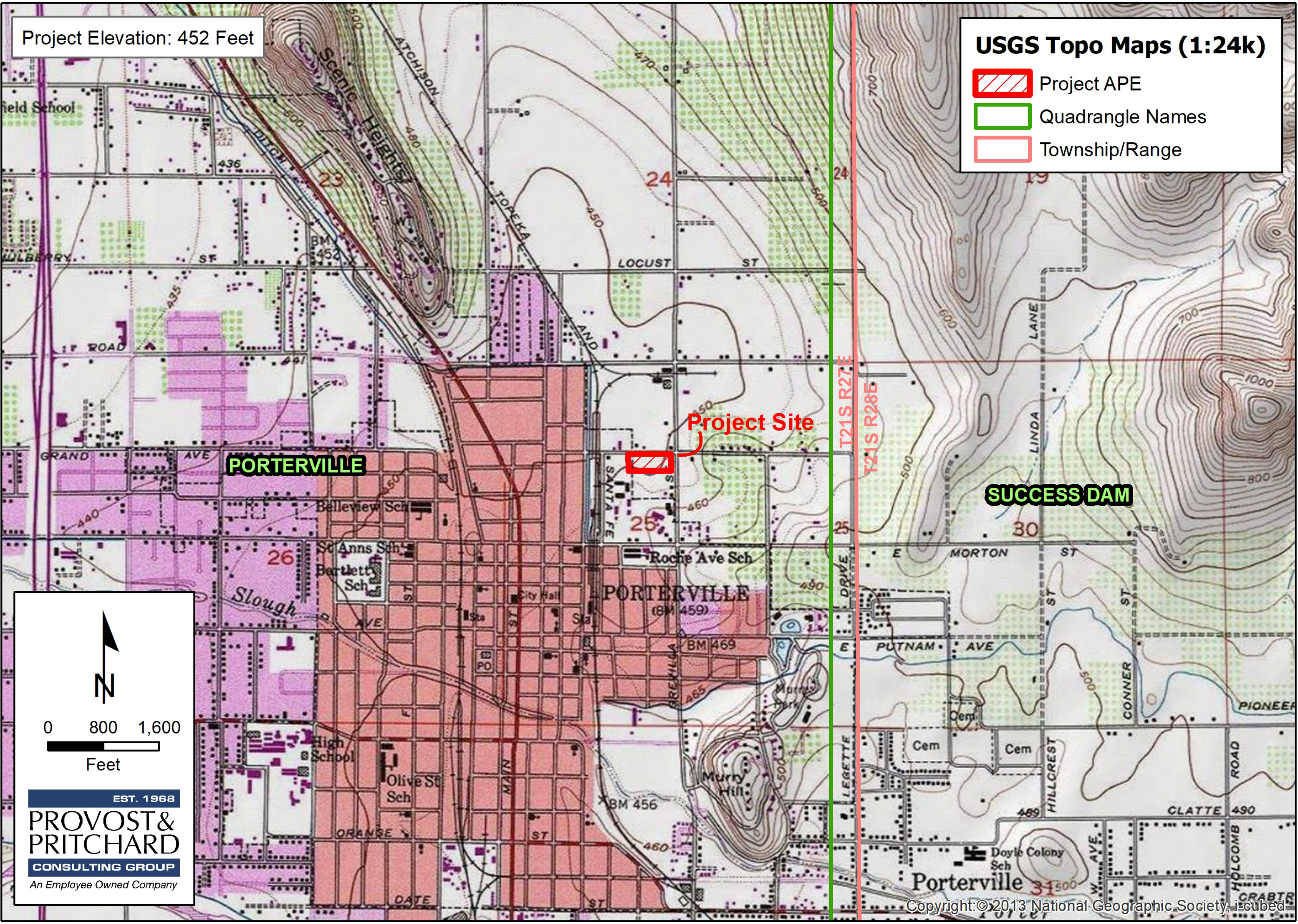
EXHIBIT A.
LOCATION OF PROJECT ON AERIAL PHOTOGRAPHY

12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\APE.mxd

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

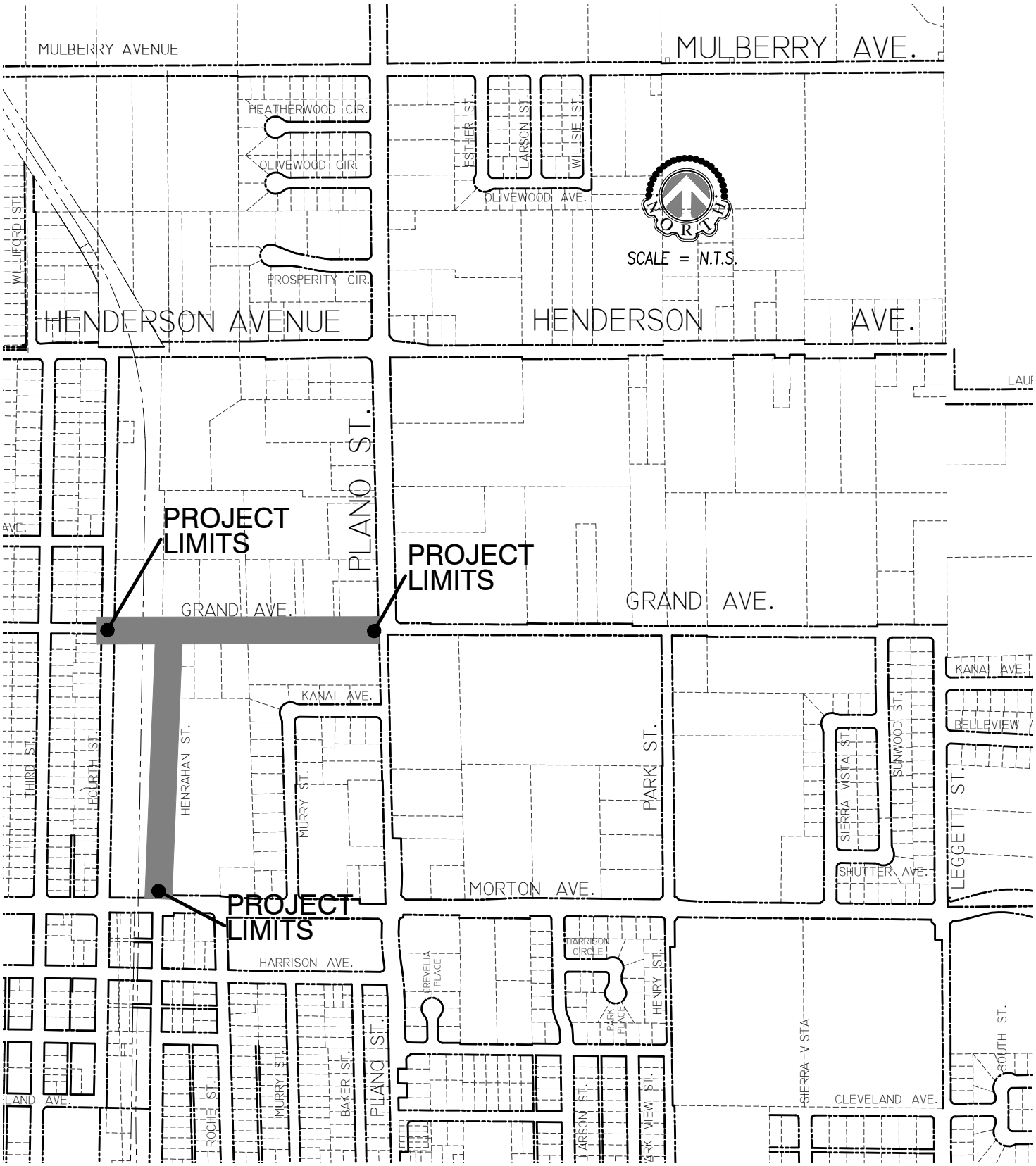
EXHIBIT B.
LOCATION OF PROJECT
ON USGS TOPOGRAPHIC QUADRANGLE MAP

Ph: (530) 633-0220
Fax: (530) 633-0230



12/17/2019 : G:\Porterville_City_of-1016\101619001-TO 1 ENV Docs Terrazza Condo\GIS\Map\Topo_Quad.mxd

EXHIBIT C.
LOCATION OF
PROJECT BOUNDARY EXPANSION



CITY OF PORTERVILLE

ENGINEERING DIVISION

291 NORTH MAIN STREET
PORTERVILLE, CA. 93257
(559) 782-7462

GRAND AVENUE PROJECT BETWEEN 4TH ST. TO PLANO AND HENREHAN PROJECT FROM GRAND TO MORTON

OWNER	–
APN	–
AREA	–
ACRES	–
SCALE	N.T.S.
DATE	–
DRAWN BY	–
CHECKED BY	–

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

EXHIBIT D.
LOCATION OF
PROJECT AND PROJECT BOUNDARY EXPANSION
ON USGS TOPOGRAPHIC QUADRANGLE MAP

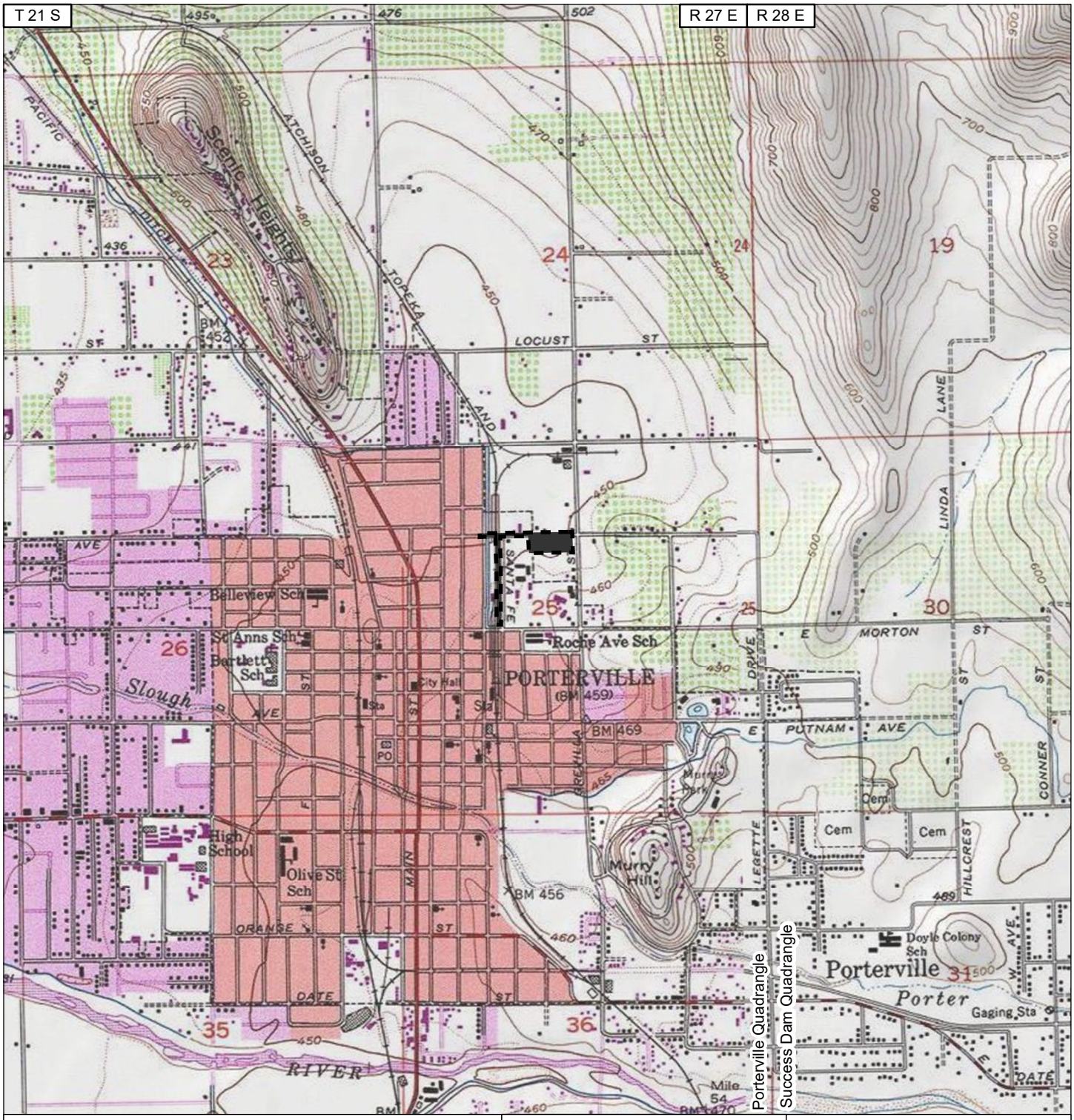


Exhibit D. Location of Project and Project Boundary Expansion

HELM
BIOLOGICAL CONSULTING
A Tansley Team Division
4600 Karchner Rd, Sheridan, CA 95681

EXHIBIT E.
POOLS WET-SEASON SAMPLED
AT THE
TERRAZZA CONDOMINIUM PROJECT

Ph: (530) 633-0220
Fax: (530) 633-0230

Project Boundary (approximate, 6.7 acres)

Pool (0.223 acre total)

0 100 200 Feet

1 inch = 200 feet

Data Sources:
- City of Porterville 2021
- Microsoft Bing accessed Apr 2021
- Provost & Pritchard 2019

Prepared by:
HELM BIOLOGICAL CONSULTING
A Tanaley Team Division
4600 Karchner Rd, Sheridan, CA 95681

Date: 4-25-21

C:\SRM\Helm\Terrazza\Fig2 Pools.mxd

Exhibit E. Pools Wet-season Sampled at the Terrazza Condominium Project

APPENDIX A.
USFWS AUTHORIZATION LETTER

Gmail **Sean O'Brien <sobrien@tansleyteam.com>**

USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)

7 messages

Sean O'Brien <sobrien@tansleyteam.com> Thu, Oct 8, 2020 at 11:54 AM
To: samantha_lantz@fws.gov
Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>

Hi Dr. Lantz,

I hope your week is going well. Attached is a request to conduct protocol-level dry-season sampling, followed by protocol-level wet-season sampling for federally-listed large branchiopods at the Terrazzo Condominium Project located in the City of Porterville, Tulare County, California. Please let us know if you have any questions.

Much appreciated,

Sean

Tansley Team, Inc.
DBA Helm Biological Consulting
4600 Karchner Rd
Sheridan, CA 95681
Phone: (530) 633-0220
Fax: (530) 633-0230
Email: sobrien@tansleyteam.com

USFWS Request Letter (2020) Terrazzo Condominium Project.pdf
4123K

Lantz, Samantha M <samantha_lantz@fws.gov> Mon, Oct 19, 2020 at 8:51 AM
To: Sean O'Brien <sobrien@tansleyteam.com>
Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>, "Cole, Patricia" <Patricia_Cole@fws.gov>

Brent Helm,

By this email message, you are authorized to conduct protocol-level vernal pool branchiopod surveys per the conditions of recovery permit TE-795930 and as specified in your request dated October 8, 2020. The surveys will be conducted at the Terrazza Condominium Project site near Porterville in Tulare County, California.

Please remember to carry a copy of your permit while doing the work, and to follow the terms and conditions of the permits, including the reporting requirements. Let us know if the surveys are not performed as authorized, or if they are done by a different permittee under a separate authorization. This authorization does not include access to the property which must be arranged with the landowner or manager.

Please send electronic copies of the report(s) to myself and Patricia Cole (cc'd). **We ask that you use UTM coordinates for all spatial data and that you use Service reference number 2021-TA-0145 in future correspondence regarding these surveys.** In your report, please include which surveys were authorized, the names of all persons involved in the surveys, their recovery permit numbers, if applicable, and the date of this authorization, to help ensure that we correctly record the fulfillment of the reporting requirement under this authorization.

Sam

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Samantha Lantz, PhD
Fish and Wildlife Biologist
USFWS, Sacramento Field Office
Listing and Recovery Division
2800 Cottage Way W-2605
Sacramento, CA 95825-1888
Phone: 916-414-6526
Pronouns: she/her/hers

In an effort to slow the spread of the coronavirus (COVID-19), staff in the Sacramento Fish and Wildlife Office have implemented an aggressive telework schedule. At this time, we are responding to requests for information via email or phone as often as possible as we do not have the in-office capacity to support regular mail service. We appreciate your understanding.

From: Sean O'Brien <sobrien@tansleyteam.com>
Sent: Thursday, October 8, 2020 11:54 AM
To: Lantz, Samantha M <samantha_lantz@fws.gov>
Cc: Brent Helm <bhelm@tansleyteam.com>; Dena Giacomini <DGiacomini@ppeng.com>
Subject: [EXTERNAL] USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)

[Quoted text hidden]

Sean O'Brien <sobrien@tansleyteam.com> Mon, Oct 19, 2020 at 11:43 AM
To: "Lantz, Samantha M" <samantha_lantz@fws.gov>
Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>, "Cole, Patricia" <Patricia_Cole@fws.gov>

Hi Dr. Lantz,

Thank you for the quick turnaround.

Much appreciated,

Sean

Tansley Team, Inc.
DBA Helm Biological Consulting
4600 Karchner Rd
Sheridan, CA 95681
Phone: (530) 633-0220
Fax: (530) 633-0230
Email: sobrien@tansleyteam.com

[Quoted text hidden]

Sean O'Brien <sobrien@tansleyteam.com> Tue, Feb 2, 2021 at 3:07 PM
To: "Lantz, Samantha M" <samantha_lantz@fws.gov>
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>, "Cole, Patricia" <Patricia_Cole@fws.gov>

Hi Sam,

For our wet-season sampling efforts at the Terrazza Condominium Project (Tulare County) (USFWS #: 2021-TA-0145), our Client would like us to survey areas located just outside of the original Project boundary and will mostly consist of roads, curbs, gutters, and sidewalks. The attached map shows the original Project boundary (in orange) and the additional area to be surveyed (in grey). We are planning on conducting our 1st round of wet-sampling on Thursday (2/4). Please let us know if you have any hesitations about these additional sampling efforts.

Thanks,

Sean

Tansley Team, Inc.
DBA Helm Biological Consulting
4600 Karchner Rd
Sheridan, CA 95681
Phone: (530) 633-0220
Fax: (530) 633-0230
Email: sobrien@tansleyteam.com

[Quoted text hidden]

Terrazza Condominium Project - Additional Survey Area.pdf
804K

Dena Giacomini <DGiacomini@ppeng.com> Wed, Feb 3, 2021 at 11:04 AM
To: Sean O'Brien <sobrien@tansleyteam.com>
Cc: Brent Helm <bhelm@tansleyteam.com>

We have a signed contract, please move forward with the wet sampling for both the Terrazza Condo and Road Projects.

Thank you,

Dena

[Quoted text hidden]

Lantz, Samantha M <samantha_lantz@fws.gov> Fri, Feb 12, 2021 at 3:24 PM
To: Sean O'Brien <sobrien@tansleyteam.com>
Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>, "Cole, Patricia" <Patricia_Cole@fws.gov>

Hi Sean,

Yes, please continue to use the same reference number and I will update our files with the expanded area.

Sam

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Samantha Lantz, PhD
Fish and Wildlife Biologist
USFWS, Sacramento Field Office
Listing and Recovery Division
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

2800 Cottage Way W-2605
Sacramento, CA 95825-1888
Phone: 916-414-6526
Pronouns: she/her/hers

In an effort to slow the spread of the coronavirus (COVID-19), staff in the Sacramento Fish and Wildlife Office have implemented an aggressive telework schedule. At this time, we are responding to requests for information via email or phone as often as possible as we do not have the in-office capacity to support regular mail service. We appreciate your understanding.

From: Sean O'Brien <sobrien@tansleyteam.com>
Sent: Tuesday, February 2, 2021 3:07 PM
To: Lantz, Samantha M <samantha_lantz@fws.gov>
Cc: Brent Helm <bhelm@tansleyteam.com>; Dena Giacomini <DGiacomini@ppeng.com>; Cole, Patricia <Patricia_Cole@fws.gov>
Subject: Re: [EXTERNAL] USFWS Sampling Request for Dr. Brent Helm (TE-795930-10.2)

[Quoted text hidden]

Sean O'Brien <sobrien@tansleyteam.com> Mon, Feb 15, 2021 at 1:08 PM
To: "Lantz, Samantha M" <samantha_lantz@fws.gov>
Cc: Brent Helm <bhelm@tansleyteam.com>, Dena Giacomini <DGiacomini@ppeng.com>, "Cole, Patricia" <Patricia_Cole@fws.gov>

Thank you, Sam!

[Quoted text hidden]

APPENDIX B.
WET-SEASON
FIELD DATA FORMS

Project: Terrazza Condominium Project | **Surveyor(s): O'Brien** | **Quad: Porterville** | **County: Tulare**

Date: 2/4/2021 | **Weather Cond: 15% cloud cover** | **Township: 21 South** | **Lat.: 36.076243**

Time: 12:30 PM to 2:30 PM | **Air Temperature(°F): 53** | **Range: 27 East** | **Long.: -119.010470**

Abundance: R = Rare (≤2 individuals), NC = Not Common (3-10 individuals), C = Common (11-50 individuals), VC = Very Common (51-100 individuals), A = Abundant (>100 individuals)

Hydrology: D = dry, N/P = not ponding, M=moist, S = saturated to surface, I/P = intermittent ponding, X = Present but not observed in 1 meter sample

LB Redroductive Status: i = immature, m = mature, g = gravid (with eggs)

Habitat Condition: UD = undisturbed, D = disturbed - tt = tire tracks, t = trash, p = plowing

UG = ungrazed, G = grazed - C = cattle, H = horse, S = sheep, l = light grazing,

l = light grazing, m = moderate grazing, h = heavy grazing

		Present Depth (inches)		Potential Depth (Inches)			Crustacea										Insecta											Mollusca			Turbellaria	Acari	Collembola	Other	Herps			
								Copepods			Large Branchiopods (LB)						Coleoptera			Hemiptera			Odanota		Diptera														
Feature No.	Water Temp (°F)	Max	Ave.	Max	Ave.	Surface Area Inundation (% of maximum)	Ostracods	Calanoida	Cyclopoda	Cladocera	*LIOC*	*BRLY*	*BRME*	*BRSP*	*BRLI*	*LEPA*	Dytiscidae	Hydrophilidae	Haliplidae	Notonectidae	Corixidae	Ephemeroptera	Zygoptera	Anisoptera	Culicidae	Chironomidae	Trichoptera	Lymnaeidae	Physidae	Planorbidae	Micro-turbellarian	Hydracarini		Other Invertebrate	Pseudacris	Other	Habitat Condition	Comments
1	Dry																																			D-tt	
2	54	3	2	12	6	7								NC																						D-tt	
3	53	4	2	14	7	7								NC																						D-tt	
4	Dry																																			D-tt	
5	Dry																																			D-tt	
6	54	1	0.5	12	6	5																														D-tt	
7	Dry																																			D-tt	
8	53	2	1	10	5	20																														D-tt	
9	54	1	1	6	3	15																														D-tt	
10	53	1	1	10	5	7																														D-tt	
11	Dry																																			D-tt	
12	54	5	2	14	7	20																														D-tt	
13	Dry																																			D-tt	
14	52	4	2	12	6	7								C																						D-tt	
15	Dry																																			D-tt	
16	53	1	1	6	3	5																														D-tt	

Project: Terrazza Condominium Project | **Surveyor(s): O'Brien** | **Quad: Porterville** | **County: Tulare**

Date: 2/12/2021 | **Weather Cond: 25% cloud cover** | **Township: 21 South** | **Lat.: 36.076243**

Time: 1:30 PM to 3:30 PM | **Air Temperature(°F): 58** | **Range: 27 East** | **Long.: -119.010470**

Abundance: R = Rare (≤2 individuals), NC = Not Common (3-10 individuals), C = Common (11-50 individuals), VC = Very Common (51-100 individuals), A = Abundant (>100 individuals)

Hydrology: D = dry, N/P = not ponding, M=moist, S = saturated to surface, I/P = intermittent ponding, X = Present but not observed in 1 meter sample

LB Redroductive Status: i = immature, m = mature, g = gravid (with eggs)

Habitat Condition: UD = undisturbed, D = disturbed - tt = tire tracks, t = trash, p = plowing

UG = ungrazed, G = grazed - C = cattle, H = horse, S = sheep, l = light grazing,

l = light grazing, m = moderate grazing, h = heavy grazing

		Present Depth (inches)		Potential Depth (Inches)			Crustacea										Insecta											Mollusca			Turbellaria	Acari	Collembola	Other	Herps			
								Copepods			Large Branchiopods (LB)						Coleoptera			Hemiptera			Odanota		Diptera														
Feature No.	Water Temp (°F)	Max	Ave.	Max	Ave.	Surface Area Inundation (% of maximum)	Ostracods	Calanoida	Cyclopoda	Cladocera	*LIOC*	*BRLY*	*BRME*	*BRSP*	*BRLI*	*LEPA*	Dytiscidae	Hydrophilidae	Haliplidae	Notonectidae	Corixidae	Ephemeroptera	Zygoptera	Anisoptera	Culicidae	Chironomidae	Trichoptera	Lymnaeidae	Physidae	Planorbidae	Micro-turbellarian	Hydracarini		Other Invertebrate	Pseudacris	Other	Habitat Condition	Comments
1	Dry																																			D-tt	
2	58	3	1	12	6	5									R																					D-tt	
3	57	4	2	14	7	3									C																					D-tt	
4	Dry																																			D-tt	
5	Dry																																			D-tt	
6	58	1	0.5	12	6	5																														D-tt	
7	Dry																																			D-tt	
8	Dry																																			D-tt	
9	58	2	1	6	3	20																														D-tt	
10	57	1	1	10	5	5																														D-tt	
11	59	1	1	4	2	5																														D-tt	
12	58	2	1	14	7	5																														D-tt	
13	58	1	1	4	2	5																														D-tt	
14	56	4	2	12	6	7																														D-tt	
15	58	1	1	6	3	1																														D-tt	
16	58	1	1	6	3	3																														D-tt	

Project: Terrazza Condominium Project | **Surveyor(s): O'Brien** | **Quad: Porterville** | **County: Tulare**

Date: 2/22/2021 | **Weather Cond: 25% cloud cover** | **Township: 21 South** | **Lat.: 36.076243**

Time: 1:30 PM to 3:30 PM | **Air Temperature(°F): 58** | **Range: 27 East** | **Long.: -119.010470**

Abundance: R = Rare (≤2 individuals), NC = Not Common (3-10 individuals), C = Common (11-50 individuals), VC = Very Common (51-100 individuals), A = Abundant (>100 individuals)

Hydrology: D = dry, N/P = not ponding, M=moist, S = saturated to surface, I/P = intermittent ponding, X = Present but not observed in 1 meter sample

LB Redroductive Status: i = immature, m = mature, g = gravid (with eggs)

Habitat Condition: UD = undisturbed, D = disturbed - tt = tire tracks, t = trash, p = plowing

UG = ungrazed, G = grazed - C = cattle, H = horse, S = sheep, l = light grazing,

l = light grazing, m = moderate grazing, h = heavy grazing

		Present Depth (inches)		Potential Depth (Inches)			Crustacea										Insecta											Mollusca			Turbellaria	Acari	Collembola	Other	Herps			
								Copepods			Large Branchiopods (LB)						Coleoptera			Hemiptera			Odanota		Diptera														
Feature No.	Water Temp (°F)	Max	Ave.	Max	Ave.	Surface Area Inundation (% of maximum)	Ostracods	Calanoida	Cyclopoda	Cladocera	*LIOC*	*BRLY*	*BRME*	*BRSP*	*BRLI*	*LEPA*	Dytiscidae	Hydrophilidae	Haliplidae	Notonectidae	Corixidae	Ephemeroptera	Zygoptera	Anisoptera	Culicidae	Chironomidae	Trichoptera	Lymnaeidae	Physidae	Planorbidae	Micro-turbellarian	Hydracarini		Other Invertebrate	Pseudacris	Other	Habitat Condition	Comments
1	Dry																																			D-tt	
2	58	1	1	12	6	1																														D-tt	
3	57	1	1	14	7	1									NC																					D-tt	
4	Dry																																			D-tt	
5	Dry																																			D-tt	
6	Dry																																			D-tt	
7	Dry																																			D-tt	
8	Dry																																			D-tt	
9	Dry																																			D-tt	
10	Dry																																			D-tt	
11	Dry																																			D-tt	
12	Dry																																			D-tt	
13	Dry																																			D-tt	
14	Dry																																			D-tt	
15	Dry																																			D-tt	
16	Dry																																			D-tt	

APPENDIX C.
REPRESENTATIVE PHOTOGRAPHS

Photograph of Pool 2 taken on February 4, 2021 (facing east).

Photograph of Pool 3 taken on February 4, 2021 (facing west).

Photograph of immature *Branchinecta* sp. detected in Pool 3 on February 4, 2021.

Photograph of Pool 12 taken on February 4, 2021 (facing west).

Photograph of Pool 14 taken on February 4, 2021 (facing south).

Photograph of Pool 16 taken on February 4, 2021 (facing west).

Photograph of Pool 2 taken on February 12, 2021 (facing east).

Photograph of Pool 3 taken on February 12, 2021 (facing west).

Photograph of female versatile fairy shrimp (*Branchinecta lindahli*) detected in Pool 3 on February 12, 2021. Note the relatively elongated brood pouch.

Photograph of Pool 12 taken on February 12, 2021 (facing west).

Photograph of Pool 14 taken on February 12, 2021 (facing south).

Photograph of Pool 2 taken on February 22, 2021 (facing east).

Photograph of Pool 3 taken on February 22, 2021 (facing west).

Photograph of Pool 14 (dry) taken on February 22, 2021 (facing south).

Biological Survey and Report Review Assessment Memo – Dated August 2021

LIVE OAK ASSOCIATES, INC.
an Ecological Consulting Firm

August 13, 2021

Dena Giacomini, Senior Planner/Senior Biologist
Provost & Pritchard Consulting Group
1800 30th Street, Suite 280
Bakersfield, CA 933301

RE: Branchiopod Survey Report Review and Assessment, Terrazza Condominium Project, Porterville, CA

Dear Ms. Giacomini,

Live Oak Associates, Inc. (LOA) has prepared the following assessment of two branchiopod survey reports we received and reviewed for the Terrazza Condominium Project ("project") in Tulare County, CA. As I understand it, the project consists of the development of a small parcel into a condominium facility and resurfacing adjacent streets within the City of Porterville.

PROJECT BACKGROUND

During a survey completed by Provost & Pritchard (P&P) biologist Brooke Fletcher, inundated tire ruts inhabited by fairy shrimp were identified on and adjacent to the project site during a reconnaissance survey. To determine what species of fairy shrimp was present, P&P hired Helm Biological Consulting (HBC) to conduct protocol level branchiopod surveys over the condominium project site consisting of a dry-season survey during the summer of 2020 and a wet-season survey the following rainy season. However, between the two survey efforts the project site was expanded to include adjacent sections of road needing project related improvements. As a result, some potential branchiopod habitat within the project site was not subject to a dry-season survey. HBC prepared two reports documenting the methods and results of their surveys: *Dry-Season Sampling and Cyst Culturing for Federally-Listed Large Branchiopods at the Terrazza Condominium Project, Tulare County, California* (December 2020 and Revised April 2021), and *Protocol-Level Wet-Season Sampling for Federally-Listed Large Branchiopods at the Terrazza Condominium Project, Tulare County, California* (May 2021). HBC did not identify any special-status fairy shrimp and Dr. Brent Helm of HCB apparently indicated during multiple phone conversations with Dena Giacomini of P&P that habitats on the project site were highly unlikely to support listed branchiopod species. However, HCB's final survey report did not determine the absence of federally listed branchiopods, presumably because the all pools within the survey area were not subject to both dry and wet-season surveys, or render an opinion on the likelihood of such species to occur on the site. As a result, the City of Porterville and P&P are uncertain on how to proceed with their project and are seeking a second opinion from a qualified biologist.

PURPOSE

The purpose of this review and assessment is to provide LOA's professional opinion on whether the project will have a significant effect on federally listed branchiopod species per the provisions of the California Environmental Quality Act (CEQA). The following assessment and opinions are based upon my 14 years of branchiopod surveying under my federal recovery permit (TE-168924-2), as well as a review of HCB's survey reports, the California Natural Diversity Database (CNDDB), historic aerial photography, and scientific literature and other documents related to regionally occurring branchiopods.

HCB SURVEY SUMMARY

Dry-season Survey: Mr. Sean O'Brien of HBC conducted dry-season branchiopod sampling on October 21, 2020 where he collected soil samples from seven (7) pools within or immediately adjacent to the Terrazza Condominium Project site. Soil samples were examined in an HCB laboratory by HBC staff for cysts (eggs) belonging to branchiopod genus' that contain federally listed species. These cysts were separated and reared in the laboratory to determine the species of cysts in order to determine the presence of listed branchiopod species on the project site. After three hatching attempts, a total of one (1), six (6), and eleven (11) individual versatile fairy shrimp (*Branchinecta lindahli*) were hatched and raised to maturity from the soils of Pools 1, 2, and 3, respectively. The versatile fairy shrimp has no state or federal listing status and is a common fairy shrimp species in disturbed pools with poor water quality.

Wet-season Survey: Dr. Brent Helm and/or Mr. Sean O'Brien of HBC conducted three rounds of protocol-level wet- season sampling during the 2020/2021 wet-season on February 4 (1st round), February 12 (2nd round), and February 22 (3rd round). The wet-season sampling was conducted using methods generally following the USFWS's (2017) *Survey Guidelines for Listed Large Branchiopods* (hereafter "Survey Guidelines") for wet-season sampling.

Wet-season sampling was conducted in all habitats (i.e., basins, pools) at the project site that had potential to support federally listed large branchiopods. This survey effort covered an expanded project boundary to accommodate road improvements associated with the Terrazza Condominium Project. A total of 16 habitats occurring within the project site were considered potential habitat for federally listed branchiopods and sampled during the survey. This included the seven (7) pools on the condominium site that were sampled during the dry-season survey, plus an additional nine (9) pools located across both the condominium site and the project expansion area.

No federally listed branchiopods were detected within the sampled habitats. The versatile fairy shrimp, which has no state or federal listing status, was detected in three habitats (Pools 2, 3, and 14). Concluding the wet-season survey report, HCB recommended that dry-season surveys be conducted in pools that were sampled in the wet-season but were not sampled during the dry-season survey.

BRANCHIOPOD HABITAT REQUIREMENTS

There is only one federally listed branchiopod species, the vernal pool fairy shrimp (*Branchinecta lynchi*), who's range extends into the Porterville region of Tulare County. As noted above, HCB survey results identified only one branchiopod species, the versatile fairy shrimp, within the survey areas. A brief discussion of these species' habitat requirements follows.

Vernal Pool Fairy Shrimp: The vernal pool fairy shrimp is a wide-ranging fairy shrimp species in California that primarily occurs in vernal pools and swales with a grassy or, occasionally, muddy bottom, in unplowed grassland (Erikson and Belk 1999). This species is capable of carrying out its life cycle in short-lived pools and occasionally can be found in disturbed habitats such as plowed fields and road-side pools, typically in close association with nearby or historic vernal pool landscapes. Vernal pool fairy shrimp occur in waters at least 4.5-23°C, with low to moderate TDS (48-481 ppm, mean of 185) and alkalinity (22-274 ppm, average of 91), and a mean pH of 6.8 with a range of 6.3-8.5 (Erikson and Belk 1999).

The nearest documented occurrence of this species is approximately 3.2 miles southwest of the project site, where it was documented in pools on the west side of State Route 65 in 2002 (CDFW 2021).

Versatile Fairy Shrimp: The versatile fairy shrimp is also a wide-ranging fairy shrimp species that primarily occurs in seasonal pools and puddles which collect water from winter and spring rains. These habitats are typically unpredictable, often quite small, and short-lived. This species is also tolerant of a wide range of water chemistry conditions (Erikson and Belk 1999). Because of this species' tolerance to a variety of habitat conditions the versatile fairy shrimp commonly occupies ruderal pools and puddles such as road-side ditches, quarries, bulldozed watering holes, and tire ruts, but can also be found in arid grassland swales and pools (Erikson and Belk 1999).

AVAILABLE FAIRY SHRIMP HABITAT ON THE PROJECT SITE AND VICINITY

Existing Habitat: Fairy shrimp habitat on the project site consists solely of ruderal pools and puddles situated in an urban landscape. A majority of this habitat consists of depressions and tire ruts along the shoulder of an urban roadway. Other habitat consisted of depressions in a vacant lot in which the condominium project is proposed. Roadside pools and puddles appear to be regularly driven through or parked upon by vehicles, as evidenced by tire tracks and vehicles apparent in photographs of the pools presented in the HCB survey reports and in Google Earth aerial imagery. Water quality in these roadside pools is expected to be poor due to oil and other vehicle related chemicals concentrating in these depressions from cars parked over and near these pools and from street runoff. Habitats within the interior of the vacant lot appear to experience much less disturbance, consisting of possible annual mowing or discing. As a result, the water quality of these pools is expected to be higher than in the roadside pools.

The project site is situated within the urban footprint of the City of Porterville, located at the eastern edge of the San Joaquin Valley. Surrounding lands consist of industrial, commercial, and residential uses. Small areas of open land associated with rural residences or as vacant lots occur in the vicinity. Vernal pool landscapes are absent from the project vicinity.

Historic Habitat: Historic aerial photographs reveal that the project site and vicinity have consisted entirely of developed lands dating back to 1946. Such development was primarily agricultural but also consisted of the construction and operation of the historic Atchison Topeka and Santa Fe Railway, as well as residential development. Vernal pool landscapes are clearly absent from the site and vicinity in 1946. Furthermore, soils of the site and vicinity are not classified as hydric, meaning they don't have the propensity to form vernal pools or other wetlands.

POTENTIAL FOR VERNAL POOL FAIRY SHRIMP TO OCCUR ON THE PROJECT SITE

The project site provides unlikely habitat for the vernal pool fairy shrimp due to the urban landscape, as well as the expected low water quality in, and regular disturbance to, roadside pools. Furthermore, the absence of current or historical vernal pool landscapes on or near the project site from which a population of vernal pool fairy shrimp may have migrated onto the site or persisted in sub-optimal conditions on the site, further reduces the likelihood that this species occurs on the project site.

With baseline conditions generally unsuitable for the vernal pool fairy shrimp it was not surprising that HCB only detected the versatile fairy shrimp during surveys of the site. In fact, the ruderal pools on the site are entirely consistent with the type of habitat commonly occupied by the versatile fairy shrimp and only roadside pools were found to be occupied by this species.

Furthermore, the pools within the site's vacant lot that would be more suited to vernal pool fairy shrimp occupation, due to a lower disturbance level and anticipated higher water quality, were found to be uninhabited by any fairy shrimp species during both dry and wet-season surveys.

ASSESSMENT OF HCB'S RECOMMENDATION FOR ADDITIONAL SURVEYS

HCB recommended surveys be conducted in nine (9) aquatic habitats that were not sampled during the dry-season survey. This included pools within the original project site that were not identified during the dry-season survey, as well as several roadside pools within the expanded project site that were only covered by the wet-season survey. This recommendation was likely made in order to adhere to the *U.S. Fish and Wildlife Service Survey Guidelines for the Listed Large Branchiopods* (USFWS 2017) that recommend a dry and wet-season survey be conducted within a survey area. However, it is LOA's opinion that additional surveys would have a very low probability of detecting the vernal pool fairy shrimp, due to the low-quality habitat and demonstrated absence during HCB surveys. Additionally, most of the pools that HCB is recommending further surveys of are interspersed within a matrix of ruderal pools that received both dry and wet-season surveys. Many of these pools are almost certainly connected, experience regular communication from water, dust, and mud transmitted from vehicle tires; and/or are of a similar quality and type as the fully surveyed pools. As a result, the survey effort to date provides a strong case that the vernal pool fairy shrimp is absent from the site.

CEQA IMPACT ASSESSMENT

Based on the information collected during HCB's surveys, combined with research that I have conducted and presented in this letter, LOA has concluded that federally listed branchiopods (i.e. the vernal pool fairy shrimp) are highly unlikely to occur on the project site and that project impacts to the vernal pool fairy shrimp (*Branchinecta lynchi*) would be less than significant per the provisions of CEQA.

If you have any questions regarding this letter, please contact me at (559) 760-6842 or jgurule@loainc.com.

Sincerely,

Jeff Gurule
Senior Project Manager
Live Oak Associates, Inc.

Appendix C

Cultural and Historical Resources Records Search

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Jackie Lancaster
Provost & Pritchard Consulting Group, Inc.
130 N. Garden Street
Visalia, CA 93291

Record Search 19-306

Date: August 6, 2019

Re: City of Porterville – Terrazza Condominiums

County: Tulare

Map(s): Porterville 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, Historic Property Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-QUARTER MILE RADIUS

According to the information in our files, there have been no previous cultural resource studies conducted within the project area. There have been two studies within the one-quarter mile radius, TU-01031 and TU-01061.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-QUARTER MILE RADIUS

There are no recorded cultural resources within the project area, and it is not known if any exist there. There are 20 recorded resources within the one-quarter mile radius, P-54-003049, 003063, 003066, 003067, 003068, 003069, 003070, 003071, 003072, 003073, 003074, 003075, 003076, 003140, 003141, 003142, 003151, 004354, 004632, and 004700. These resources consist of historic era single-family residences, ditches, railroads, and historic urban districts.

Resource P-54-003140 is the William Duncan House, located at 266 E. Morton Ave. This resource has been given a National Register status code of 3S, indicating it appears eligible for listing in the National Register of Historic Places as an individual property through survey evaluation. There are no recorded cultural resources within the project area that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project consists of development of a multi-family neighborhood consisting of 22 four-bedroom units and 24 three-bedroom units on a 3.35-acre parcel that is vacant and has not been previously developed. Because a cultural resources study has not been previously conducted on this property, it is unknown if any cultural resources are present. Therefore, prior to ground disturbance activities, we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file in order to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Celeste M. Thomson, Coordinator **Date:** August 6, 2019

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Appendix D

NRCS Soils 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 Tulare County, California, Central Part

February 6, 2019

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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

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.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,040 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

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: Tulare County, California, Central Part
Survey Area Data: Version 12, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 5, 2015—May 10, 2015

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
147	Porterville clay, 0 to 2 percent slopes	3.0	88.7%
148	Porterville clay, 2 to 9 percent slopes	0.4	11.3%
Totals for Area of Interest		**3.4**	**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.

Tulare County, California, Central Part

147—Porterville clay, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hkf7
Elevation: 50 to 300 feet
Mean annual precipitation: 9 to 20 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Porterville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Porterville

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Typical profile

Ap - 0 to 32 inches: clay
C - 32 to 72 inches: sandy clay, clay
C - 32 to 72 inches:

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural 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: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Centerville

Percent of map unit: 4 percent

Hydric soil rating: No

Clear lake

Percent of map unit: 4 percent
Landform: Alluvial fans
Hydric soil rating: Yes

Seville

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed, wet

Percent of map unit: 3 percent
Hydric soil rating: No

148—Porterville clay, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hkf8
Elevation: 50 to 300 feet
Mean annual precipitation: 9 to 20 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 150 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Porterville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Porterville

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Typical profile

Ap - 0 to 32 inches: clay
C - 32 to 72 inches: sandy clay, clay
C - 32 to 72 inches:

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural 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: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: CLAYEY (R017XE001CA)
Hydric soil rating: No

Minor Components

Centerville

Percent of map unit: 4 percent
Hydric soil rating: No

Seville

Percent of map unit: 4 percent
Hydric soil rating: No

Clear lake

Percent of map unit: 4 percent
Landform: Alluvial fans
Hydric soil rating: Yes

Unnamed, wet

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, ponded

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

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