DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR LAGO SUBDIVISION

JANUARY 2024

Prepared By:

4CREEKS

4Creeks, Inc.
324 S Santa Fe, Suite A
Visalia, CA 93292

Prepared For:

CITY OF TULARE
INCORPORATED APRIL 5 1888

City of Tulare
411 East Kern Ave
Tulare, CA 93274

TABLE OF CONTENTS

Section 1

Initial Study/Negative Declaration Process

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 1
CEQA Review Process

Project Title: Lago Subdivision

1.1 California Environmental Quality Act Guidelines

Section 15063 of the California Environmental Quality Act (CEQA) Guidelines requires that the Lead Agency prepare an Initial Study to determine whether a discretionary project will have a significant effect on the environment. All phases of the project planning, implementation, and operation must be considered in the Initial Study. The purposes of an Initial Study, as listed under Section 15063(c) of the CEQA Guidelines, include:

(1) Provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or negative declaration;
(2) Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;
(3) Assist the preparation of an EIR, if one is required, by:
  (a) Focusing the EIR on the effects determined to be significant,
  (b) Identifying the effects determined not to be significant,
  (c) Explaining the reasons for determining that potentially significant effects would not be significant, and
  (d) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
(4) Facilitate environmental assessment early in the design of a project;
(5) Provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment
(6) Eliminate unnecessary EIRs;
(7) Determine whether a previously prepared EIR could be used with the project.

1.2 Initial Study

The Initial Study provided herein covers the potential environmental effects of the construction and operation of 125 low density residential dwelling units on approximately 14.06 gross acres. The proposed project would also change the existing general plan land use designation from Community Commercial to Low density residential and rezone the project site from C-3 (Retail Commercial) to R-1-4 (Small Lot Residential), a Specific Plan amendment to amend the Del Lago Specific Plan land use diagram for the project area from Community Commercial to Single Family Residential and to add development standards specific to the proposed project which do not adhere to the R-1-4 zoning designation.,. The City of Tulare will act as the Lead Agency for processing the Initial Study/Mitigated Negative Declaration pursuant to the CEQA Guidelines.

1.3 Environmental Checklist

The Lead Agency may use the CEQA Environmental Checklist Form [CEQA Guidelines, Section 15063(d)(3) and (f)] in preparation of an Initial Study to provide information for determination if there are significant effects of the project on the environment. A copy of the completed Environmental Checklist is set forth in **Section Three**.

1.4 Notice of Intent to Adopt a Mitigated Negative Declaration

The Lead Agency shall provide a Notice of Intent to Adopt a Mitigated Negative Declaration (CEQA Guidelines, Section 15072) to the public, responsible agencies, trustee agencies and the County Clerk within which the project is located, sufficiently prior to adoption by the Lead Agency of the Mitigated Negative Declaration to allow the public and agencies the review period. The public review period (CEQA Guidelines, Section 15105) shall not be less than 30 days when the Initial Study/Negative Declaration is submitted to the State Clearinghouse unless a shorter period, not less than 20 days, is approved by the State Clearinghouse.

Prior to approving the project, the Lead Agency shall consider the proposed Mitigated Negative Declaration together with any comments received during the public review process, and shall adopt the proposed Negative Declaration only if it finds on the basis of the whole record before it, that there is no substantial evidence that the project will have a significant effect on the environment and that the Negative Declaration reflects the Lead Agency's independent judgment and analysis.

The written and oral comments received during the public review period will be considered by The City of Tulare prior to adopting the Negative Declaration. Regardless of the type of CEQA document that must be prepared, the overall purpose of the CEQA process is to:

1) Assure that the environment and public health and safety are protected in the face of discretionary projects initiated by public agencies or private concerns;
2) Provide for full disclosure of the project's environmental effects to the public, the agency decision-makers who will approve or deny the project, and the responsible trustee agencies charged with managing resources (e.g. wildlife, air quality) that may be affected by the project; and
3) Provide a forum for public participation in the decision-making process pertaining to potential environmental effects.

According to Section 15070(a) a public agency shall prepare or have prepared a proposed negative declaration for a project subject to CEQA when:

> ***The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. Less than significant impacts with mitigation measures have been identified.***

The Environmental Checklist Discussion contained in Section Three of this document has determined that the environmental impacts of the project are less than significant with mitigation measures and that a Mitigated Negative Declaration is adequate for adoption by the Lead Agency.

1.5 Negative Declaration or Mitigated Negative Declaration

The Lead Agency shall prepare or have prepared a proposed Negative Declaration or Mitigated Negative Declaration (CEQA Guidelines Section 15070) for a project subject to CEQA when the Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment. The proposed Negative Declaration or Mitigated Negative Declaration circulated for public review shall include the following:

(a) A brief description of the project, including a commonly used name for the project.
(b) The location of the project, preferably shown on a map.
(c) A proposed finding that the project will not have a significant effect on the environment.
(d) An attached copy of the Initial Study documenting reasons to support the finding.
(e) Mitigation measures, if any.

1.6 Intended Uses of Initial Study/Negative Declaration documents

The Initial Study/Negative Declaration document is an informational document that is intended to inform decision-makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed project. The environmental review process has been established to enable the public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency must balance any potential environmental effects against other public objectives, including economic and social goals. The City of Tulare, as Lead Agency, will make a determination, based on the environmental review for the Environmental Study, Initial Study and comments from the general public, if there are less than significant impacts from the proposed project and the requirements of CEQA can be met by adoption of a Mitigated Negative Declaration.

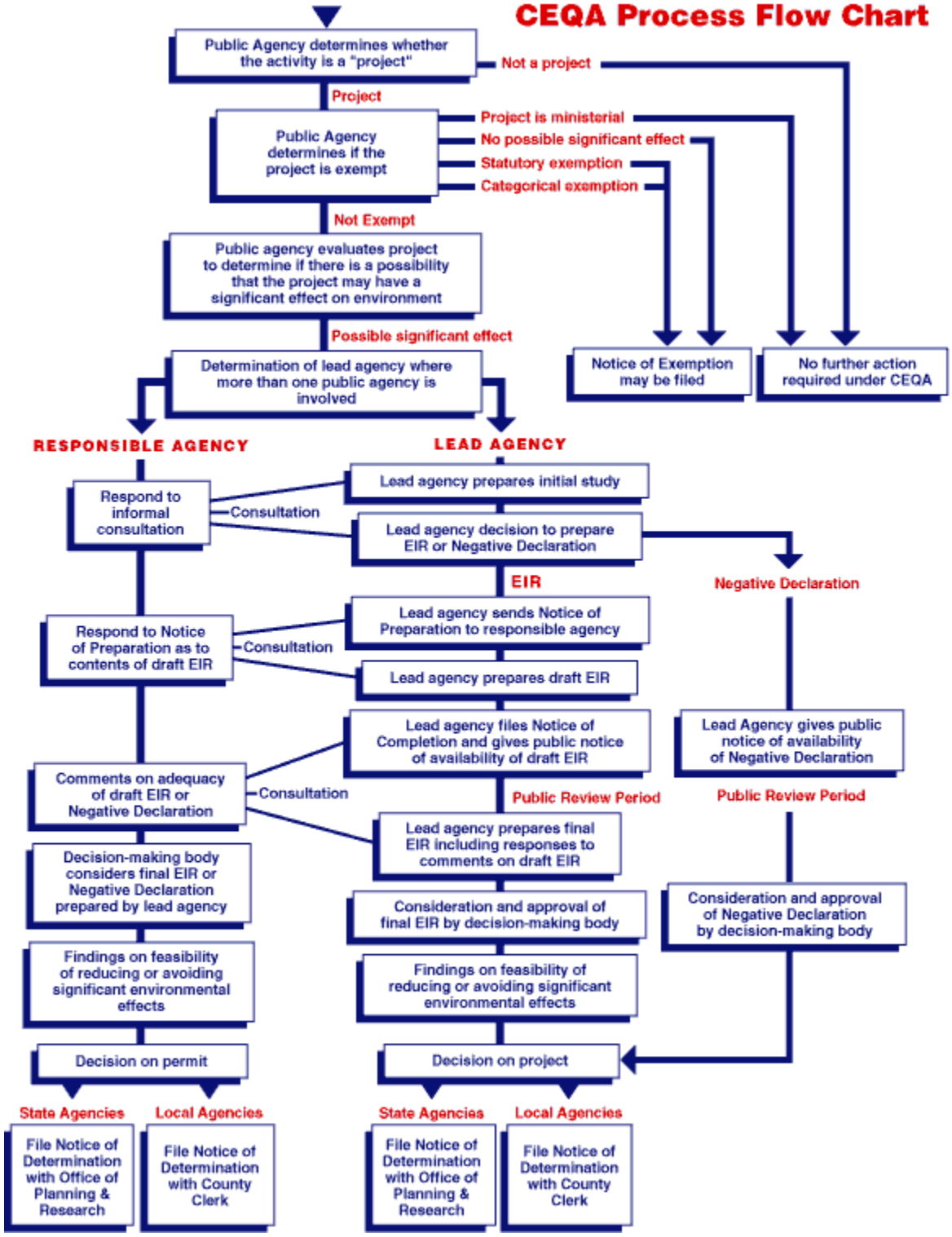
1.7 Notice of Determination (NOD)

The Lead Agency shall file a Notice of Determination within five working days after deciding to approve the project. The Notice of Determination (CEQA Guidelines, Section 15075) shall include the following:

(1) An identification of the project including the project title as identified on the proposed negative declaration, its location, and the State Clearinghouse identification number for the proposed negative declaration if the notice of determination is filed with the State Clearinghouse.
(2) A brief description of the project.
(3) The agency's name and the date on which the agency approved the project.
(4) The determination of the agency that the project will not have a significant effect on the environment.
(5) A statement that a negative declaration or a mitigated negative declaration was adopted pursuant to the provisions of CEQA.
(6) A statement indicating whether mitigation measures were made a condition of the approval of the project, and whether a mitigation monitoring plan/program was adopted.
(7) The address where a copy of the negative declaration or mitigated negative declaration may be examined.
(8) The identity of the person undertaking a project which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies or

the identity of the person receiving a lease, permit, license, certificate, or other entitlement for use from one or more public agencies.

1.8 CEQA Process Flow Chart



Section 2

Project Description

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 2
Project Description

Project Title: Lago Subdivision

2.1 Project Background & Purpose

The proposed project site is within the City of Tulare. The proposed project involves the development of 125 single-family residential units on 14.06 acres. The typical lot size for the proposed project is 2,880 SF (32' x 90'). Homes will include both single and two car garages.

The project will require a general plan amendment to change the land use designation from Community Commercial to Low Density Residential, a rezone of the site from C-3 (Retail Commercial) to R-1-4(Small Lot Residential), and a Specific Plan amendment to amend the Del Lago Specific Plan land use designation for the project site from Community Commercial to Single Family Residential and to add development standards specific to the proposed project which do not adhere to the R-1-4 zoning designation..

The proposed project would result in on-site infrastructure improvements, including new local residential streets and new and relocated utilities. The proposed project would include ROW dedications and street improvements, including frontage improvements on Cartmill Avenue, Mooney Blvd, and Ribolla Avenue. Construction is proposed to begin in April 2024 and continue through October 2026 See Figure 3-2 for site layout.

2.2 Project Location

The proposed project site is located within the northeastern portion of the City of Tulare, on the southwest corner of Cartmill Avenue and Mooney Boulevard. The project site is approximately 14.06 gross acres and is located on APN 149-038-032 and 149-039-022. The site is bordered by single family residential uses to the north, west and south, and agricultural land uses to the east.

2.3 Other Permits and Approvals

Other permits and approvals required for the Lago Tentative Subdivision Map Project are listed below. It should be noted that this list is not exhaustive and additional permits and approvals may also be required.

- *City of Tulare Tentative Subdivision Map*
- *City of Tulare General Plan Amendment*
- *City of Tulare Zone Amendment*
- *City of Tulare Specific Plan Amendment*
- *City of Tulare Landscape and Maintenance District*
- *City of Tulare Building and Encroachment Permits*

- *San Joaquin Valley Air Pollution Control District (SJVAPCD)*. The proposed project is within the jurisdiction of the SJVAPCD and will be required to comply with Rule VIII, 3135, 4101, and 9510.
- *Central Valley Regional Water Quality Control Board, SWPPP*. The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB will require a Storm Water Pollution Prevention Plan (SWPPP) to prevent impacts related to stormwater as a result of project construction

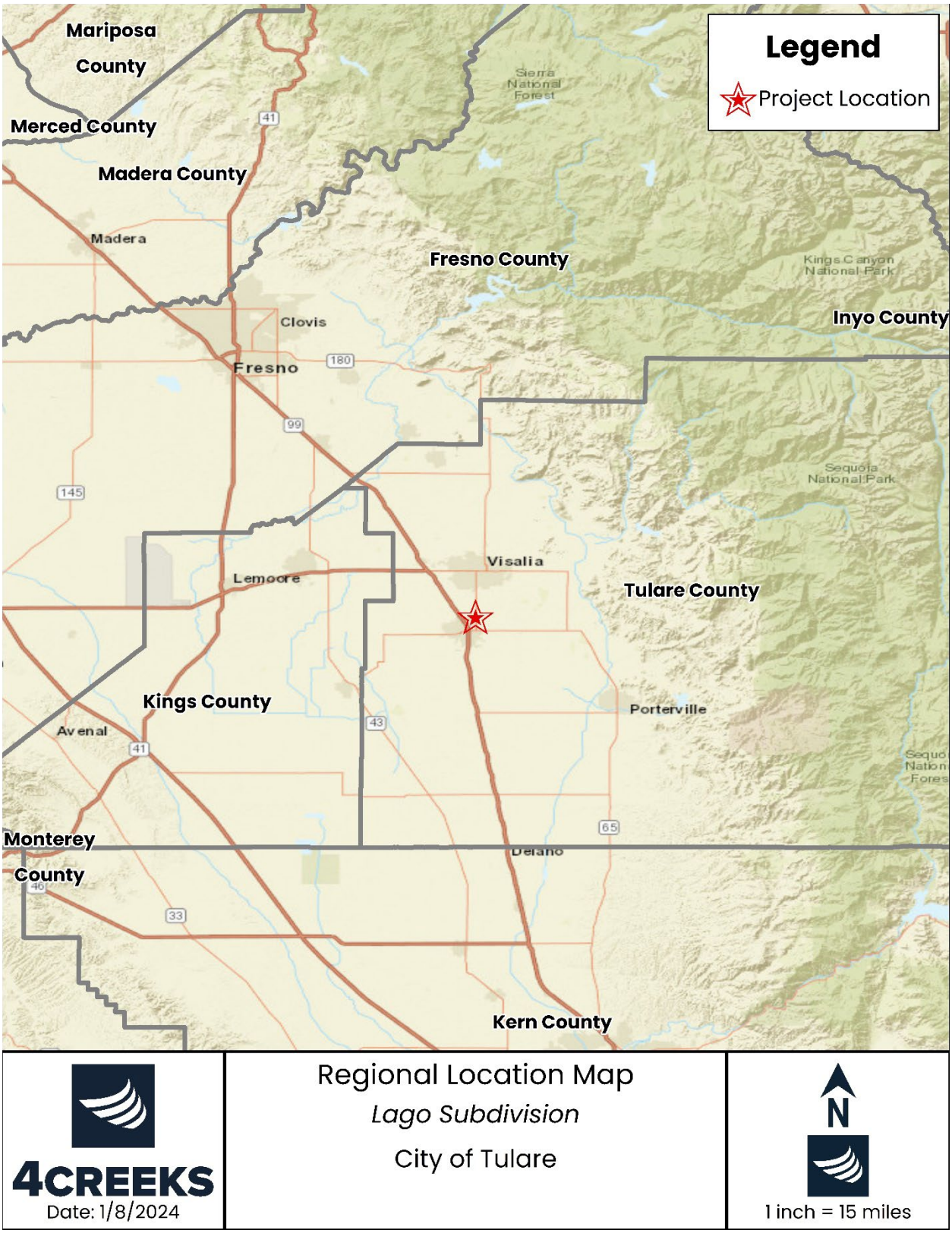


Figure 2-1. Regional Location Map

Figure 2-2. Vicinity Map.

Section 3

Evaluation of Environmental Impacts

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 3
Evaluation of Environmental Impacts

Project Title: Lago Subdivision

This document is the Initial Study/Mitigated Negative Declaration for the proposed project which involves the development of 125 single-family residential units on 14 acres. The project will require a zone amendment of the site from C-3 to R-1-4, a General Plan amendment from Retail Commercial to low density residential, and a Conditional Use Permit to establish R-1-4 zoning. Additionally, a specific plan amendment is required for changes to the adopted land use map from the Del Lago Specific Plan, changes in the unit counts, and changes to development standards (lot sizes, setbacks, one-car garages). The project is located within City of Tulare city limits. The City of Tulare will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

3.1 PURPOSE

The purpose of this environmental document is to implement the California Environmental Quality Act (CEQA). Section 15002(a) of the CEQA Guidelines describes the basic purposes of CEQA as follows.

(1) Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
(2) Identify the ways that environmental damage can be avoided or significantly reduced.
(3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
(4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

This Initial Study of environmental impacts has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.).

According to Section 15070(a), a Negative Declaration is appropriate if it is determined that:

(1) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment.

3.2 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1. **Project Title:** Lago Subdivision

2. **Lead Agency:** City of Tulare
411 East Kern Avenue
Tulare, CA 93274
(559) 684-4210

3. **Applicant:** San Joaquin Valley Homes
Contact Person: Jim Robinson
5607 Avenida de los Robles
Visalia, CA 93291
(559) 732-2660

4. **Project Location:** The proposed project site is located within the northeastern portion of the City of Tulare, within the Del Lago Specific Plan planning area, on the southwest corner of Cartmill Avenue and Mooney Boulevard. The project site is approximately 14 gross acres and is located on APN 149-038-032 and 149-039-022. The site is bordered by single family residential uses to the north, west and south, and agricultural land uses to the east.

5. **General Plan Designation:** The project site is designated as Community Commercial. The proposed land use is Low Density Residential, and will require a Specific Plan Amendment to account for the change in land use and to allow for a variance in development standards to allow smaller parcel sizes and one car garages.

6. **Zoning Designation:** The project site is zoned as C-3 and requires a Zone Amendment to change the zoning to R-1-4.

7. **Project Description:** The proposed project site is within the City of Tulare and involves the development of 125 low density single family residential dwelling units. The project will require a Specific Plan Amendment and a Zone Amendment to establish R-1-4 zoning, Low Density Residential Land Use, and a variance in development standards.

   The proposed project would result in on-site infrastructure improvements, including new local residential streets and new and relocated utilities. The proposed project would include ROW dedications and street improvements. Mooney Blvd will be widened to a ROW ranging from 124’ to 138’. On the southbound side of Mooney Blvd, the project would include widening the existing two lanes, adding a Caltrans standard curb, gutter, and sidewalk. Construction is proposed to begin in April 2024 and continue through October 2026. See Figure 3-2 for site layout.

8. **Surrounding Land Use Designations and Settings:**

   North Low Density Residential
   South Low Density Residential
   East Village (City of Tulare 2035 General Plan), currently Tulare County agricultural land
   West Low Density Residential (City of Tulare 2035 General Plan), currently Low Density Residential

9. **Required Approvals:** The following discretionary approvals are required from The City of Tulare for the proposed project:

    - City of Tulare Tentative Subdivision Map
    - Specific Plan Amendment
    - General Plan Amendment
    - Zone Amendment

10. **Native American Consultation:** The Santa Rosa Rancheria Tachi Yokut Tribe is the only tribe that has requested to be notified of projects within the City of Tulare for AB 52 tribal consultation. Other tribes in the area were notified of the project pursuant to SB 18. Notices for both AB-52 and SB-18 consultation were sent to all relevant tribes on October 25, 2023.

11. **Parking and access:** Vehicular Access to the project site will be available via one access point on Cartmill Ave and one access point on Ribolla Ave. The proposed residential development will provide parking for each residential unit, including both single and two car garages. During construction, workers will utilize existing facility parking areas and/or temporary construction staging areas for parking vehicles and equipment.

12. **Landscaping and Design:** The landscape and design plans will be required at the time that the project submits for building permits for the project and will be subject to the City of Tulare's Water Efficient Landscape Ordinance (WELO).

13. **Utilities and Public Services:** City services (water, sewer, storm drain, law enforcement, fire protection etc.) will be extended to the proposed Project area upon development. Non-city services such as electricity and cable will also be provided. The Project will be fully electric, with no natural gas hookups will be included.

Acronyms

BMP	Best Management Practices
CAA	Clean Air Act
CCR	California Code of Regulation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CWA	California Water Act
DHS	Department of Health Services
FEIR	Final Environmental Impact Report
FPPA	Farmland Protection Policy Act
ISMND	Initial Study Mitigated Negative Declaration
MCL	Maximum Contaminant Level
ND	Negative Declaration
NAC	Noise Abatement Criteria
RCRA	Resource Conservation and Recovery Act of 1976
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWPPP	Storm Water Pollution Prevention Plan

Figure 3-1. Vicinity Map.

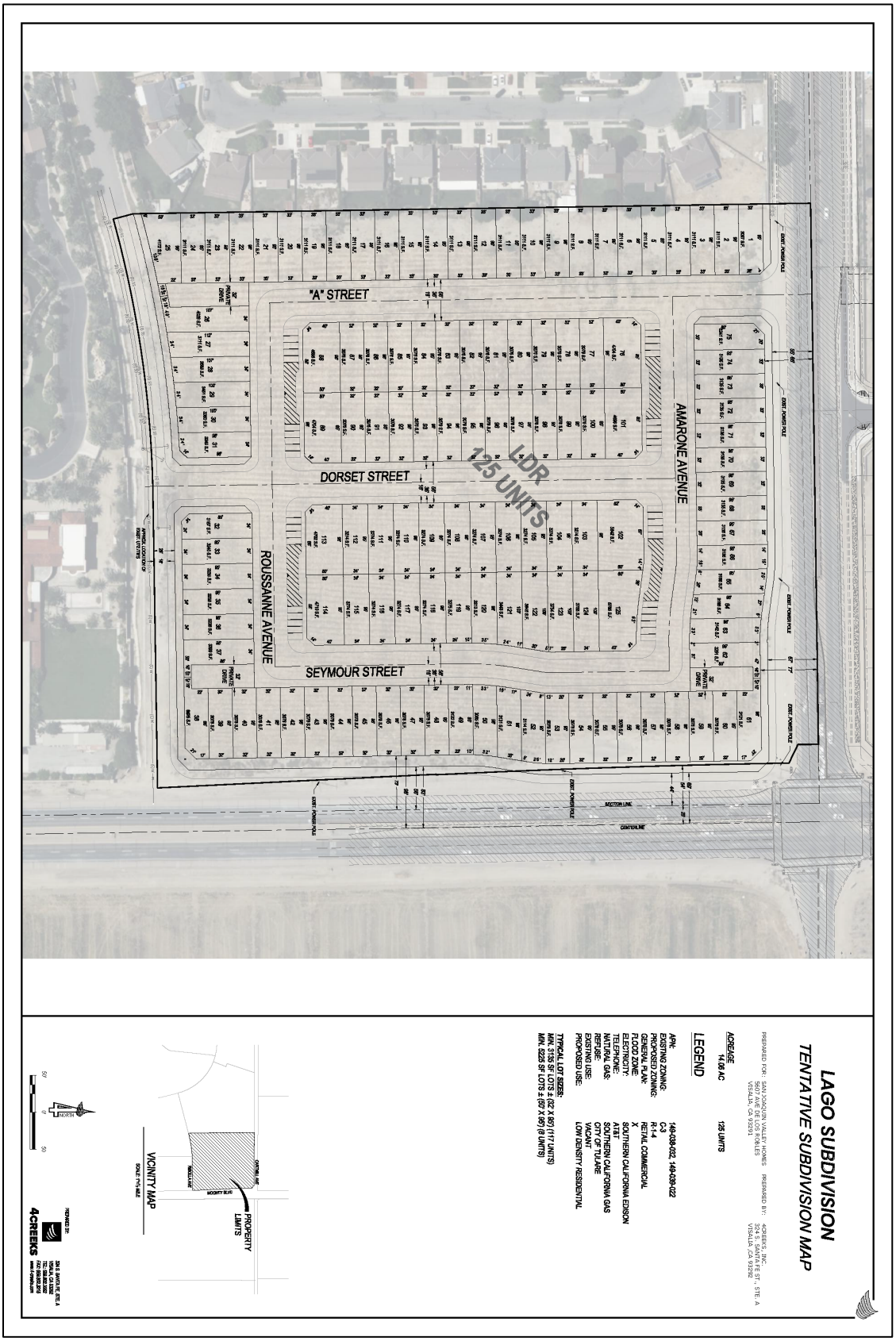
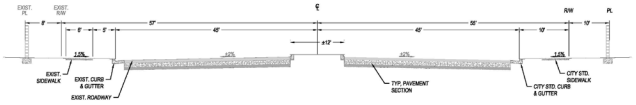
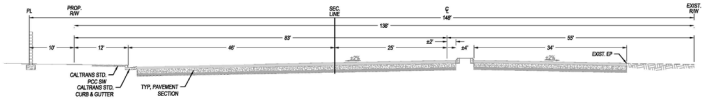


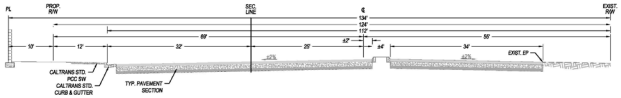
Figure 3-2. Site Plan.



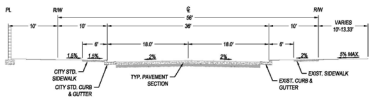
CARTMILL AVENUE
(LOOKING EAST)



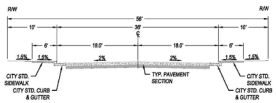
MOONEY BOULEVARD W/ RIGHT TURN POCKET
(LOOKING NORTH)



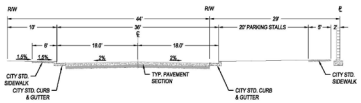
MOONEY BOULEVARD
(LOOKING NORTH)



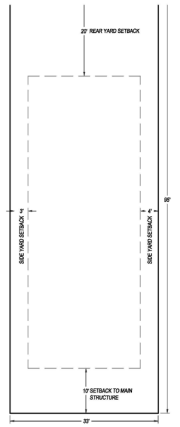
RIBOLLA AVENUE
(LOOKING EAST)



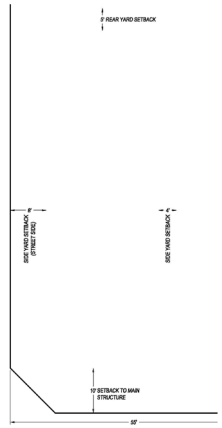
TYP. INTERNAL STREET



INTERNAL STREET W/ PARKING



TYP. LOT SETBACKS



CORNER LOT SETBACKS

LAGO SUBDIVISION
TENTATIVE SUBDIVISION MAP

PREPARED FOR: SAN JOAQUIN VALLEY HOMES
5607 AVE DE LOS ROBLES
VISALIA, CA 93291

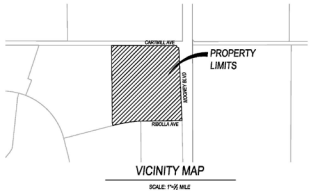
PREPARED BY: 4CREEKS, INC.
324 S. SANTA FE ST., STE. A
VISALIA, CA 93292

ACREAGE
14.06 AC — 132 UNITS

LEGEND

APN:	149-038-032, 149-039-022
EXISTING ZONING:	C-3
PROPOSED ZONING:	R-1-4
GENERAL PLAN:	RETAIL COMMERCIAL
FLOOD ZONE:	X
ELECTRICITY:	SOUTHERN CALIFORNIA EDISON
TELEPHONE:	AT&T
NATURAL GAS:	SOUTHERN CALIFORNIA GAS
REFUSE:	CITY OF TULARE
EXISTING USE:	VACANT
PROPOSED USE:	LOW DENSITY RESIDENTIAL

TYPICAL LOT SIZES:
MIN. 2880 SF LOTS ± (32' X 90') (132 UNITS)



VICINITY MAP
SCALE: 1"=½ MILE

PREPARED BY:
4CREEKS
324 S. SANTA FE, STE. A
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3315
www.4-creeks.com

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately support by the information sources a lead agency cites, in the parentheses following each question. A "No Impact" answer is adequately supported if the reference information sources show that the impact simply does not apply to projects like the one involved (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).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR if required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequate analyzed in an earlier EIR or negative declaration. Section 15063(c) (3)(D). In this case, a brief discussion should identify the following.

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated." Describe and mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

3.4 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture and Forest Resources	☐ Hazards and Hazardous Materials	☐ Recreation
☐ Air Quality	☑ Hydrology and Water Quality	☑ Tribal Cultural Resources
☑ Biological Resources	☐ Land Use and Planning	☐ Transportation
☑ Cultural Resources	☐ Mineral Resources	☐ Utilities and Service System
☐ Energy	☐ Noise	☐ Wildfire
☐ Geology and soils	☐ Population	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency) Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

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. A Negative Declaration 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 requested.

_____ _____

SIGNATURE DATE

Steven Sopp-Principal Planner City of Tulare

PRINTED NAME AGENCY

3.5 ENVIRONMENTAL ANALYSIS

The following section provides an evaluation of the impact categories and questions contained in the checklist and identify mitigation measures, if applicable.

I. AESTHETICS

Except as provided in Public Resource Code Section 210999, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 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 a 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?	☐	☐	☑	☐

Environmental Setting

There are no aesthetic resources identified in the City of Tulare General Plan; however, the views of the Sierra Nevada Mountains are considered to be an important scenic vista in Tulare County.

Sierra Nevada Mountains: The Sierra Nevada Mountain range and its foothills stretch along the east area of the county and are a valuable aesthetic resource. Additionally, Sequoia National Park is located within the stretch of the Sierra Nevada Mountains located in Tulare County. Sequoia National Forest is a U.S. National Forest known for its mountain scenery and natural resources. Located directly north of Sequoia National Park is Kings Canyon National Park, a U.S. National Park also known for its towering sequoia trees and scenic vistas. The Sierra Nevada Mountains are approximately 17 miles east of the proposed project site, but views of the mountains are not visible on most days due to poor air quality.

The following photos demonstrate the aesthetic character of the project area. As shown, the proposed project site is on a relatively flat area with agriculture, surrounded by residential and agriculture uses. The Sierra Nevada Mountains are generally slightly visible on an average day when facing east.

Photo 1: West site boundary (View East). Source: Google Maps June 2022

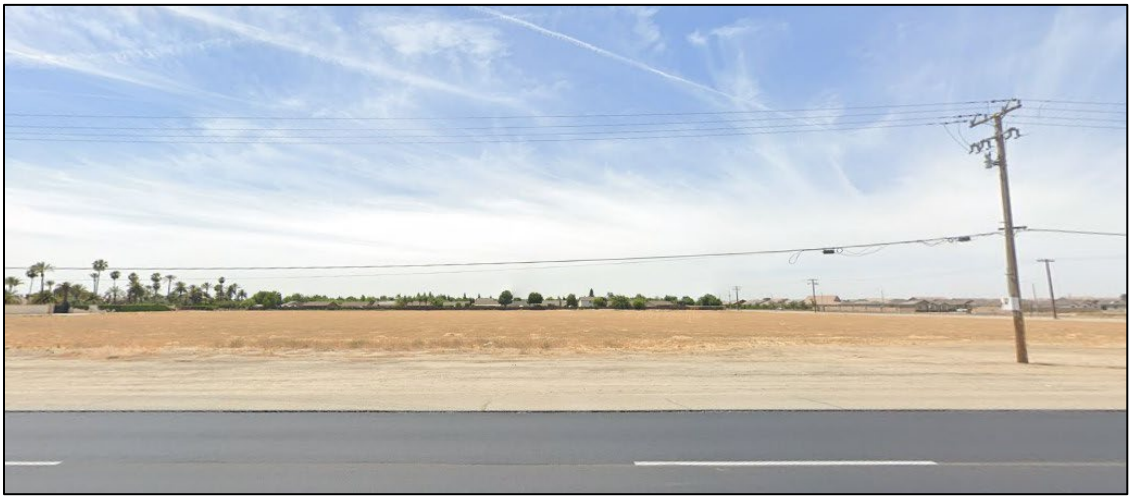


Photo 2: East Site boundary (View West). Source: Google Maps June 2022

Photo 3: NorthWest Site Boundary (View South). Source: Google Maps June 2022

Photo 4: South East site boundary (View North West). Source: Google Maps June 2022

Regulatory Setting

State Scenic Highways: The State Scenic Highway Program is implemented by Caltrans and was developed to preserve the aesthetic quality of certain highway corridors. Highways included in this program are designated as scenic highways. A highway is designated as scenic based on how much of the natural landscape is visible to travelers, the quality of that landscape, and the extent to which development obstructs views of the landscape. There are no designated State Scenic Highways or highways that are eligible for designation within the City of Tulare.

City of Tulare General Plan: The City of Tulare General Plan includes the following aesthetic goals and policies that are intended to protect the City's aesthetic resources and are relevant to the proposed project.

- LU-P13.14 Scenic Features and Views. The City shall preserve its scenic features and view corridors to the mountains.

- LU-P13.2 City Image. The City shall encourage a high level of design quality (architectural and landscape) for all new development in order to create a pleasant living environment, a source of community pride, and an improved overall City image.

Discussion

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

Less than Significant Impact: A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. The Sierra Nevada Mountains are the primary scenic vista within this region and the Land Use Element of the City's General Plan states that view corridors to the mountains should be preserved. These view corridors are typically found along major arterial streets in the City and on the periphery of the City and would not be impacted by this project. The foothills of the Sierra Nevada Mountains are approximately 17 miles east of the proposed project site and are not visible on most days due to poor air quality.

Views of the Sierra Nevada Mountains would largely be unaffected by the proposed project because of the distance between the project site and the mountains and the limited visibility of these features due to air quality. The impact is *less than significant.*

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

No Impact: There are no Officially Designated State Scenic Highways within the City of Tulare. Highway 198 is the nearest Eligible State Scenic Highway and is located approximately 7 miles north of the project site. Significant urban development between the project site and Highway 198 completely eliminates visibility of the project site from the highway. There is *no impact.*

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from a 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?

No Impact: The proposed project site is located within City limits and is within an urbanized area. The proposed project would not conflict with applicable zoning or other regulations governing scenic quality. There is *no impact.*

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 proposed project would result in new lighting sources on the project site consistent with adjacent residential development. New lighting sources would include interior lighting from residences, street lighting, and security lighting. All street and landscape lighting will be consistent with the City's lighting standards, which are developed to minimize impacts related to excessive light and glare. Additionally, the project would comply with the City's General Plan Policies LU-P13.24 and LU-P13.25 to prevent excess spillover lighting that could otherwise occur within the vicinity of the project area. Although the project will introduce new light sources to the area, all lighting will be consistent with adjacent residential land uses and the City's lighting standards. The impacts are *less than significant.*

II. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 forestland 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 forestland to non-forest use?	☐	☐	☑	☐

Environmental Setting

Agriculture is a vital component of the City of Tulare's economy and is a significant source of the City's cultural identity. As such, preserving the productivity of agricultural lands is integral to maintaining the City's culture and economic viability.

The proposed project site is not under Williamson Act Contract and is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under the Important Farmland Mapping and Monitoring Program (FMMP). The project site is currently vacant, and has been vacant for several years, but was formerly operated as a hay field and is bounded by agricultural activities to the East.

Regulatory Setting

California Land Conservation Act of 1965: The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, allows local governments to enter into contracts with private landowners to restrict the activities on specific parcels of land to agricultural or open space uses. The landowners benefit from the contract by receiving greatly reduced property tax assessments. The California Land Conservation Act is overseen by the California Department of Conservation; however local governments are responsible for determining specific allowed uses and enforcing the contract. The City of Tulare General Plan states that the City encourages the use of Williamson Act contracts on parcels located outside the urban development boundary.

California Farmland Mapping and Monitoring Program (FMMP): The FMMP is implemented by the California Department of Conservation (DOC) to conserve and protect agricultural lands within the State. Land is included in this program based on soil type, annual crop yields, and other factors that influence the quality of farmland. The FMMP mapping categories for the most important statewide farmland are as follows:

- ***Prime Farmland*** has the ideal physical and chemical composition for crop production. It has been used for irrigated production in the four years prior to classification and is capable of producing sustained yields.
- ***Farmland of Statewide Importance*** has also been used for irrigated production in the four years prior to classification and is only slightly poorer quality than Prime Farmland.
- ***Unique Farmland*** has been cropped in the four years prior to classification and does not meet the criteria for Prime Farmland or Farmland of Statewide Importance but has produced specific crops with high economic value.
- ***Farmland of Local Importance*** encompasses farmland that does not meet the criteria for the previous three categories. These may lack irrigation, produce major crops, be zoned as agricultural, and/or support dairy.
- ***Grazing Land*** has vegetation that is suitable for grazing livestock.

City of Tulare General Plan: The Conservation and Open Space Element of the City's General Plan includes the following agricultural resource goals and policies that are potentially applicable to the proposed project:

- COS-P3.1 Protect Interim Agricultural Activity. The City shall protect the viability of existing interim agricultural activity in the UDB to the extent possible.

- COS-P3.2 Agricultural Buffers. The City shall require that agricultural land uses designated for long-term protection (in a Williamson Act contract or under a conservation easement located outside the City's UDB) shall be buffered from urban land uses through the use of techniques including, but not limited to, spatial separations (e.g. greenbelts, open space setbacks, etc.), transitions in density, soundwalls, fencing, and/or berming.
- COS-P3.3 Agricultural Disclosures. The City shall require that developers of residential projects, which are within general proximity of agricultural operations in the city, to provide notification to new homeowners within their deeds of the City's right to farm ordinance.
- COS-P3.4 Discourage Leapfrog Development. The City shall discourage leapfrog development (defined as urban development more than 1/2 mile from existing urban development) and development of peninsulas extending into agricultural lands to avoid adverse effects on agricultural operations and contribute to premature conversion.
- COS-P3.9 Williamson Act Contracts. The City shall encourage the use of Williamson Act contracts on parcels located outside the UDB.
- COS-P3.10 Williamson Act Contracts near City Limits. The City shall protest the formation of new Williamson Act or Super Williamson Act contracts within the UDB.
- COS-P3.11 Williamson Act Non-Renewal in UDB. The City shall support non-renewal or cancellation processes for Williamson Act designated lands within the City of Tulare UDB.
- COS-P3.12 Mitigation for Agricultural Land Conversion. The City shall create and adopt a mitigation program to address the conversion of Prime Farmland & Farmland of Statewide Importance within the UDB and outside the city limits to non-agricultural uses. This mitigation program shall:
    - Require a 1:1 ratio of agricultural land preserved for every acre of land converted.
    - Require land to be preserved be equivalent to the land converted, e.g. Prime Farmland, and further require that the land to be preserved has adequate existing water supply to support agricultural use, is designated and zoned for agriculture, is located outside of a city UDB, and is within the southern San Joaquin Valley.
    - Require mitigation prior to or at time of impact.
    - Allow mitigation to be provided either by purchase of agricultural easements or by payment of agricultural mitigation fees, but state that purchase of conservation easements is the preferred form of mitigation. Both purchase of easements and payment of mitigation fees should cover not only the cost of an agricultural easement, but additional costs of transactional fees and administering, monitoring, and enforcing the easement.
    - Require easements to be held by and/or mitigation fees to be transferred to a qualifying entity, such as a local land trust with demonstrated experience administering, monitoring and enforcing agricultural easements.
    - Require the qualifying entity to submit annual status and monitoring reports to the City and to Tulare County.
    - Allow stacking of conservation and agricultural easements if habitat needs of species on conservation easement are compatible with agricultural activities/use on agricultural easement.
    - Allow exemptions for conversion of land to agricultural tourism uses, agricultural processing uses, agricultural buffers, public facilities, and roadways.
- COS-P3.13 Farmland Trust and Funding Sources. The City shall encourage the trust or other qualifying entity to pursue a variety of funding sources (grants, donations, taxes, or other funds) to fund further implementation of mitigation for agricultural land conversion.

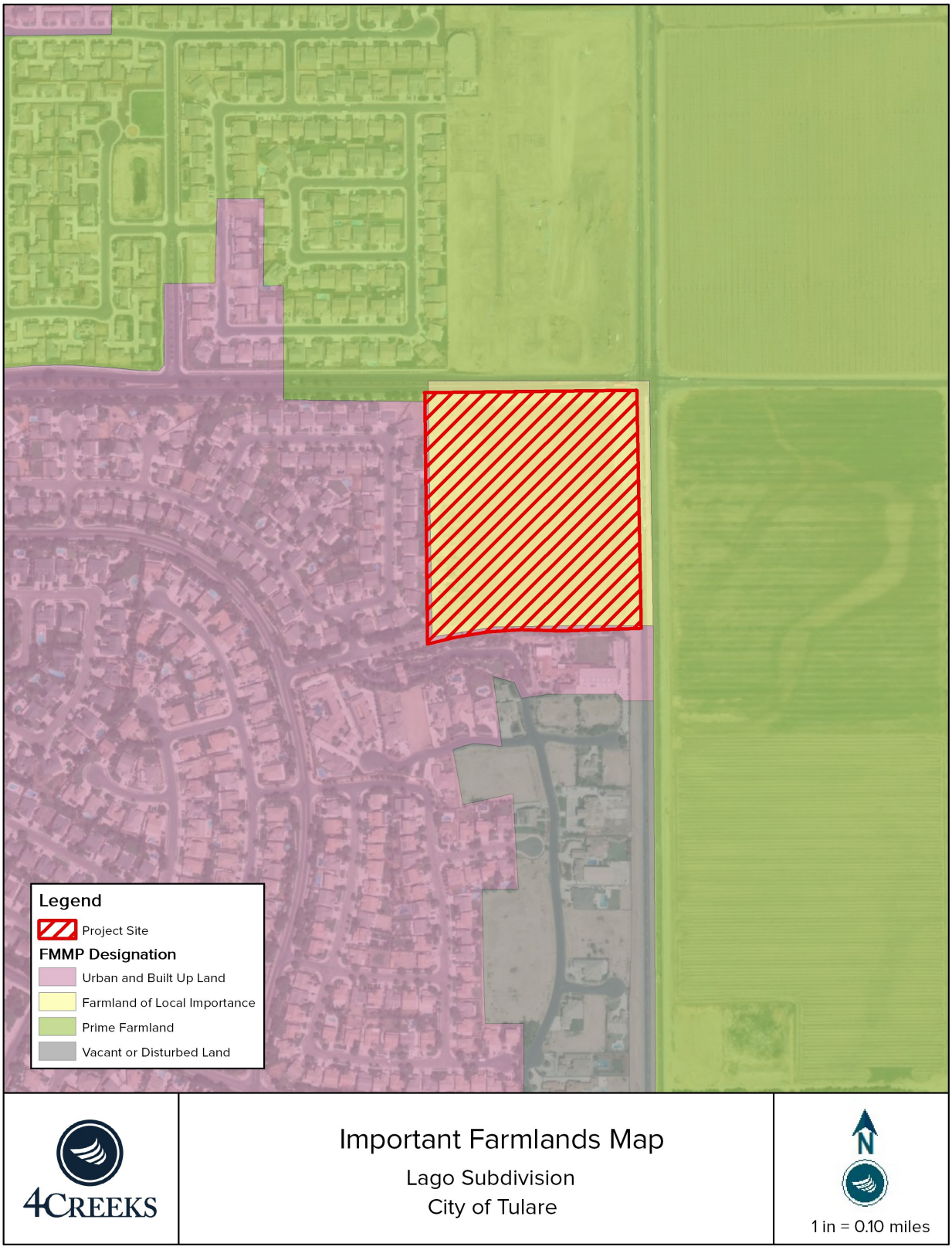


Figure 3-3. Important Farmlands Map.

Discussion

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?

Less than Significant Impact: The project site is designated as Farmland of Local Importance, according to the California Department of Conservation Important Farmland Finder (see Figure 3-3). The site is located within the City of Tulare Urban Development Boundary and City Limits and the site has been designated for non-agricultural land use by the City's General Plan. The Project is consistent with the policies in the Conservation Element of the General Plan. As such, no mitigation is required, and there is a less than *significant impact.*

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

No Impact: The proposed project site is not zoned for agricultural use or under a Williamson Act Contract. There is *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)?

No Impact: The project site is not zoned for forest or timberland production and there is no forest land located on the site. Therefore, *no impacts* would occur.

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

No Impact: No conversion of forestland, as defined under Public Resource Code or General Code, will occur as a result of the project and there would be *no impacts*.

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 forestland to non-forest use?

Less than Significant Impact: The project site is located in an area that is designated as Farmland of Local Importance. However, the proposed project site is not currently under active agriculture use and has not been used for agriculture in several years. Additionally, the site is not designated for agriculture in the City's General Plan or Zoning Ordinance (Title 10 of the Tulare Municipal Code). Adjacent farmland will not be converted to non-agricultural use as a result of the proposed project. Therefore, the proposed project would result in a *less than significant impact.*

III. 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 Incorporation	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?	☐	☐	☑	☐

Environmental Setting

Air pollution is directly related to regional topography. Topographic features can either stimulate the movement of air or restrict air movement. California is divided into regional air basins based on topographic air drainage features. The proposed project site is within the San Joaquin Valley Air Basin, which is bordered by the Sierra Nevada Mountains to the east, Coastal Ranges to the west, and the Tehachapi Mountains to the south.

The mountain ranges surrounding the San Joaquin Valley Air Basin (SJVAB) serve to restrict air movement and prevent the dispersal of pollution. As a result, the SJVAB is highly susceptible to pollution accumulation over time. As shown in the Table 3-1, the SJVAB is in nonattainment for several pollutant standards.

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – One hour	No Federal Standard[f]	Nonattainment/Severe
Ozone – Eight hour	Nonattainment/Extreme	Nonattainment
PM 10	Attainment[c]	Nonattainment
PM 2.5	Nonattainment[d]	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

[a] See 40 CFR Part 81
[b] See CCR Title 17 Sections 60200-60210
[c] On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard (NAAQS) and approved the PM10 Maintenance Plan.
[d] The Valley is designated nonattainment for the 1997 PM2.5 NAAQS. EPA designated the Valley as nonattainment for the 2006 PM2.5

NAAQS on November 13, 2009 (effective December 14, 2009).
[e] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).
[f] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

Table 3-1. San Joaquin Valley Attainment Status; Source: SJVAPCD

Regulatory Setting

Federal Clean Air Act – The 1977 Federal Clean Air Act (CAA) authorized the establishment of the National Ambient Air Quality Standards (NAAQS) and set deadlines for their attainment. The Clean Air Act identifies specific emission reduction goals, requires both a demonstration of reasonable further progress and an attainment demonstration, and incorporates more stringent sanctions for failure to meet interim milestones. The U.S. EPA is the federal agency charged with administering the Act and other air quality-related legislation. EPA's principal functions include setting NAAQS; establishing minimum national emission limits for major sources of pollution; and promulgating regulations. Under CAA, the NCCAB is identified as an attainment area for all pollutants.

California Clean Air Act – California Air Resources Board coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, California Air Resources Board monitors existing air quality, establishes California Ambient Air Quality Standards, and limits allowable emissions from vehicular sources. Regulatory authority within established air basins is provided by air pollution control and management districts, which control stationary-source and most categories of area-source emissions and develop regional air quality plans. The project is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District.

The state and federal standards for the criteria pollutants are presented in Section 8.4 of The San Joaquin Valley Unified Air Pollution Control District's 2015 "Guidance for Assessing and Mitigating Air Quality Impacts". These standards are designed to protect public health and welfare. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation and other aspects of general welfare. The U.S. EPA revoked the national 1-hour ozone standard on June 15, 2005, and the annual PM_{10} standard on September 21, 2006, when a new $PM_{2.5}$ 24-hour standard was established.

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (03)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet 8 Hour Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
	Annual Arithmetic Mean	20 µg/m3		--		
	24 Hour			35 µg/m^3		

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Annual Analysis
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	--	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		--	--	
Nitrogen Dioxide (NO_2) [8]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	--	Gas Phase Annual Chemiluminescence
	Arithmetic Mean	0.030 ppm (57 µg/m^3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	--	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)9	--	
	Annual Arithmetic Mean	--		0.030 ppm (for certain areas)9	--	
Lead[10,11]	30 Day Average	1.5 µg/m^3	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m3 (for certain areas)11	Same as Primary Standard	
	Rolling 3-Month Average	--		0.15 µg/m^3		
Visibility Reducing Particles[12]	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No National Standard		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[10]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies. 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas. 4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used. 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health. 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. 7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA. 8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 53 ppb and 100 ppb are identical to 0.053 ppm and 0.100 ppm, respectively. 9. On June 2, 2010, a new 1-hour SO2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm. 10. The ARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants. 11. The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved. 12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the statewide and Lake Tahoe Air Basin standards, respectively.					

Table 3-2. Ambient Air Quality Standards; Source: SJVAPCD

San Joaquin Valley Air Pollution Control District (SJVAPCD) – The SJVAPCD is responsible for enforcing air quality standards in the project area. To meet state and federal air quality objectives, the SJVAPCD adopted the following thresholds of significance for projects:

Pollutant/Precursor	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
CO	100	100	100
Nox	10	10	10
ROG	10	10	10
SOx	27	27	27
PM10	15	15	15
PM2.5	15	15	15

Table 3-3. SJVAPCD Thresholds of Significance for Criteria Pollutants; Source: SJVAPCD

The following SJVAPCD rules and regulations may apply to the proposed project:

- **Rule 3135:** Dust Control Plan Fee. All projects which include construction, demolition, excavation, extraction, and/or other earth moving activities as defined by Regulation VIII (Described below) are required to submit a Dust Control Plan and required fees to mitigate impacts related to dust.
- **Rule 4101:** Visible Emissions. District Rule 4101 prohibits visible emissions of air contaminants that are dark in color and/or have the potential to obstruct visibility.
- **Rule 9510:** Indirect Source Review (ISR). This rule reduces the impact PM10 and NOX emissions from growth on the SJVB. This rule places application and emission reduction requirements on applicable development projects in order to reduce emissions through onsite mitigation, offsite SJVAPCD administered projects, or a combination of the two. This project will submit an Air Impact Assessment (AIA) application in accordance with Rule 9510's requirements.
- **Regulation VIII:** Fugitive PM10 Prohibitions. Regulation VIII is composed of eight rules which together aim to limit PM10 emissions by reducing fugitive dust. These rules contain required management practices to limit PM10 emissions during construction, demolition, excavation, extraction, and/or other earth moving activities.

Discussion

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

No Impact: The proposed project is located within the boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and would result in air pollutant emissions that are regulated by the air district during both its construction and operational phases. The SJVAPCD is responsible for bringing air quality in Tulare County into compliance with federal and state air quality standards. The air district has Particulate Matter (PM) plans, Ozone Plans, and Carbon Monoxide Plans that serve as the clean air plan for the basin. Together, these plans quantify the required emission reductions to meet federal and state air quality standards and provide strategies to meet these standards.

Construction Phase. Project construction would generate pollutant emissions from the following construction activities: site preparation, grading, building construction, application of architectural coatings, and paving. The construction related emissions from these activities were calculated using CalEEMod. The full CalEEMod Report can be found in Appendix A. As shown in Table 3-4 below, project construction related emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Construction	**2.4626**	**2.2841**	**0.0048**	**2.1959**	**0.3862**	**0.2089**
SJVAPCD Air Quality Thresholds of Significance	**100**	**10**	**27**	**10**	**15**	**15**
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-4. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Construction; Source: SJVAPCD, CalEEMod Analysis (Appendix A)

Operational Phase. Implementation of the proposed project would result in long-term emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. Operational emissions from these factors were calculated using CalEEMod. The Full CalEEMod Report can be found in Appendix A. As shown in Table 3-5 below, the project's operational emissions do not exceed the thresholds established by the SJVAPCD.

	CO (tpy)	ROG (tpy)	SOx (tpy)*	Nox (tpy)	PM10 (tpy)	PM2.5 (tpy)
Emissions Generated from Project Operations	**5.8296**	**1.7287**	**0.0123**	**1.0347**	**1.1904**	**0.3403**
SJVAPCD Air Quality Thresholds of Significance	**100**	**10**	**27**	**10**	**15**	**15**
*Threshold established by SJVAPCD for SOx, however emissions are reported as SO2 by CalEEMod.						

Table 3-5. Projected Project Emissions Compared to SJVAPCD Thresholds of Significance for Criteria Pollutants related to Operations; Source: SJVAPCD, CalEEMod Analysis (Appendix A)

Because the emissions from both construction and operation of the proposed project would be below the thresholds of significance established by the SJVAPCD, the project would not conflict with or obstruct implementation of an applicable air quality plan and there is *no impact.*

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 SJVAPCD accounts for cumulative impacts to air quality in Section 1.8 "Thresholds of Significance – Cumulative Impacts" in its 2015 Guide for Assessing and Mitigating Air Quality Impacts. The SJVAPCD considered basin-wide cumulative impacts to air quality when developing its significance thresholds. Because construction and operational emissions are below the significance thresholds adopted by the air district, and compliance with SJVAPCD rules will address any cumulative impacts regarding operational emissions, impacts regarding cumulative emissions would be *less than significant.*

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

Less Than Significant Impact: The single-family residences located directly west, and south of the project site are the closest sensitive receptors. The project does not include any project components identified by the California Air Resources Board that could potentially impact any sensitive receptors. These include heavily traveled roads, distribution centers, fueling stations, and dry-cleaning operations. The project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be *less than significant.*

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

Less Than Significant Impact: The project will create temporary localized odors during project construction. The proposed project will not introduce a conflicting land use (surrounding land includes residential neighborhoods) to the area and will not have any component that would typically emit odors. The project would not create objectionable odors affecting a substantial number of people. Therefore, impacts would be *less than significant.*

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 & Game 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 Game or US 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 director 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?	☐	☐	☐	☑

Discussion for this section originates from the Habitat Assessment that was prepared for this project by Live Oak Associates, Inc. to identify sensitive biological resources, provide project impact analysis, and suggest mitigation measures. The full document can be found in Appendix B of this Initial Study.

The Project Site has been disturbed through farming practices for many years. The potential for sensitive-species to be present onsite is relatively low, however, the Project site contains potentially suitable habitat for the following species: Swainson's hawk, Burrowing owl, Loggerhead shrike, Pallid bat, and Western mastiff bat. None of the above referenced special status species were observed on the Project site.

Environmental Setting

The overall topography of the project site is flat with elevations between 306 and 308 feet National Geodetic Vertical Datum (NGVD) across the site (west to east). One soil-mapping unit was identified within

the site: Nord fine sandy loam, 0 to 2 percent slopes (NRCS 2021). This soil type is classified as well drained, with no hydric soil rating, meaning it does not have the propensity to pond water in depressions or form vernal pools. Furthermore, the soil within the project APE and surrounding lands have been subjected to decades of soil-disturbing activities associated with agriculture and urban development, so that their native soil characteristics may no longer be present.

Two biotic habitats and/or land uses were identified on the project site during the site surveys. Ruderal grassland and ruderal/developed. Analysis of historical aerial photographs shows this site was used for agriculture from 1946 to 2005 when the adjacent housing developments to the west and south began construction.

Regulatory Setting

Federal Endangered Species Act (FESA): defines an *endangered species* as "any species or subspecies that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

The Federal Migratory Bird Treaty Act (FMBTA: 16 USC 703-712): FMBTA 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 FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Although the USFWS and its parent administration, the U.S. Department of the Interior, have traditionally interpreted the FMBTA as prohibiting incidental as well as intentional "take" of birds, a January 2018 legal opinion issued by the Department of the Interior now states that incidental take of migratory birds while engaging in otherwise lawful activities is permissible under the FMBTA. However, California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities.

Birds of Prey (CA Fish and Game Code Section 3503.5): Birds of prey are protected in California under provisions of the 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.

Clean Water Act: Section 404 of the Clean Water Act of (1972) is to maintain, restore, and enhance the physical, chemical, and biological integrity of the nation's waters. Under Section 404 of the Clean Water Act, the US Army Corps of Engineers (USACE) regulates discharges of dredged and fill materials into "waters of the United States" (jurisdictional waters). Waters of the US including navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries.

California Endangered Species Act (CESA): prohibits the take of any state-listed threatened and endangered species. CESA defines *take* as "any action or attempt to hunt, pursue, catch, capture, or kill

any listed species." If the proposed project results in a take of a listed species, a permit pursuant to Section 2080 of CESA is required from the CDFG.

Discussion

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 & Game or U.S. fish and Wildlife Service?

Less Than Significant Impact with Mitigation: Discussion for this section originates from the Habitat Assessment that was prepared for this project by Live Oak Associates, Inc. to identify sensitive biological resources, provide project impact analysis, and suggest mitigation measures. A reconnaissance-level field survey was conducted by Live Oak Associates in addition to a literature review The full document can be found in Appendix B of this Initial Study.

Of the 18 special status animal species known from the regional vicinity, 14 are considered absent or unlikely to occur on the project site according to the Habitat Assessment. This is due to the absence of suitable habitat, the site's urban and agricultural setting/surroundings, and the site's being situated outside of the species distribution. The remaining species, the loggerhead shrike (*Lanius ludovicianus*), Swainson's hawk (*Buteo swainsonii*), Pallid bat (*Antrozous pallidus*), and Western mastiff bat (*Eumops perotis californicus*) has some potential to forage on site from time to time but would not use the site for nesting or roosting or other activities in which it is particularly sensitive to disturbance. This is due to a lack of trees, high structures, and cliffs.

Twelve special status plant species are known to occur in the region. However, according to the Habitat Assessment, none of the special status plant species have the potential to occur on the project site following decades of agricultural disturbance and present-day agricultural use.

Although unlikely, the project site has the potential to be used for foraging by several native avian species protected by the Migratory Bird Treaty Act and related state laws. If future site buildout takes place during the nesting season (generally February 1-August 31), birds nesting on the site could be injured or killed by construction activities or disturbed such that they would abandon their nests. Significant construction-related disturbance is also a possibility for birds nesting adjacent to the project site. Construction-related injury, mortality, or disturbance of nesting birds that results in nest abandonment are potential impacts that will be mitigated with Mitigation Measure BIO-1. Additionally, to avoid and minimize the potential for construction-related mortality/disturbance of Swainson's hawks, Mitigation Measure BIO-2 will be incorporated. The impacts are *less than significant with mitigation incorporation.*

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 Game or US Fish and Wildlife Service?

No Impact: During the Habitat Assessment performed by Live Oak Associates, no riparian habitat nor other sensitive natural communities were observed on-site. Development of the proposed project would not impact 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 (CDFW), or

United States Fish and Wildlife Service (USFWS). There is *no impact.*

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 director removal, filling, hydrological interruption, or other means?

No Impact: No water or other hydrologic features occur within the limits of construction and operation of the proposed project. There are no jurisdictional water features and no nexus to Waters of the United States. Therefore, no impacts to state or federally protected wetlands would occur due to the proposed project. There is *no impact.*

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

Less than Significant Impact: The project does not contain streams or other waterways that could be used by migratory fish or as a wildlife corridor for other wildlife species. There is a residential neighborhood to the south and west, the Project site is otherwise surrounded by major arterial roads. As such, the project would not interfere substantially with the movement of any resident or migratory fish, wildlife species or with established resident or migratory wildlife corridors or impede the use of wildlife nursery sites. The impact is *less than significant.*

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

No Impact: The County of Tulare General Plan and the City of Tulare General Plan contain requirements to preserve and maintain Oak (Quercus sp.) species and associated habitats. In addition, the City of Tulare has regulations guiding maintenance of street trees on city roads. No protected tree species or associated habitat have been observed on site, so the policies related to tree preservation do not apply. There is *no impact.*

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

No Impact: The proposed project is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional or state habitat conservation plan. There is *no impact.*

Mitigation Measures for impacts to Biological Resources:

Mitigation Measure BIO-1a: (*Construction Timing*) If feasible, the project will be implemented outside of the avian nesting season, typically defined as February 1 to August 31.

Mitigation Measure BIO-1b: *(Pre-construction Surveys*) If construction is to occur between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for active bird nests within 10 days prior to the start of construction. The survey area will encompass the site and accessible surrounding lands within 250 feet for nesting migratory birds and 500 feet for raptors (i.e., birds of prey).

Mitigation Measure BIO-1c: *(Avoidance of Active Nests*) Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing and will be maintained until the biologist has determined that the young have fledged and are capable of foraging independently.

Mitigation Measure BIO-2a: *(Construction Timing)* If feasible, the project will be implemented outside of the Swainson's hawk nesting season, typically defined as March 1 to September 15.

Mitigation Measure BIO-2b: *(Pre-construction Surveys*) If the project must be constructed during the March 1-September 15 nesting season, surveys for nesting Swainson's hawks will be conducted. The surveys will follow the protocol established in the Swainson's Hawk Technical Advisory Committee's 2000 *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* and will encompass all mature trees within ½ mile of the project site. If no nesting pairs are found during the surveys, no further mitigation is required.

Mitigation Measure BIO-2c: (*Establish Buffers*) If preconstruction surveys identify one or more active Swainson's hawk nests within ½ mile of the project site, suitable disturbance-free buffers would need to be established around the nest(s) and maintained until the end of construction or until a qualified biologist determines that the nest is no longer active, whichever comes first.

V. Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☑	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☑	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☑	☐	☐

Environmental Setting

The history of European settlement in the Tulare County area focused primarily on farming and ranching. European settlement did not occur until the arrival into southern California of land-based expeditions originating from Spanish Mexico starting in the 1760s. European-American settlement of this region began in 1851 with the building of Fort Miller on the San Joaquin River. Unfortunately, hostility grew between American settlers and Native inhabitants, which initially prevented widespread settlement of the area. By the 1860s, the arrival of waves of additional European-American settlers subjugated and removed the Native inhabitants, and the European-American settlers began to inhabit more regions.

In April 1852, Tulare County was created, with the county seat initially located at Woodsville. In 1853 the county seat was removed to Fort Visalia, located in the area bounded by Oak, Center, Garden and Bridge streets. In 1872, the Southern Pacific Railroad founded the City of Tulare by beginning construction of the railroad within Tulare County, connecting the San Joaquin Valley with markets in the north and east. During this time, valley residents constructed a series of water conveyance systems (canals, dams, and ditches) across the valley. Ample water supplies and assured rail transport were particularly important for the new colonies making their living off fruit, grain, and dairy farming.

A Cultural Resources Records Search was conducted by Peak & Associates, Inc**.** in May 2023. The records search stated that there has been one report within the project area, and covered the eastern edge of project area along Mooney Boulevard. Another study was completed for the area immediately adjacent to the project site for the Cartmill Avenue roadway to the north of the project. . According to the records search, there are no recorded cultural resources within the project area or within ¼ mile radius of the project area. The full findings of the cultural records search can be found in Appendix C.

Regulatory Setting

National Historic Preservation Act: The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register: The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. California Historical Landmarks are sites,

buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, experimental, or other value. In order for a resource to be designated as a historical landmark, it must meet the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

City of Tulare General Plan: The City of Tulare General Plan includes the following goals and policies pertaining to cultural and historic resources:

- LU-P13.15 Architectural Heritage. The City shall encourage expressions of its cultural and historic heritage in key central area architectural and other physical design elements (such as murals and/or community art), as well as through encouragement of related cultural events and celebrations.

Goal COS-5 To manage and protect sites of cultural and archaeological importance for the benefit of present and future generations.

- COS-P5.1 Archaeological Resources. The City shall support efforts to protect and/or recover archaeological resources.
- COS-P5.2 Evaluation of Historic Resources. The City shall use appropriate State and Federal standards in evaluating the significance of historical resources that are identified in the city.
- COS-P5.3 Historic Preservation. The City shall encourage the preservation of historic residences and neighborhoods wherever appropriate.
- COS-P5.4 Historic Buildings. The City shall encourage the preservation and adaptive use of historic buildings, particularly in the downtown.
- COS-P5.5 Historic Structures and Sites. The City shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures, sites, and districts. Where applicable, preservation efforts shall conform to the current Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Building.
- COS-P5.6 Protection of Resources with Potential State or Federal Designations. The City shall encourage the protection of cultural and archaeological sites with potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values.
- COS-P5.7 State Historic Building Code. The City shall utilize the State Historic Building Code for designated properties.
- COS-P5.8 Design Compatibility with Historic Structures. The City shall ensure design compatibility of new development within close proximity to designated historic structures and neighborhoods.
- COS-P5.9 Discovery of Archaeological Resources. In the event that archaeological/ paleontological resources are discovered during site excavation, grading, or construction, the City shall require

that work on the site be suspended within 100 feet of the resource until the significance of the features can be determined by a qualified archaeologist/ paleontologist. If significant resources are determined to exist, an archaeologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.

- COS-P5.10 Discovery of Human Remains. Consistent with Section 7050.5 of the California Health and Safety Code and CEQA Guidelines (Section 15064.5), if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). If any human remains are discovered or recognized in any location on the project site, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

    - The Tulare County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and
    - If the remains are of Native American origin,

        - The descendants of the deceased Native Americans have made a timely recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98.
        - The Native American Heritage Commission was unable to identify a descendant, or the descendant failed to make a recommendation within 24 hours after being notified by the commission, or
        - The landowner or his or her authorized representative rejects any timely recommendations of the descendent, and mediation conducted by the Native American Heritage Commission has failed to provide measures acceptable to the landowner.

- COS-P5.11 Impact Mitigation. If preservation of cultural/historical resources is not feasible, the City shall make every effort to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.
- COS-P5.12 Mitigation Monitoring for Historical Resources. The City shall develop standards for monitoring mitigation measures established for the protection of historical resources prior to development.
- COS-P5.13 Alteration of Sites with Identified Cultural Resources. When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. The City shall permit development in these areas only after a site-specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.
- COS-P5.14 Education Program Support. The City shall support local, state, and national education programs on cultural and archaeological resources.

- COS-P5.15 Solicit Input from Local Native Americans. The City shall solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- COS-P5.16 Confidentiality of Archaeological Sites. The City shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect resources that are determined to exist. An archaeologist/paleontologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.
- COS-P5.17 Cooperation of Property Owners. The City shall encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities, and encourage public support for the preservation of these resources.
- COS-P5.18 Archaeological Resource Surveys. Prior to project approval, the City shall require project applicant to have a qualified archaeologist conduct the following activities: (1) conduct a record search at the Regional Archaeological Information Center located at California State University Bakersfield and other appropriate historical repositories, (2) conduct field surveys where appropriate, and (3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards (Archaeological Resource Management Reports).

Discussion

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

Less Than Significant Impact with Mitigation: A Cultural Resources Records Search was conducted by Peak & Associates, Inc**.** in May 2023. The records search stated that there is one report within the project area (#TU-01085), that covered the eastern edge of project area along Mooney Boulevard. Another study was completed immediately adjacent to the roadway to the north, Cartmill Avenue (#TU-00102). According to the records search, there are no recorded cultural resources within the project area or within ¼ mile radius of the project area. The full findings of the cultural records search can be found in Appendix C.

Based on the results of this records search, no previously recorded cultural resources are located within the project site. Although no historical resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that impacts to this checklist item will be *less than significant with mitigation incorporation*.

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

Less Than Significant Impact with Mitigation: There are no known archaeological resources located within the project area. Implementation of Mitigation Measures CUL-1 and CUL-2 will ensure that potential impact will be *less than significant with mitigation incorporation.*

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

Less Than Significant Impact with Mitigation: There are no known human remains buried in the project vicinity. If human remains are unearthed during development, there is a potential for a significant impact. As such, implementation of Mitigation Measure CUL-2 will ensure that impacts remain *less than significant with mitigation incorporation.*

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.

Mitigation Measure CUL-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

VI. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?	☐	☐	☐	☑

Environmental Setting

Southern California Edison (SCE) provides electricity services to the region. SCE serves approximately 15 million people throughout a 50,000 square-mile service area in Central, Coastal, and Southern California. SCE supplies electricity to its customers through a variety of renewable and nonrenewable sources. The Table 3-7 below shows the proportion of each energy resource sold to California consumers by SCE in 2017 as compared to the statewide average.

Fuel Type		SCE Power Mix	California Power Mix
Coal		0%	3%
Large Hydroelectric		8%	12%
Natural Gas		16%	37%
Nuclear		8%	9%
Other (Oil/Petroleum Coke/Waste Heat)		0%	<1%
Unspecified Sources of Power[1]		33%	5%
Eligible Renewables	Biomass	<1%	2%
	Geothermal	6%	5%
	Small Hydro	1%	1%
	Solar	16%	13%
	Wind	12%	11%
	Total Eligible Renewable	**36%**	**33%**

1. "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

Table 3-7. 2020 SCE and State average power resources; Source: California Energy Commission

SCE also offers Green Rate Options, which allow consumers to indirectly purchase up to 100% of their energy from renewable sources. To accomplish this, SCE purchases the renewable energy necessary to meet the needs of Green Rate participants from solar renewable developers.
Southern California Gas (SoCalGas) Company provides natural gas services to the project area. Natural gas is an energy source developed from fossil fuels composed primarily of methane (CH4). Approximately 45% of the natural gas burned in California is used for electricity generation, while 21% is consumed by the residential sector, 25% is consumed by the industrial sector, and 9% is consumed by the commercial sector. Approximately 41,418,644 therms of natural gas are consumed annually within the City of Tulare Urban Development Boundary. The residential sector accounts for 18% of the City's total natural gas consumption.

Regulatory Setting

California Code of Regulations, Title 20: Title 20 of the California Code of Regulations establishes standards and requirements for appliance energy efficiency. The standards apply to a broad range of appliances sold in California.

California Code of Regulations, Title 24: Title 24 of the California Code of Regulations is a broad set of standards designed to address the energy efficiency of new and altered homes and commercial buildings. These standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Title 24 requirements are enforced locally by the City of Tulare Building Department.

California Green Building Standards Code (CALGreen): CalGreen is a mandatory green building code that sets minimum environmental standards for new buildings. It includes standards for volatile organic compound (VOC) emitting materials, water conservation, and construction waste recycling

City of Tulare Climate Action Plan (2011): The City of Tulare Climate Action Plan establishes the following Goals and Policies related to energy efficiency and conservation:

Goal 1: Increase energy efficiency and conservation.

1.1 Increase energy efficiency in existing City buildings and facilities through Facility Improvement Measures and by retrofitting Edison-owned streetlights. (City measure)
1.2 Design new City buildings and facilities to exceed California Energy Code requirements by 15%. (City measure)
1.3 Increase energy efficiency in new commercial and residential development and require new residential and commercial development to achieve enhanced energy efficiency and exceed California Energy Code requirements by 15%.
1.4 Reduce the urban heat island effect to cool the local climate and reduce energy consumption by maintaining current rates of public tree planting and increased shading on private property, high albedo surfaces, and cool surfaces.
1.5 Achieve a 20% reduction in water use by 2020 (20X2020) to reduce energy consumed for groundwater pumping.
1.6 Facilitate energy efficiency improvements within the residential building stock.
1.7 Support commercial and industrial profitability and energy efficiency through programs and partnerships.
1.8 Promote voluntary energy efficiency retrofits in the commercial and industrial sectors through financing and incentive programs.

1.9 Require stationary equipment in new industrial development to comply with best practice energy efficiency standards.
1.10 Continue to partner in regional initiatives that encourage achievement of regional energy efficiency targets.

Discussion

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: While construction of the proposed project will result in additional energy consumption, this energy use is not unnecessary or inefficient.

During project construction there would be an increase in energy consumption related to worker trips and operation of construction equipment. This energy use is justified by the energy-efficient nature of the proposed project and would be limited to the greatest extent possible through compliance with local, state, and federal regulations.

Once construction is complete, the project is expected to achieve net zero energy consumption. The proposed project is subject to the California New Residential Zero Net Energy Action Plan 2015-2020. This plan establishes a goal for all residential buildings built after January 1, 2020 to be zero net energy. The California Energy Commission is responsible for the development and enforcement of specific strategies to achieve this goal. These strategies are implemented through Title 24, Part 6 of the California Building Code, which requires developers to include certain measures (including solar panels on all new residential buildings) to achieve required building efficiency standards.

Because the proposed project will comply with all energy efficiency standards required under Title 24, Section 6, and these standards were specifically developed to achieve net zero energy for residential projects, it can be presumed that the project will achieve net zero energy. The impact is *less than significant.*

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact: The proposed project will not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. The project will be designed to meet Title 24 and CALGreen requirements. Compliance with these standards will be enforced by the City of Tulare Building Division. There is *no impact.*

VII. GEOLOGY AND SOILS

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

Environmental Setting

Geologic Stability and Seismic Activity

- **Seismicity**: Tulare County is considered to be a low to moderate earthquake hazard area. The San Andreas Fault is the longest and most significant fault zone in California and is approximately 40 miles west of the Tulare County Boundary. Owens Valley fault zone is the only active fault located within Tulare County. Section 5 of the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the project site as likely to experience low to moderate shaking from earthquakes

and may experience higher levels if an earthquake were to occur in or near the County. Ground shaking can result in other geological impacts, including liquefaction, landslides, lateral spreading, subsidence, or collapse.

- **Liquefaction**: Liquefaction is a phenomenon whereby unconsolidated and/or near-saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in temporary, fluid-like behavior of the soil, which can result in landslides and lateral spreading. No specific countywide assessment of liquefaction has been performed; however, the 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil types in the area either too coarse or too high in clay content to be suitable for liquefaction.

- **Landslides**: Landslides refer to a wide variety of processes that result in the downward and outward movement of soil, rock, and vegetation under gravitational influence. Landslides can be caused by both natural and human-induced changes in slope stability and often accompany other natural hazard events, such as floods, wildfire, or earthquake. Eastern portions of the County are considered to be at a higher risk of landslides where steep slopes are present. However, the majority of the County, including the proposed project site, is considered to be at low risk of landslides and mudslides because of its flat topography. The 2017 Tulare Multi-Jurisdictional Local Hazard Mitigation Plan states that occurrence of landslide events within populated areas of Tulare County is unlikely.

- **Subsidence**: Land Subsidence refers to the vertical sinking of land as a result of either manmade or natural underground voids. Subsidence has occurred throughout the Central Valley at differing rates since the 1920's as a result of groundwater, oil, and gas withdrawal. During drought years, Tulare County is prone to accelerated subsidence, with some areas sinking up to 28 feet. Although western portions of the County show signs of deep and shallow subsidence, the majority of the County, including the proposed project site, is not considered to be at risk of subsidence related hazards.

Soils Involved in Project: The proposed project involves construction on one soil type. The properties of these soils are described below:

- **Nord fine sandy loam, 0 to 2 percent slopes:** The Nord series consists of very deep, well drained soils formed primarily from granitic and sedimentary rocks. The Nord series is a member of a coarse-loamy, mixed, superactive, thermic cumulic Haploxerolls taxonomic class and are found in flood plains and alluvial fans.

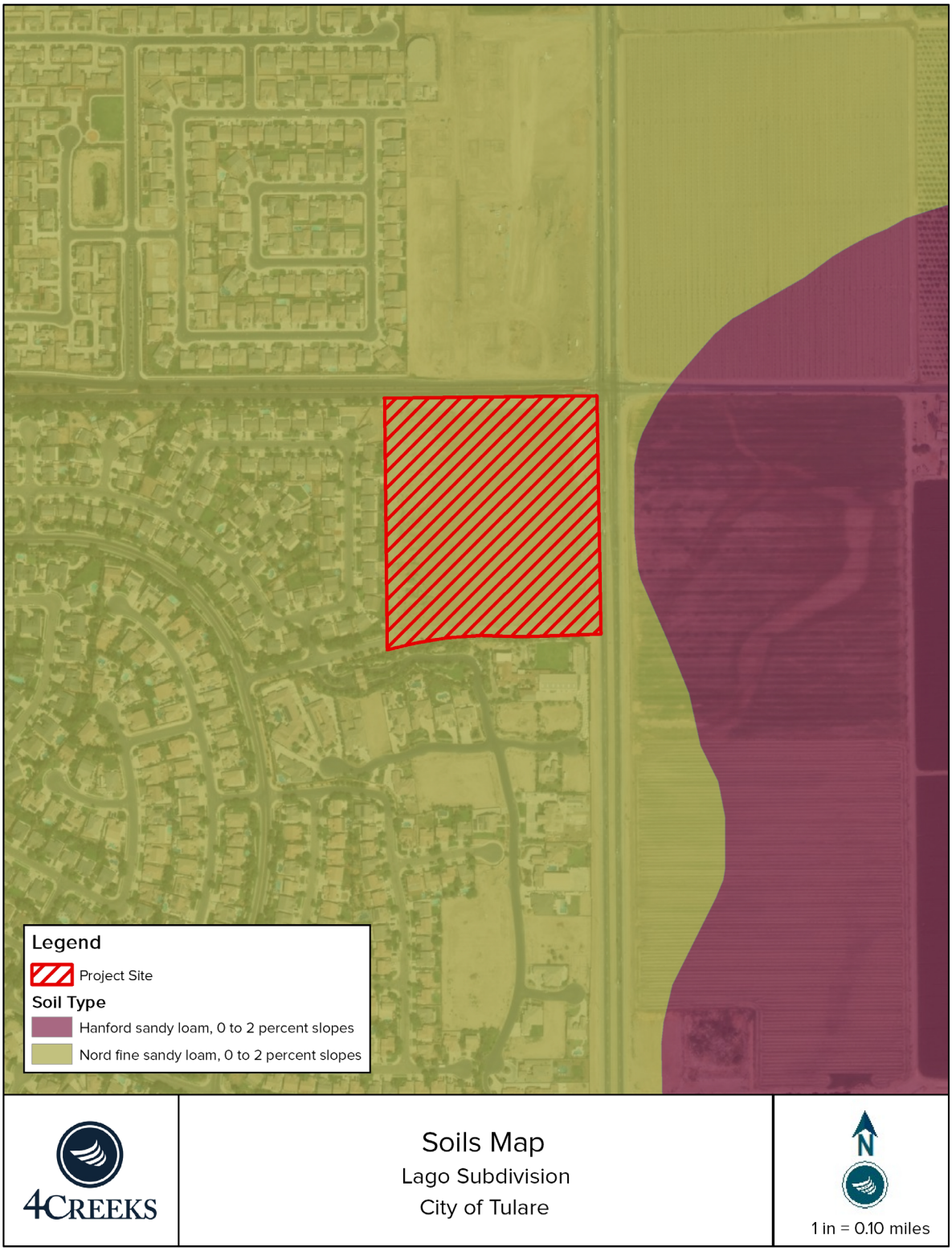


Figure 3-4. Soils Map

Regulatory Setting

California Building Code: The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures and certain equipment.

City of Tulare General Plan: The Safety Element of the City of Tulare General Plan includes the following goals and policies regarding soils and geology.

- SAF-P1.4 Building and Codes. Except as otherwise allowed by State law, the City shall ensure that all new buildings intended for human habitation are designed in compliance with the latest edition of the California Building Code, California Fire Code, and other adopted standards based on risk (e.g., seismic hazards, flooding), type of occupancy, and location (e.g., floodplain, fault).
- SAF-P1.7 Site Investigations. The City shall require applicants to conduct site investigations in areas planned for new development to determine susceptibility to landslides, subsidence/settlement, contamination, and/or flooding.

Goal SAF-4 To protect people and property from seismic and geotechnical hazards.

- SAF-P4.4 Alquist-Priolo Act Compliance. The City shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resources Code, Chapter 7.5) unless the specific provisions of the Act and Title 14 of the California Code of Regulations have been satisfied.
- SAF-P4.5 Subsidence. The City shall confirm that development is not located in any known areas of active subsidence. If urban development may be located in such an area, a special safety study will be prepared and needed safety measures implemented.

Discussion

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

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

Less than Significant Impact: According to the Tulare County Multi-Hazard Mitigation Plan, no active faults underlay the project site. Although the project is located in an area of relatively low seismic activity, the project could be affected by ground shaking from nearby faults. The potential for strong seismic ground shaking on the project site is not a significant environmental concern due to the infrequent seismic activity of the area and distance to the faults. The project has no potential to indirectly or directly cause the rupture of an earthquake fault. Therefore, the risk of loss, injury or death involving a rupture of a known earthquake fault would be *less than significant.*

ii. Strong seismic ground shaking?

No Impact: According to the Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan, the project site is located in an area of relatively low seismic activity. The proposed project does not include any activities or components which could feasibly cause strong seismic ground shaking, either directly or indirectly. There is *no impact.*

iii. Seismic-related ground failure, including liquefaction?

No Impact: No specific countywide assessment of liquefaction has been performed; however, the Tulare County Multi-Hazard Mitigation Plan identifies the risk of liquefaction within the county as low because the soil type on the project site are unsuitable for liquefaction. According to state soils maps, the project site consists mostly of Nord fine Sandy Loam which does not contain soils suitable for liquefaction. There is *no impact.*

iv. Landslides?

No Impact: The proposed project site is generally flat and there are no hill slopes in the area. As a result, there is almost no potential for landslides. No geologic landforms exist on or near the site that would result in a landslide event. There is *no impact.*

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

Less Than Significant Impact: Because the project site is relatively flat, the potential for erosion is low. However, construction-related activities and increased impermeable surfaces can increase the probability for erosion to occur. Construction-related impacts related to erosion will be temporary and subject to best management practices (BMPs) required by SWPPP, which are developed to prevent significant impacts related to erosion from construction. The project will direct its stormwater runoff into an existing basin, as analyzed in the Del Lago Specific Plan. Because impacts related to erosion would be temporary and limited to construction, and because required best management practices would prevent significant impacts related to erosion, the impact will remain *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?

No Impact: The soils associated with the project site are considered stable and have a low capacity for landslides, lateral spreading, subsidence, liquefaction or collapse. Because the project area is considered to be stable, and this project would not result in a substantial grade change to the topography to the point that it would increase the risk of landslides, lateral spreading, subsidence, liquefaction or collapse, there is *no impact.*

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

No Impact: Expansive soils contain substantial amounts of clay, which absorb water and cause the soil to increase in volume. Conversely, the soil associated with the proposed project site is granular, well-

draining, and therefore have a limited ability to absorb water or exhibit expansive behavior. Because the soil associated with the project is not suitable for expansion, implementation of the project will pose no direct or indirect risk to life or property caused by expansive soils and there is *no impact.*

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

No Impact: The proposed project will have access to existing City wastewater infrastructure and would not require the use of septic tanks or alternative wastewater disposal systems. There is *no impact.*

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

Less Than Significant Impact: There are no unique geologic features and no known paleontological resources located within the project area and no excavation proposed in undisturbed soils, particularly to a depth with a potential to unearth paleontological resources. Potential impacts resulting from project implementation would be *less than significant.*

VIII. GREENHOUSE GAS EMISSIONS

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

Environmental Setting

Natural processes and human activities emit greenhouse gases. The presence of GHGs in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34ºC cooler. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The effect of greenhouse gasses on earth's temperature is equivalent to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydro chlorofluorocarbons, and hydro fluorocarbons, per fluorocarbons, sulfur and hexafluoride. Some gases are more effective than others. The Global Warming Potential (GWP) has been calculated for each greenhouse gas to reflect how long it remains in the atmosphere, on average, and how strongly it absorbs energy. Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to global warming. For example, one pound of methane is equivalent to twenty-one pounds of carbon dioxide.

GHGs as defined by AB 32 include the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHGs as defined by AB 32 are summarized in Table 3-8. Each gas's effect on climate change depends on three main factors. The first being the quantity of these gases are in the atmosphere, followed by how long they stay in the atmosphere and finally how strongly they impact global temperatures.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Methane (CH4)	Is a flammable gas and is the main component of natural gas	12 years	21	Emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Carbon dioxide (CO2)	An odorless, colorless, natural greenhouse gas.	30-95 years	1	Enters the atmosphere through burning fossil fuels (coal, natural gas and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.
Chloro-fluorocarbons	Gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are non-toxic nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	55-140 years	3,800 to 8,100	Were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone.
Hydro-fluorocarbons	A man-made greenhouse gas. It was developed to replace ozone-depleting gases found in a variety of appliances. Composed of a group of greenhouse gases containing carbon, chlorine an at least one hydrogen atom.	14 years	140 to 11,700	Powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases.
Nitrous oxide (N2O)	Commonly known as laughing gas, is a chemical compound with the formula N2O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effects.	120 years	310	Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
Pre-fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.

Greenhouse Gas	Description and Physical Properties	Lifetime	GWP	Sources
Sulfur hexafluoride	An inorganic, odorless, colorless, and nontoxic nonflammable gas.	3,200 years	23,900	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing and as a tracer gas.

Table 3-8. Greenhouse Gasses; Source: EPA, Intergovernmental Panel on Climate Change

Regarding the quantity of these gases are in the atmosphere, we first must establish the amount of particular gas in the air, known as Concentration, or abundance, which are measured in parts per million, parts per billion and even parts per trillion**.** To put these measurements in more relatable terms, one part per million is equivalent to one drop of water diluted into about 13 gallons of water, roughly a full tank of gas in a compact car. Therefore, it can be assumed larger emission of greenhouse gases lead to a higher concentration in the atmosphere.

Each of the designated gases described above can reside in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All these gases remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world regardless of the source of the emission.

Regulatory Setting

AB 32: AB 32 set the 2020 greenhouse gas emissions reduction goal into law. It directed the California Air Resources Board to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. The reduction measures to meet the 2020 target are to be adopted by the start of 2011.

SB 32: SB 32 was passed in 2016 to strengthen AB 32. It requires California to reduce greenhouse gas emissions by 40% from the 1990 levels by 2030 by adopting regulations to achieve maximum greenhouse gas emissions.

SB 1078, SB 107 and Executive Order S-14-08: SB 1078, SB 107, and Executive Order S-14-08 require California to generate 20% of its electricity from renewable energy by 2017. SB 107 then changes the 2017 deadline to 2010. Executive Order S-14-08 required that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

SB 100: SB 100, passed in 2018, set a deadline in 2045 for 100% of energy to be renewable. Additionally, by 2030, 60% of all energy must be renewable. California is targeting this goal through solar and other renewable sources.

AB 178: For California to meet its renewable goals, AB 178 was passed in 2018. AB 178 states that starting in 2020 all new low rise residential buildings must be built with solar power.

City of Tulare Climate Action Plan: The City of Tulare Climate Action Plan identifies the following goals and policies to reduce GHG emissions related to new development:

- LU-7.15. Energy Conservation. The County shall encourage the use of solar power and energy conservation building techniques in all new development.
- ERM-4.6. Renewable Energy. The County shall support efforts, when appropriately sited, for the development and use of alternative energy resources, including renewable energy such as wind and solar, biofuels and co-generation.
- ERM-4.7. Reduce Energy Use in County Facilities. Continue to integrate energy efficiency and conservation into all County functions.
- ERM-4.8. Energy Efficiency Standards. The County shall encourage renovations and new development to incorporate energy efficiency and conservation measures that exceed State Title 24 standards. When feasible, the County shall offer incentives for use of energy reduction measures such as expedited permit processing, reduced fees, and technical assistance
- AQ-1.9. Support Off-Site Measures to Reduce Greenhouse Gas Emissions. The County will support and encourage the use of off-site measures or the purchase of carbon offsets to reduce greenhouse gas emissions.

Discussion

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

Less Than Significant Impact: Greenhouse gas emissions for the construction and operation of the proposed project were modeled using the California Emissions Estimator Model (CalEEMod). The CalEEMod report can be found in Appendix A.

Construction

Greenhouse gasses would be generated during construction from activities including site demolition, site preparation, grading, building construction, application of architectural coatings, and paving. The CalEEMod Emissions report predicts that this project will create a maximum of 423.85 MT of CO2e emissions per year during construction. Because the SJVAPCD does not have numeric thresholds for assessing the significance of construction-related GHG emissions, predicted emissions from project construction were compared to SCAQMD thresholds for construction related GHG emissions. The SCAQMD currently has a threshold of 10,000 metric tons of CO2e per year for construction emissions amortized over a 30-year project lifetime. Because project construction would generate far less GHG emissions than this threshold, impacts related to GHG emissions during project construction would be less than significant.

Operation

Implementation of the proposed project would result in long-term greenhouse gas emissions associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, as well as mobile emissions. The U.S. Environmental Protection Agency (EPA) published a rule for the mandatory reporting of greenhouse gases (GHG) from sources that in general emit 25,000 MT or more of CO2e per year. Project GHG emissions were calculated using CalEEMod (emissions output results found in Appendix A) based on development of 125 single-family dwelling units located on approximately 14.06 acres. The proposed project is estimated to produce 1,542 MT of CO2e

per year, which is well below the 25,000 MT threshold for GHG emissions. Therefore, because the GHG emissions related to construction and operation of the proposed project are below accepted thresholds of significance, the potential impacts are considered *less than significant*.

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

No Impact: The proposed project will comply with all Federal, State, and Local rules pertaining to the regulation of greenhouse gas emissions. The project would include solar panels required for new residential construction. In addition, the project will implement Best Performance Standards developed by the SJVAPCD. Projects implementing Best Performance Standards are determined to have a less than significant impact on global climate change. The project will not conflict with any plan, policy, or regulation developed to reduce GHG emissions. There is *no impact.*

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 or excessive noise 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 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 significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

Environmental Setting

The proposed project site is located approximately 0.5 miles from the nearest existing schools (Mission Valley Elementary School and Liberty Elementary School), 5.5 miles north of the airport (Mefford Field Airport).

The Department of Toxic Substances Control's (DTSC's) Envirostor was used to identify any sites known to be associated with releases of hazardous materials or wastes within the project area. This research confirmed that the project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Regulatory Setting

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S. Code [U.S.C.] §9601 et seq.). The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or the Superfund Act) authorizes the President to respond to releases or threatened releases of hazardous substances into the environment.

Occupational Safety and Health Administration. The Occupational Safety and Health Administration (OSHA) sets and enforces Occupational Safety and Health Standards to assure safe working conditions. OSHA provides training, outreach, education, and compliance assistance to promote safe workplaces. The proposed Project would be subject to OSHA requirements during construction, operation, and maintenance.

Toxic Substances Control Act of 1976 (15 U.S.C. §2601 et seq.). The Toxic Substance Control Act was enacted by Congress in 1976 and authorizes the EPA to regulate any chemical substances determined to cause an unreasonable risk to public health or the environment.

Hazardous Waste Control Law, Title 26. The Hazardous Waste Control Law creates hazardous waste management program requirements. The law is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR), which contains requirements for the following aspects of hazardous waste management:

- Identification and classification;
- Generation and transportation;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

California Code of Regulations, Title 22, Chapter 11. Title 22 of the California Code of Regulations contains regulations for the identification and classification of hazardous wastes. The CCR defines a waste as hazardous if it has any of the following characteristics: ignitability, corrosivity, reactivity, and/or toxicity.

California Emergency Services Act. The California Emergency Services Act created a multi-agency emergency response plan for the state of California. The Act coordinates various agencies, including CalEPA, Caltrans, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

Hazardous Materials Release Response Plans and Inventory Law of 1985. Pursuant to the Hazardous Materials Release Response Plans and Inventory Law of 1985, local agencies are required to develop "area plans" for response to releases of hazardous materials and wastes. Tulare County maintains a Hazardous Material Incident Response Plan to coordinate emergency response agencies for incidents and requires the submittal of business plans by persons who handle hazardous materials.

City of Tulare General Plan: The City of Tulare General Plan includes the following goals and policies pertaining to hazards and hazardous materials:

- LU-P11.19 Recycling of Hazardous Materials. The City shall require the proper disposal and recycling of hazardous materials.

Goal SAF-1 To regulate future development to ensure the protection of public health and safety from hazards and hazardous materials and the adequate provision of emergency services.

Goal SAF-5 To protect people from the harmful effects of exposure to hazardous materials.

- SAF-P5.2 Hazardous Materials Studies. The City shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project.
- SAF-P5.3 Transporting Hazardous Materials. The City shall strive to ensure hazardous materials are used, stored, transported, and disposed of in a safe manner, in compliance with local, State, and federal safety standards.

Discussion

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

Less than Significant Impact: Project construction activities may involve the use and transport of hazardous materials. The use of such materials would be considered minimal and would not require these materials to be stored in bulk form. The project does not involve the use or storage of hazardous substances other than the insignificant amounts of pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping. The project must adhere to applicable zoning and fire regulations regarding the use and storage of any hazardous substances. Further, there is no evidence that the site has been used for underground storage of hazardous materials. Therefore, the proposed project will have *less than significant impacts* to hazardous materials.

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

Less Than Significant Impact: The proposed project is near other residential subdivisions. There is no reasonably foreseeable condition or incident involving the project that could result in release of hazardous materials into the environment, other than any potential accidental releases of standard fuels, solvents, or chemicals encountered during typical construction of a residential subdivision. Should an accidental hazardous release occur or should the project encounter hazardous soils, existing regulations for handling hazardous materials require coordination with the California Department of Toxic Substances Control for an appropriate plan of action, which can include studies or testing to determine the nature and extent of contamination, as well as handling and proper disposal. Therefore, potential impacts are considered to 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?

Less Than Significant Impact: The project is located approximately 0.5 miles from an existing elementary school. The project does not involve the use or storage of hazardous substances other than insignificant amounts of pesticides, fertilizers, and cleaning agents required for normal maintenance of structures and landscaping. The project would not emit hazardous emissions or involve the handling of acutely hazardous materials or waste. Therefore, impacts would be *less than significant*.

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?

Less Than Significant Impact with Mitigation: The project site is not listed as a hazardous materials site pursuant to Government Code Section 65962.5 and is not included on a list compiled by the Department of Toxic Substances Control (DTSC). However, the proposed project would develop residential units on a property previously and currently used for agriculture, and therefore is subject to DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision*). With incorporation of Mitigation Measure HAZ-1, potential impacts related to the presence and risk of residual organochlorinated pesticides would be reduced to *less than significant with mitigation*.

Mitigation Measures for Impacts Related to Hazards and Hazardous Materials:

Mitigation Measure HAZ-1: Prior to issuance of grading permits for ground clearance or excavation, the project proponent shall prepare a soils report and investigation for the presence of environmentally persistent pesticides , such as organochlorinated pesticides, as well as aerially deposited lead in conjunction with the California Department of Toxic Substances Control (DTSC), and in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision*).

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

No Impact: The proposed project is not located within an airport land use plan and is not within two miles of a public airport. Mefford Field Airport is the nearest public airport to the project site and is located approximately 5.5 miles away. Implementation of the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. There is *no impact.*

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

No Impact: The City's site plan review procedures ensure compliance with emergency response and evacuation plans. In addition, the site plan will be reviewed by the Fire Department per standard City procedure to ensure consistency with emergency response and evacuation needs. Therefore, the proposed project would have *no impact* on emergency evacuation.

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

No Impact: The land surrounding the project site is developed with urban, suburban, and agricultural uses and are not considered to be wildlands. Additionally, the 2017 Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan finds that fire hazards within the City of Tulare, including the proposed project site, have low frequency, limited extent, limited magnitude, and low significance. The proposed project would not expose people or structures to significant risk of loss, injury or death involving wildland fires and there is *no impact.*

X. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise sustainably 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 the release of pollutants due to project inundation?	☐	☐	☐	☑
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater movement plan?	☐	☐	☐	☑

Environmental Setting

Hydrologic System: The proposed project site is in the Tulare Lake Hydrologic Region, which covers 10.9 million acres south of the San Joaquin River. The proposed project site lies within the San Joaquin Valley Groundwater Basin. The San Joaquin Valley Groundwater Basin is divided into seven sub-basins. The proposed project site is located within the Kaweah Subbasin. The subbasin lies between the Kings Groundwater Subbasin on the north, the Tule Groundwater Subbasin on the south, the Tulare Lake subbasin on the west, and crystalline bedrock of the Sierra Nevada foothills on the east. The area is comprised mostly of lands in the Kaweah Delta Water Conservation District. Major rivers in the subbasin include the St. Johns and lower Kaweah Rivers, although the Kaweah River is considered the primary surface water source for groundwater recharge.

Groundwater: The City of Tulare consists of 23 active wells, a 125,000-gallon water storage tower, two - 2-million-gallon concrete storage tanks, one - 1.5-million-gallon concrete storage tank, 7 well sites with granulated activated carbon (GAC) treatment filters, 277 miles of water transmission and distribution

mains, and over 2,500 fire hydrants. The city's water supply comes from a series of deep groundwater wells scattered throughout the city and pumped into an interconnected water system. Additionally, the City of Tulare, City of Visalia, and the Tulare Irrigation District have joined a Joint Power Authority (JPA) Agreement to form the Mid-Kaweah Groundwater Sustainability Agency (GSA). The JPA states the Board of Directors is responsible for the development, adoption, and implementation of a Groundwater Sustainability Plan as required by the Sustainable Groundwater Management Act of 2014.

Surface Waters: None of the City's potable water is supplied through surface water. However, the City of Tulare does purchase surface water from the Tulare Irrigation District to be used for groundwater recharge.

Regulatory Setting

Clean Water Act: The Clean Water Act (CWA) is enforced by the U.S. EPA and was developed in 1972 to regulate discharges of pollutants into the waters of the United States. The Act made it unlawful to discharge any pollutant from a point source into navigable waters unless a National Pollution Discharge Elimination System (NPDES) Permit is obtained.

Central Valley RWQCB: The proposed project site is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). The Central Valley RWQCB requires a National Pollution Discharge Elimination System (NPDES) Permit and Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a NPDES Permit and SWPPP will be required.

City of Tulare General Plan: The City of Tulare General Plan contains the following goals and policies related to water resources:

- LU-P11.3 System Expansion. The City shall require new development be responsible for expansion of existing facilities such as water systems, sewer systems, storm drainage systems, parks and other capital facilities made necessary to serve the new development.
- LU-P11.4 Water Supply System. The City shall require that water supply systems be adequate to serve the size and configuration of land developments. Standards as set forth in the subdivision ordinance shall be maintained and improved as necessary.
- LU-P11.5 Water Supply for New Development. For all new development, prior to the approval of any subdivision applications, the developers shall assure that there is sufficient available water supply to meet projected buildout.
- LU-P11.6 Adequate System Maintenance. The City shall require maintenance funding for streets, storm drainage, and ponding basins for new development.
- LU-P11.7 Adequate Infrastructure Capacity. The City shall only approve new development when it can be demonstrated by the applicant that adequate system capacity in the service area is or will be available to handle increases related to the project.
- LU-P11.9 Adequate City Service Capacity. The City shall only approve new development when it can be demonstrated by the applicant that adequate public service capacity in the area is or will be available to handle increases related to the project. School capacity will be discussed in the review of each development, and the City will ensure early coordination with the school districts serving the site. School capacity will be addressed as allowed under State law.

- LU-P11.17 Fair Share Improvements. The City shall ensure new development is required to participate on a fair-share basis in the completion of improvements to the existing sewer system, and/or the construction of new sewer trunk lines as described in the City's adopted Sewer Master Plan.
- COS-P1.1 Regional Groundwater Protection. The City shall work with Tulare County and special districts to help protect groundwater resources from overdraft by promoting water conservation and groundwater recharge efforts.
- COS-P1.8 Water Conservation. The City shall promote efficient water use and reduced water demand by:
  a. Requiring water-conserving design and equipment in new construction.
  b. Encouraging water-conserving landscaping and other conservation measures; and
  c. Encourage retrofitting existing development with water conserving devices.
  d. Providing public education programs.
  e. Distributing outdoor lawn watering guidelines.
  f. Promoting water audit and leak detection programs.
  g. Enforcing water conservation programs.
- COS-P1.11 Water for Irrigation. Whenever possible, the City shall require new development to use recycled or non-potable water for irrigation in landscaped areas.

Discussion

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 with Mitigation: The project will result in less than significant impacts to water quality due to potentially polluted runoff generated during construction activities. Construction would include excavation, grading, and other earthwork that may occur across most of the 14.06-acre project site. During storm events, exposed construction areas across the project site may cause runoff to carry pollutants, such as chemicals, oils, sediment, and debris. In addition, soil erosion will require implementation of a Stormwater Pollution Prevention Plan (SWPPP) for the project. A SWPPP identifies all potential sources of pollution that could affect stormwater discharges from the project site and identifies best management practices (BMPs) related to stormwater runoff. There may be chemicals or surfactants used during project maintenance or operations, so discharge could impact water quality standards. Therefore, the impacts are *less than significant with mitigation.*

Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit.

- Prior to issuance of grading permits for Phase 1 the Applicant shall submit a copy of the NOI to the City.
- The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the site during construction for compliance.

Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and

instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to:

- Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust;
- A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures;
- Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used;
- Soil stockpiles and graded slopes will be covered after two weeks of inactivity and 24 hours prior to and during extreme weather conditions; and,
- BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc.

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

Less than Significant Impact: Water services will be provided by the City of Tulare upon development. The City's water supply source is comprised of 23 wells that extract water from an underground aquifer. According to the City's 2020 Urban Water Management Plan (UWMP), the projected water supply for Tulare in year 2025 is 10,554 million gallons, which is comprised of both groundwater and recycled water. The proposed project would involve a Specific Plan Amendment to change the 14.06-acre site's land use designation from Community Commercial to Low Density Residential. Therefore, it is relevant to consider the change in water use associated with the change in specific plan land use.

According to the City's Water System Master Plan, commercial uses use 1,300 gallons per day/acre. If the Project were to be developed for commercial use, the 14.06-acre site would be projected to have a gpd of 18,278. This would increase the total Citywide gallons per day from the existing 15,608,000 gpd to 15,641,744 gpd.

According to the City's Water System Master Plan, single family residential uses use 2,400 gallons per day/acre. If the Project were to be developed for single family residential use, the 14.06-acre site would be projected to have a gpd of 33,744. This would increase the total Citywide gallons per day from the existing 15,608,000 gpd to 15,626,278 gpd.

The percent different in the City's gpd from 15,641,744 to 15,626,278 would be 0.098%. Although the project would use slightly more water as a residential development compared to a commercial development, the percent different in the City's total gpd would not have a significant impact on water demand.

The project would result in reduced percolation, as compared to the existing vacant site, to the groundwater basin due to an increase in the amount of paved and impervious surfaces. However, all

stormwaters will be redirected to a nearby retention basin for groundwater recharge. Although the Project would utilize groundwater for domestic purposes, the amount of water used is not considered significant and would not substantially lower the groundwater table of the aquifer or interfere substantially with the recharge of the underground aquifer. The Project would pay its fair share of installation of improvements and pay all development fees related to water service. Therefore, the impacts would be *less than significant.*

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?

Less than Significant Impact: The proposed project includes the construction and operation of 125 low-density residential units on approximately 14.06 gross acres. The construction of these units may be considered an alteration in drainage patterns; however, this would not result in substantial erosion or siltation on- or off-site. A Stormwater Pollution Prevention Plan (SWPPP) will be implemented during project construction. SWPPPs include mandated erosion control measures, which are developed to prevent significant impacts related to erosion caused by runoff during construction. The impact is *less than significant.*

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: Because the project would result in an increase of impervious surfaces within the project site, an increase in surface runoff may occur. However, all stormwater runoff will be routed and contained in a nearby basin. The applicant will be required to provide and there will not be substantial flooding on- or off-site. The project will have a *less than significant impact.*

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?

Less than Significant with Mitigation: The proposed project would include the construction and operation of 125 low-density residential units. New impervious surfaces, such as the roads and driveways, collect automobile derived pollutants such as oils, greases, rubber and heavy metals. During storms, pollutants would be transported into the drainage systems by surface runoff. Due to the increase in population and impervious surfaces within the site, there would be an increase in pollutants in surface runoff. As a result, an increase in point source and non-point source pollution may result from increases in development. The project, as a residential project, is not a source which would otherwise create substantial degradation of water quality. Upon compliance with the City's SWMP, Engineering Standards, General Plan, and City Ordinance requirements, impacts related to water quality would be *less than significant with mitigation.*

> **Mitigation Measure HYD-3:** A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP

devices be inspected, cleaned and maintained in accordance with the manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following:

- Runoff shall be directed away from trash and loading dock areas;
- Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes;
- Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and,
- Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system.

iv. Impede or redirect flood flows?

No Impact: The Project site is generally flat and no significant grading or leveling will be required. The proposed project site is not in proximity to a stream or river and will not alter the course of a stream or river. According to National Flood Hazard mapping by the Federal Emergency Management Agency, the proposed project site is not located within a 100-year flood hazard area. There would be *no impact* with regard to impeding or redirecting flood flows.

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

No Impact: The proposed project is located inland and not near an ocean or large body of water, and therefore, would not be affected by a tsunami. The proposed project is located in a relatively flat area and would not be impacted by inundation related to mudflow. Since the project is located in an area that is not susceptible to inundation, the project would not risk release of pollutants due to project inundation. As such, there is *no impact.*

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

No Impact: The proposed project will not conflict with or obstruct implementation of a water quality control plan. The proposed project will be subject to the requirements of the NPDES Stormwater Program and will be required to comply with a SWPPP, which will identify all potential sources of pollution that could affect stormwater discharges from the project site and identify BMPs to prevent significant impacts related to stormwater runoff.

The proposed project site is within the jurisdiction of the Mid-Kaweah Groundwater Sustainability Agency (GSA). The Groundwater Sustainability Plan (GSP) was adopted by the Mid-Kaweah GSA in December 2019. The plan was reviewed for consistency with the proposed project, and it was determined that the proposed project does not conflict with and would not obstruct implementation of the GSP. There is *no impact.*

XI. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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?	☐	☐	☑	☐

Environmental Setting

The proposed project site is located with the northeastern corner of the City of Tulare. Under the City of Tulare General Plan, the project site is designated Community Commercial and zoned C-3 (Retail Commercial). The Project is located in the Del Lago Specific Plan planning area and requires a Specific Plan Amendment to change the land use designation from Community Commercial to Low Density Residential.

Regulatory Setting

City of Tulare General Plan: The Project site is designated as Community Commercial in the 2035 City of Tulare General Plan. The Project will require a General Plan Amendment to change the existing designation to Low Density Residential, as well as an amendment to the Del Lago Specific Plan to change the destination from Community Commercial to Low Density Residential. Low Density Residential establishes areas for single-family residences in a suburban configuration. This designation typically has a density range of 3.1-7 DU/acre with a minimum lot size of 4,000 square feet.

The following goals and policies in the City of Tulare General Plan are applicable to the project site's residential land use designation:

Goal LU-3 To designate, protect, and provide land to ensure sufficient residential development capacity and variety to meet community needs and projected population growth.

- LU-P3.1 Neighborhood Housing Mix. The City shall encourage mixed use neighborhoods to have a variety of housing types and densities to help create an overall healthy, balanced community.
- LU-P3.4 Jobs-Housing Balance. The City shall consider the effects of city land use proposals and decisions on the Tulare County area and the efforts to maintain a regional jobs housing balance.
- LU-P3.5 Future Residential Development. The City shall direct future residential development to areas adjacent or in close proximity to existing and future neighborhoods and neighborhood commercial areas to further Tulare as a self-sufficient, full-service city.
- LU-P3.8 Incompatible Uses. The City shall protect existing residential neighborhoods from the encroachment of incompatible activities and land uses (i.e. traffic, noise, odors, or fumes) and environmental hazards (i.e. flood, soil instability).
- LU-P3.9 Planned Development. The City shall encourage the use of planned development provisions in residential developments to provide flexibility, to meet various socio-economic needs, and to address environmental and site design constraints.

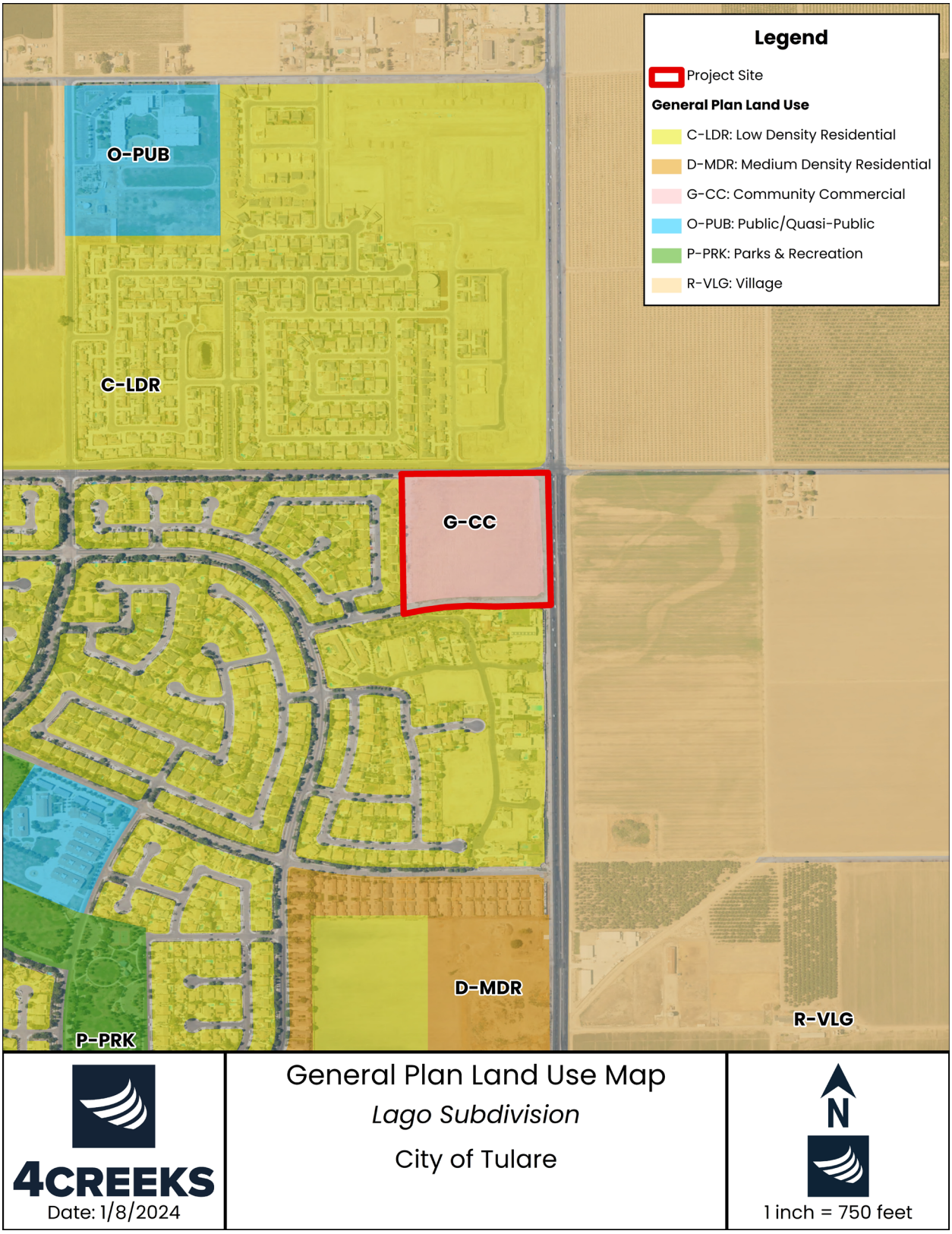


Figure 3-6: General Plan Land Use Map

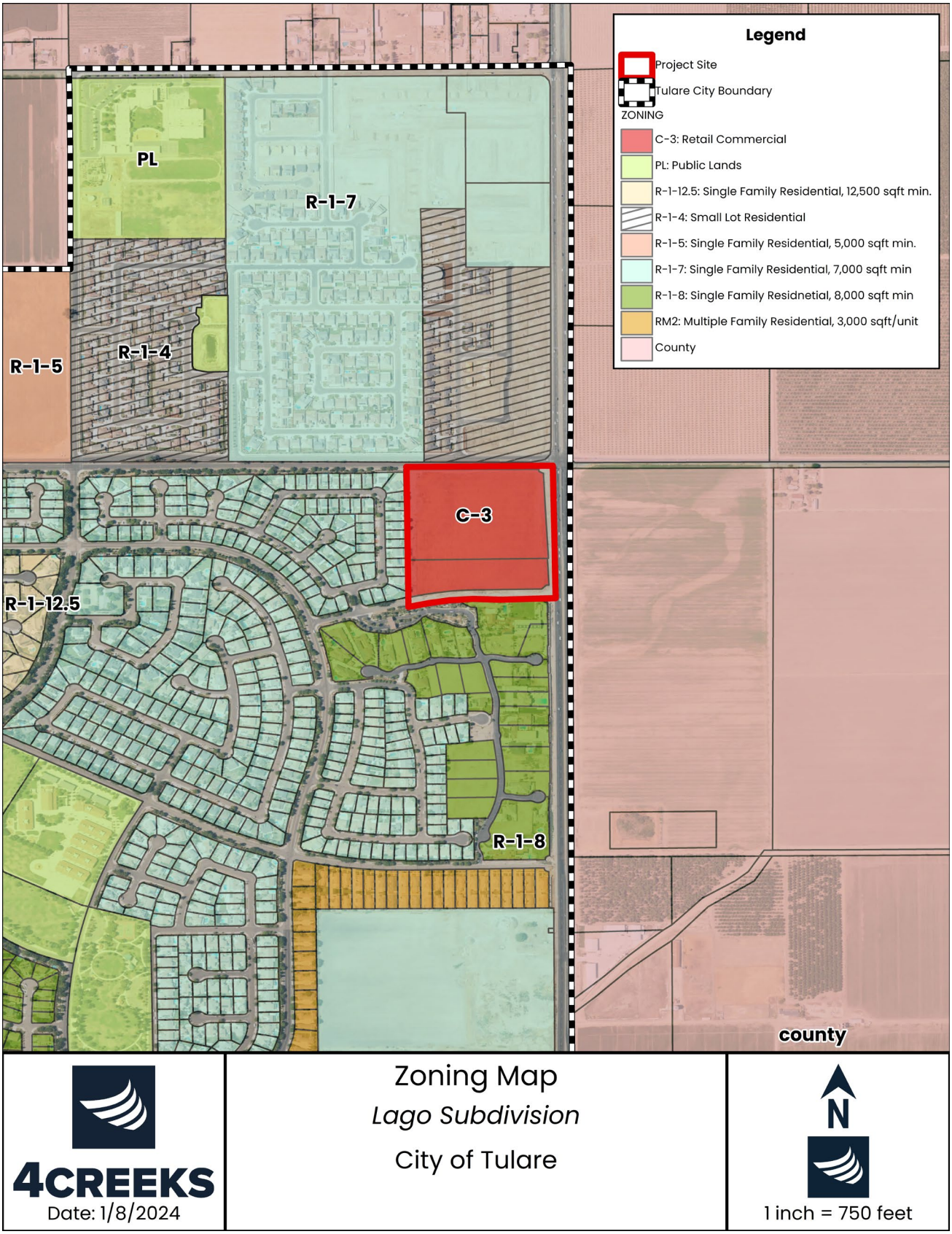


Figure 3-7: Zoning Map

Discussion

a) Would the project physically divide an established community?

No Impact: The project proposes the development of 125 low-density residential units on approximately 14.06 gross acres within the northeastern corner of the City of Tulare. The project would not function as a physical barrier within a community. There is *no impact.*

b) Would the project 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?

Less Than Significant Impact: The Project would construct 125 single family residential units within the approximately 14.06 acre Project area. As illustrated in Figure 3-6 and Figure 3-7, the City of Tulare General Plan Update land use diagram designates the Project site as Community Commercial, and the City of Tulare Zoning Ordinance designates the Project site as Retail Commercial C-3. The Project proposes a general plan amendment and rezone as well as a specific plan amendment for the site, rezoning to the R-1-4 (Single Family Residential) Zone District and amending the Del Lago Specific Plan designation to Low Density Residential. The Project will comply with all applicable General Plan policies, and subdivision and zoning regulations, thus the Project would not conflict with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, there would be a *less than significant impact*.

XII. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	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 lands use plan?	☐	☐	☐	☑

Environmental Setting

There are no mineral resource zones in Tulare County and there is no mineral extraction occurring on or adjacent to the proposed project site. Historical mines within the County include mineral deposits of tungsten, copper, gold, magnesium and lead, however most of these mines are now closed – leaving only 37 active mining operations. There are no active mining operations within the City of Tulare.

Regulatory Setting

California State Surface Mining and Reclamation Act: The California State Surface Mining and Reclamation Act was adopted in 1975 to regulate surface mining to prevent adverse environmental impacts and to preserve the state's mineral resources. The Act is enforced by the California Department of Conservation's Division of Mine Reclamation.

City of Tulare General Plan: The following mineral resource goals and policies in the Conservation and Open Space Element of the Tulare County General Plan are potentially applicable to the proposed project:

Goal COS-8 To protect the current and future extraction of mineral resources that are important to the City's economy while minimizing impacts of this use on the public and the environment.

- COS-P8.3 Future Resource Development. Provide for the conservation of identified and/or potential mineral deposits within the UDB as areas for future resource development.
- COS-P8.5 Incompatible Development. Proposed incompatible land uses shall not be on lands containing, or adjacent to, identified mineral deposits or along key access roads, unless adequate mitigation measures are adopted or a statement of overriding considerations stating public benefits and overriding reasons for permitting the proposed use are adopted.
- COS-P8.10 Resources Development. The City will promote the responsible development of identified and/or potential mineral deposits.

Discussion

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

No Impact: The project site has no known mineral resources that would be of a value to the region and the residents of the state, therefore the proposed project would not result in the loss of impede the mining of regionally or locally important mineral resources. There is *no impact.*

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

No Impact: There are no known mineral resources of importance to the region and the project site is not designated under the City's or County's General Plan as an important mineral resource recovery site. For that reason, the proposed project would not result in the loss of availability of known regionally or locally important mineral resources. There is *no impact.*

XIII. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permeant 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 public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Environmental Setting

Noise is often described as unwanted sound. Sound is the variation in air pressure that the human ear can detect. If the pressure variations occur at least 20 times per second, they can be detected by the human ear. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Ambient noise is the "background" noise of an environment. Ambient noise levels on the proposed project site are primarily due to agricultural activities and traffic. Construction activities usually result in an increase in sound above ambient noise levels.

Regulatory Setting

City of Tulare General Plan: The Noise Element of the City of Tulare General Plan is responsible for establishing noise standards within the City and includes the following goals and policies related to noise that may be applicable to the project.

Goal NOI-1 Protect the citizens of Tulare County from the harmful effects of exposure to excessive noise.

- NOI-P1.5 Construction Noise. Reduce noise associated with construction activities by requiring properly maintained mufflers on construction vehicles, requiring the placement of stationary construction equipment as far as possible from developed areas, and requiring temporary acoustical barriers/shielding to minimize construction noise impacts at adjacent receptors. Special attention should be paid to noise-sensitive receptors (including residential, hospital, school, and religious land uses).

- NOI-P1.6 Limiting Construction Activities. The City shall limit construction activities to the hours of 6 am to 10 pm, Monday through Saturday.
- NOI-P1.18 Construction-related Vibration. Evaluate individual projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors for potential vibration impacts. If construction-related vibration is determined to be perceptible at vibration-sensitive uses, additional requirements, such as use of less-vibration-intensive equipment or construction techniques, should be implemented during construction (e.g., drilled piles to eliminate use of vibration-intensive pile driver).

Discussion

a) Would the project result in generation of a substantial temporary or permeant 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: Project construction is anticipated to last approximately 2.5 years (50 units built/year) and will involve temporary noise sources. The average noise levels generated by construction equipment that will be used in the proposed project are shown below.

Type of Equipment	dBA at 50 feet
Air Compressors	81
Excavators	81
Concrete/Industrial Saws	76
Cranes	83
Forklifts	75
Generators	81
Pavers	89
Rollers	74
Dozers	85
Tractors	84
Loaders	85
Backhoes	80
Graders	85
Scrapers	89
Welders	74

Table 3-9. Noise levels of noise-generating construction equipment. Source: Federal Highway Administration Construction Noise Handbook.

The City of Tulare General Plan and Noise Ordinance does not identify noise thresholds for noise sources related to construction, however the General Plan does require the implementation of noise reduction measures for all construction equipment and limits noise generating activities related to construction to daytime hours Monday through Saturday. The project will comply with these regulations and construction will only occur Monday through Saturday between 6:00 AM and 10:00 PM.

Long term noise levels resulting from the project would include single-family homes, which are not normally associated with high operational noise levels.

Because noise generated from construction would be temporary, construction activities would comply with all measures established by the City to limit construction related noise impacts, and operational noise would be consistent with adjacent land uses, the impact is *less than significant.*

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

No Impact: The City of Tulare General Plan states that projects that use vibration-intensive construction activities, such as pile drivers, jack hammers, and vibratory rollers, near sensitive receptors must be evaluated for potential vibration. Because the proposed project would not use this type of equipment, the project would not generate excessive ground-borne vibration or ground-borne noise levels and there is *no impact.*

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 public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact: The project site is not located in an airport land use plan. Mefford Field is the nearest public airport and is located approximately 5.5 miles away from the proposed project site. There is *no impact*.

XIV. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by 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?	☐	☐	☐	☑

Environmental Setting

The United States Census Bureau reported the population in the City of Tulare to be 70,693. in 2022. This is an increase from the 2010 census, which counted the population in the City of Tulare to be 59,275. Factors that influence population growth include job availability, housing availability, and the capacity of existing infrastructure.

Regulatory Setting

The size of the population in the City of Tulare is controlled by the development code and Land Use Element of the General Plan. These documents regulate the number of dwelling units per acre allowed on various land uses and establish minimum and maximum lot sizes. These factors have a direct impact on the City's population size.

Discussion

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

Less than Significant Impact: The United States Census Bureau estimated the population in the City of Tulare to be 70,693 in 2022. The project proposes to construct 125 new low-density residential units. The Census states that the City's average household size is 3.52 persons. Based on this average household size, the anticipated population increase as a result of the proposed project is 440 persons. This would be a 0.6% population increase beyond existing conditions, which would not constitute a substantial increase in growth and population. The impact is *less than significant.*

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

No Impact: There project does not involve the removal of existing residences and would not displace any people. There is *no impact.*

XV. PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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 serve ratios, response times of other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☑	☐
b. Police protection?	☐	☐	☑	☐
c. Schools?	☐	☐	☑	☐
d. Parks?	☐	☐	☑	☐
e. Other public facilities?	☐	☐	☑	☐

Environmental Setting

Fire: The project site is served by the City of Tulare Fire Department. The City of Tulare Fire Department will continue to provide fire protection services to the proposed project site upon development. The nearest fire station is located approximately 1.8 miles west of the proposed project site.

Police: Law enforcement services are provided to the project site via the Tulare Police Department. The City of Tulare will continue to provide police protection services to the proposed project site upon development. Tulare Police Department is located approximately 2.8 miles southwest of the proposed project site.

Schools: The proposed project site is located within the Tulare School District. Mission Valley Elementary School is located 0.5 miles southwest of the project site. Liberty Elementary School is located 0.5 miles northwest of the project site.

Regulatory Setting

School Districts in the City of Tulare are regulated by the California Department of Education, and the Tulare Police Department is regulated by the California Department of Justice. Objectives and Policies relating to Law Enforcement, Fire Protection, Parkland, and School Facilities are included in the Land Use Element and Conservation and Open Space Element of the Tulare's General Plan. The Goals and Policies potentially applicable to the proposed project are as follows:

- COS-P4.1 Parkland/Open Space Standards: The City's goal is to provide 4 acres of developed parkland per 1,000 residents. New residential or mixed-use developments containing a residential

component may be required to provide parkland, or pay in-lieu fees, in this ratio as directed by the City.

- LU-P11.3 System Expansion: The City shall require new development be responsible for expansion of existing facilities such as water systems, sewer systems, storm drainage systems, parks, and other capital facilities made necessary to serve the new development.
- LU-P11.9: Adequate City Service Capacity: The City shall only approve new development when it can be demonstrated by the applicant that adequate public service capacity in the area is or will be available to handle increases related to the project. School capacity will be discussed in the review of each development, and the City will ensure early coordination with the school districts serving the site. School capacity will be addressed as allowed under State law.
- LU-P11.26 Evaluate Fiscal Impacts: The City shall evaluate the fiscal impacts of new development and encourage a pattern of development that allows the City to provide and maintain a high level of urban services (including, but not limited to, water, sewer, transportation, fire stations, police stations, libraries, administrative, and parks), and community facilities and utility infrastructure, as well as attract targeted businesses and a stable labor force.

Discussion

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 serve ratios, response times of other performance objectives for any of the public services:

a. Fire protection?

Less Than Significant Impact: The City of Tulare Fire Department will provide fire protection services to the proposed development. The closest fire station is Tulare Fire Station #63, located 1.8 miles west of the project site at 2900 M St. The addition of 125 residential units will increase the demand for fire protection services. The increase in service demand will be compensated for by the development impact fee of $496 per dwelling unit.. Therefore, the total development fee would be $62,000. The development impact fee of $496 per dwelling unit is assumed to account for fire protection deficits.

The timing of when new fire service facilities would be required or details about size and location cannot be known until such facilities are planned and proposed, and any attempt to analyze impacts to a potential future facility would be speculative. As new or expanded fire service facilities become necessary, construction or expansion projects would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant.*

b. Police protection?

Less than Significant Impact: The Tulare Police Department will provide services to the proposed development. The Tulare Police Department is located approximately 2.8 miles southwest of the proposed project site. The development would increase the demand for police service with the addition of 125 residential units. According to Tulare's Municipal Service Review (2013), the Tulare Police Department currently has a deficit of 37 sworn officers, 22 non-sworn officers, 28 vehicles, and 8,645 SF in police station space. The shortage and the additional demand will be

compensated by the development impact fee of $202 per dwelling unit, which is consistent with City Resolution Number 03-4988. The total development impact fee for police services would be $25,250.

The timing of when new police service facilities would be required or details about size and location cannot be known until such facilities are planned and proposed, and any attempt to analyze impacts to a potential future facility would be speculative. As new or expanded police service facilities become necessary, construction or expansion projects would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. Therefore, the impact is *less than significant*.

c. Schools?

Less than Significant Impact: The proposed project is within the Tulare City Elementary School District and Tulare Joint Union High School District. Since the proposed project includes the addition of 125 single-family residential units, the number of students in the school district will increase. The proposed project site is located within the city limits and approved Urban Development Boundary (UDB) per the City's General Plan. In addition to the goals and policies of the City's General Plan, future development is required by state law to pay development impact fees to the school districts at the time of building permit issuance. These impact fees are used by the school districts to maintain existing and develop new facilities, as needed. These fees will help mitigate the additional students added from this development. Therefore, the impact is *less than significant.*

d. Parks?

Less than Significant Impact: The addition of 125 new residential units would result in more use of existing parks. Parks within a half-mile to one-mile radius that would service the proposed development include Del Lago Park. The City's 2035 General Plan Policy states that new residential development may be required to provide additional parkland or in-lieu fees. Therefore, the developer shall pay a development impact fees. Since the project would not lower the existing level of services for parks, pay in-lieu fees, , the impact is *less than significant.*

e. Other public facilities?

Less than Significant Impact: Water and wastewater services for the proposed development would be serviced by existing infrastructure beneath neighboring streets. The additional 125 residential units will increase the demand for water and wastewater facilities. According to Tulare's 2035 General Plan Land Use Element, the City states that new development must be responsible for expanding existing water and sewage systems. Therefore, the developer shall pay the required development impact fees to accommodate the expansion of existing systems. Therefore, the impact is *less than significant.*

XVI. PARKS AND RECREATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	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?	☐	☐	☑	☐

Environmental Setting

There are 20 parks that are owned and operated by The City of Tulare. Del Lago Park is the closest recreational area to the project site and is located approximately 0.6 miles southwest of the project site.

Regulatory Setting

City of Tulare General Plan: The Conservation and Open Space Element of the City of Tulare General Plan contains the following recreational resource goals and policies potentially applicable to the project.

Goal COS-4 To provide parks and recreation facilities and services that adequately meet the existing and future needs of all Tulare residents.

- COS-P4.1 Parkland/Open Space Standards. The City's goal is to provide 4 acres of developed parkland per 1,000 residents. New residential or mixed-use developments containing a residential component may be required to provide parkland, or pay in-lieu fees, in this ratio as directed by the City.
- COS-P4.5 Fair Share Responsibilities. The City shall ensure all future residential development is responsible for its fair share of the City's cumulative park and recreational service and facilities maintenance needs.
- COS-P4.6 Land Dedication. The City shall continue its practice of requiring the dedication of community and neighborhood park lands as a condition of approval for large residential development projects (50 or more lots), if applicable.
- COS-P4.7 Fees In Lieu of Parkland Dedication. The City shall allow the payment of fees in lieu of parkland dedication, especially in areas where dedication is not feasible, as provided under the Quimby Act.

Discussion

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?

Less than Significant Impact: Implementation of the proposed project would result in increased use of existing parks and other recreational facilities; however, the project would contribute its fair share to parks facilities through in-lieu fees, which will be used to support the maintenance of existing parks and other recreational facilities. The impact is *less than significant.*

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 proposed project does not include recreational facilities and would not increase environmental impacts beyond those associated with the proposed project. The impact is *less than significant.*

XVII. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, **including transit, roadway, bicycle and pedestrian facilities?**	☐	☐	☑	☐
b) Conflict or be inconsistent with the 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?	☐	☐	☑	☐

Discussion for this section originates from the VMT Assessment that was prepared for this project by LSA Associates, Inc. The full VMT Assessment document can be found in Appendix D of this Initial Study.

Environmental Setting

Vehicular Access: Vehicular access to the project is proposed to be available from Mooney Blvd (via Ribolla Avenue), Cartmill Ave, and Ribolla Ave. The City of Tulare is the primary authority for major arterial and local streets, while Caltrans is the primary authority for Mooney Blvd due to it being a State Route.

Parking: During construction, workers will utilize temporary construction staging areas for parking of vehicles and equipment. During project operations, there will be no permanent personnel on-site and no additional parking facilities will be required.

Pedestrian and Cyclist Connectivity: The project will install sidewalks along the west side of Mooney Blvd, the south side of Cartmill Ave, the north side of Ribolla Avenue, and on all internal streets within the project area. Proposed sidewalks on Ribolla Avenue will connect to existing sidewalks to the west. Sidewalks along internal residential streets will connect to existing and future sidewalks to the north and west. These features will provide connectivity for pedestrians and cyclists within the project area and offsite.

Regulatory Setting

City of Tulare Improvement Standards: The City of Tulare's Improvement Standards are developed and enforced by the City of Tulare's Engineering Division to guide the development and maintenance of City Roads. The cross-section drawings contained in the City Improvement Standards dictate the development of roads within the City.

Tulare City General Plan: The Transportation and Circulation Element of the City of Tulare General Plan contains the acceptable Level of Service (LOS) for roadways.

- TR-P2.3 Level of Service Standard**.** The City shall maintain Level of Service "D," as defined in the Highway Capacity Manual (published by the Transportation Research Board of the National Research Council), as the minimum desirable service level at which freeways, arterial streets, collector streets, and their intersections should operate.
- TR-P2.6 Highway Right-of-Way**.** The City shall work with Caltrans to ensure that new development projects include the dedication of land to match the ultimate right-of-way as delineated in the Caltrans Transportation Concept Reports.
- TR-P2.10 Roadway Improvements**.** The City shall improve existing roadway links and intersections which are identified as operating below Level of Service "D" standard or have other significant existing safety or operational deficiencies.
- TR-P2.14 Driveway/Curb Cut Consolidation**.** The City shall encourage the consolidation of driveways, access points, and curb cuts along existing developed major arterials or arterials when new development or a change in the intensity of existing development or land uses occurs or when traffic operation or safety warrants.
- TR-P2.27 Orientation of Subdivision Away from Arterials**.** The City shall require residential development to be oriented away (side-on or rear-on) from major arterials and arterials, and properly buffered from these roadway types to preserve the carrying capacity on the street and protect the residential environment. No single-family residence driveways are allowed on collector streets.
- TR-P6.2 Provision of Sidewalks for new Development**.** The City shall require all new development to provide sidewalks or other suitable pedestrian facilities. Whenever feasible, pedestrian paths should be developed to allow for unobstructed pedestrian flow to major destinations such as bus stops, schools, parks, and shopping centers.

Discussion

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

Less than Significant Impact: The project consists of the construction of 125 low-density residential units, as well as on-site circulation-related infrastructure improvements, including new local residential streets. The Project would not conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The Project would not conflict with the standards and goals set forth in the City of Tulare General Plan Circulation Element. The proposed project would include frontage improvements, including sidewalks, which would be an improvement to pedestrian accessibility over existing conditions. Any congestion during construction would be temporary. Vehicular access to the project would be available on Cartmill Ave, Ribolla Ave, and Mooney Blvd. The Project is required to submit improvement plans, including roadway improvements, for review and approval by the City Engineer to ensure improvements will be consistent with City standards. Therefore, the impacts would be *less than significant.*

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

Less than Significant Impact: Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of

Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State of California Governor's Office of Planning and Research document entitled Technical Advisory on Evaluating Transportation Impacts in CEQA dated December 2018 (OPR Guidelines) provides guidance for determining a project's transportation impacts based on vehicle miles traveled (VMT). For residential projects, the OPR Guidelines indicate: "A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita."
Project specific modeling was conducted by LSA Associates (Appendix D). LSA used 2022 RTP model to develop project VMT metrics. A "no project" baseline model run was conducted to develop the average VMT per capita/trip distance for Tulare County and the corresponding threshold (85% of regional average). Based on the "no project" baseline model run using 2022 RTP model, the regional average VMT per capita/trip distance was estimated at 13.2 and the corresponding threshold would be 11.2 (85% of 13.2)
LSA then performed a model run with the project incorporated. The project's calculations came out to 10.4 VMT per capita/trip distance, a difference of -0.8 from the City of Tulare's threshold of 11.2 VMT per capita/trip distance. Therefore, the project's VMT per capita is 7.2 percent lower than the average VMT per capita/trip distance for Tulare County and the corresponding threshold (85% of regional average) which has been adopted as the city's threshold for VMT screening criteria. Based on this analysis, the project's impact on VMT is considered *less than significant.*

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

No Impact: The proposed project does not include any features that could result in increased hazards due to a geometric design feature. All proposed road designs will be reviewed and approved by the City of Tulare Engineering department. Mooney Blvd will also be reviewed by Caltrans. There is *no impact.*

d) Would the project result in inadequate emergency access?

Less Than Significant Impact: This project would not result in inadequate emergency access. Emergency access to the site would be from Ribolla Avenue (via Mooney Blvd) and Cartmill Avenue. A network of local roads within the proposed project property provides full access onto and off of the project site. Any impacts related to emergency access would be *less than significant.*

XVIII. TRIBAL CULTURAL RESOURCES

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

Environmental Setting

Of the main groups inhabiting the Tulare County area, the Southern Valley Yokuts occupied the largest territory. The Yokuts numbered about 25,000 and were clustered into about fifty independent local sub-tribes. Historians believe approximately 22 villages stretched from Stockton northerly to the Tehachapi Mountains southerly, although most were concentrated around Tulare Lake, Kaweah River, and its tributaries. As a result, numerous cultural resource sites have been identified in Tulare County.

Cultural Resources Record Search and Native American Consultation: A records search was conducted on behalf of the Applicant by Peak & Associates, Inc. to determine if historical or archaeological sites had previously been recorded within the study area, if the project area had been systematically surveyed by archaeologists prior to the initial study, and/or whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive.

A record search was conducted for the project area and at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System. There are no cultural resources, either prehistoric or historic, reported in the project area or within a ¼ mile radius of the project area. There is one report within the project area, that covered the eastern edge of project area along Mooney Boulevard. Another study is immediately adjacent for the roadway to the north, Cartmill Road. The full findings of the cultural records search can be found in Appendix C.

The Santa Rosa Rancheria Tachi Yokut Tribe is the only tribe that has requested to be notified of projects within the City of Tulare for AB 52 tribal consultation. Other tribes in the area were notified of the project pursuant to SB 18. The Santa Rosa Rancheria Tachi Yokut Tribe was notified on October 25, 2023. The tribe responded on November 2, 2023 and stated “if this project is still in the planning, at this time we do

not have any information to share regarding sensitive cultural resources or sites within the project area. If, however, resources are encountered during surveys or project work, please reach out to us again." Other tribes such as the Kern Valley Indian Community, Tubatulabals of Kern Valley, Tule River Indian Tribe, and Wuksache Indian Tribe / Eshom Valley Band were also notified on October 25, 2023. No response had been received from these tribes as of the writing of this document.

Definitions

- **Historical Resources**: Historical resources are defined by CEQA as resources that are listed in or eligible for the California Register of Historical Resources, resources that are listed in a local historical resource register, or resources that are otherwise determined to be historical under California Public Resources Code Section 21084.1 or California Code of Regulations Section 15064.5. Under these definitions Historical Resources can include archaeological resources, Tribal cultural resources, and Paleontological Resources.

- **Archaeological Resources:** As stated above, archaeological resources may be considered historical resources. If they do not meet the qualifications under the California Public Resources Code 21084.1 or California Code of Regulations Section 15064.5, they are instead determined to be "unique" as defined by the CEQA Statute Section 21083.2. A unique archaeological resource is an artifact, object, or site that: (1) contains information (for which there is a demonstrable public interest) needed to answer important scientific research questions; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

- **Tribal Cultural Resource (TCR):** Tribal Cultural Resources can include site features, places, cultural landscapes, sacred places, or objects, which are of cultural value to a Tribe. It is either listed on or eligible for the CA Historic Register or a local historic register or determined by the lead agency to be treated as TCR.

- **Paleontological Resources:** For the purposes of this section, "paleontological resources" refers to the fossilized plant and animal remains of prehistoric species. Paleontological Resources are a limited scientific and educational resource and are valued for the information they yield about the history of the earth and its ecology. Fossilized remains, such as bones, teeth, shells, and leaves, are found in geologic deposits (i.e., rock formations). Paleontological resources generally include the geologic formations and localities in which the fossils are collected.

Regulatory Setting

National Historic Preservation Act: The National Historic Preservation Act was adopted in 1966 to preserve historic and archeological sites in the United States. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic Preservation offices.

California Historic Register: The California Historic Register was developed as a program to identify, evaluate, register, and protect Historical Resources in California. California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, experimental, or other value. In order for a resource to be designated as a historical landmark, it must meet the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

City of Tulare General Plan: The City of Tulare General Plan includes the following goals and policies pertaining to tribal cultural resources:

Goal COS-5 To manage and protect sites of cultural and archaeological importance for the benefit of present and future generations.

- COS-P5.1 Archaeological Resources. The City shall support efforts to protect and/or recover archaeological resources.
- COS-P5.6 Protection of Resources with Potential State or Federal Designations. The City shall encourage the protection of cultural and archaeological sites with potential for placement on the National Register of Historic Places and/or inclusion in the California State Office of Historic Preservation's California Points of Interest and California Inventory of Historic Resources. Such sites may be of statewide or local significance and have anthropological, cultural, military, political, architectural, economic, scientific, religious, or other values.
- COS-P5.9 Discovery of Archaeological Resources. In the event that archaeological/ paleontological resources are discovered during site excavation, grading, or construction, the City shall require that work on the site be suspended within 100 feet of the resource until the significance of the features can be determined by a qualified archaeologist/ paleontologist. If significant resources are determined to exist, an archaeologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.
- COS-P5.10 Discovery of Human Remains. Consistent with Section 7050.5 of the California Health and Safety Code and CEQA Guidelines (Section 15064.5), if human remains of Native American origin are discovered during project construction, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). If any human remains are discovered or recognized in any location on the project site, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains until:

    - The Tulare County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and
    - If the remains are of Native American origin,
        - The descendants of the deceased Native Americans have made a timely recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98.

  - The Native American Heritage Commission was unable to identify a descendant, or the descendant failed to make a recommendation within 24 hours after being notified by the commission, or
  - The landowner or his or her authorized representative rejects any timely recommendations of the descendent, and mediation conducted by the Native American Heritage Commission has failed to provide measures acceptable to the landowner.

- COS-P5.11 Impact Mitigation. If preservation of cultural/historical resources is not feasible, the City shall make every effort to mitigate impacts, including relocation of structures, adaptive reuse, preservation of facades, and thorough documentation and archival of records.
- COS-P5.12 Mitigation Monitoring for Historical Resources. The City shall develop standards for monitoring mitigation measures established for the protection of historical resources prior to development.
- COS-P5.13 Alteration of Sites with Identified Cultural Resources. When planning any development or alteration of a site with identified cultural or archaeological resources, consideration should be given to ways of protecting the resources. The City shall permit development in these areas only after a site-specific investigation has been conducted pursuant to CEQA to define the extent and value of resource, and mitigation measures proposed for any impacts the development may have on the resource.
- COS-P5.14 Education Program Support. The City shall support local, state, and national education programs on cultural and archaeological resources.
- COS-P5.15 Solicit Input from Local Native Americans. The City shall solicit input from the local Native American communities in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.
- COS-P5.16 Confidentiality of Archaeological Sites. The City shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect resources that are determined to exist. An archaeologist/paleontologist shall make recommendations for protection or recovery of the resource. City staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the City.
- COS-P5.17 Cooperation of Property Owners. The City shall encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities and encourage public support for the preservation of these resources.
- COS-P5.18 Archaeological Resource Surveys. Prior to project approval, the City shall require project applicant to have a qualified archaeologist conduct the following activities: (1) conduct a record search at the Regional Archaeological Information Center located at California State University Bakersfield and other appropriate historical repositories, (2) conduct field surveys where appropriate, and (3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards (Archaeological Resource Management Reports).

Discussion

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

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

Less Than Significant Impact with Mitigation: The project would not cause a substantial adverse change in the significance of a tribal cultural resource, nor is it listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. Based on the results of the records search, no previously recorded tribal cultural resources are located within the project site. Although no historical resources were identified, the presence of remains or unanticipated cultural resources under the ground surface is possible. Implementation of Mitigation Measures TCR-1, TCR -2, and TCR -3will ensure that impacts to this checklist item will be *less than significant with mitigation incorporation*.

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

Less Than Significant Impact with Mitigation: The lead agency has not determined there to be any known tribal cultural resources located within the project area. Additionally, there are not believed to be any paleontological resources or human remains buried within the project area's vicinity. However, the potential for buried cultural deposits in the Project area is moderate. If resources were found 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 resources to a California Native American Tribe. Implementation of Mitigation Measures TCR-1, TCR -2, and TCR -3, will ensure that any impacts resulting from project implementation remain *less than significant with mitigation incorporation.*

Mitigation Measures for Impacts to Cultural Resources:

Mitigation Measure TCR-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.

Mitigation Measure TCR-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Mitigation Measure TCR-3: Upon coordination with the Tulare County Resource Management Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.

XIX. UTILITIES AND SERVICE SYSTEMS

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

Environmental Setting

According to the Tulare Municipal Service Review (2013), the City would be able to provide the necessary infrastructure services and utility systems required for new development. Utilities and service systems include wastewater treatment, storm water drainage facilities, water supply, landfill capacity, and solid waste disposal.

Wastewater: Wastewater will be collected and treated at the City's wastewater treatment facility, which is located at the intersection Paige Ave. and West St.

Solid Waste: Solid waste collection service is provided by the City of Tulare Solid Waste Division. Solid waste disposal will be provided by the Tulare County Solid Waste Department, which operates two landfills and six transfer stations within the county. Combined, these landfills receive approximately 300,000 tons of solid waste per day.

Water: Water for the proposed development will be provided by the City of Tulare. The City's primary water source is groundwater. Existing water entitlements currently provide water to the proposed project site. Implementation of the proposed project will not require additional water entitlements.

Storm Drainage: Tulare is currently in an agreement with Tulare Irrigation District (TID). Tulare pumps storm water into canals owned by TID. However, the drainage to TID facilities will be limited and no new sources will be established. Once the Site is operational, storm water drainage will be directed into an existing basin within the Del Lago Specific Plan. This basin will be able to support drainage from the proposed Project.

Regulatory Setting

CalRecycle: California Code of Regulations, Title 14, Natural Resources – Division 7 contains all current CalRecycle regulations regarding nonhazardous waste management in the state. These regulations include standards for the handling of solid waste, standards for the handling of compostable materials, design standards for disposal facilities, and disposal standards for specific types of waste.

Central Valley RWQCB: The Central Valley RWQCB requires a Stormwater Pollution Prevention Plan (SWPPP) for projects disturbing more than one acre of total land area. Because the project is greater than one acre, a SWPPP to manage stormwater generated during project construction will be required.

The Central Valley RWQCB regulates Wastewater Discharges to Land by establishing thresholds for discharged pollutants and implementing monitoring programs to evaluate program compliance. This program regulates approximately 1500 dischargers in the region.

The Central Valley RWQCB is also responsible for implementing the federal program, the National Pollutant Discharge Elimination System (NPDES). The NPDES Program is the federal permitting program that regulates discharges of pollutants to surface waters of the U.S. Under this program, a NPDES permit is required to discharge pollutants into Waters of the U.S. There are 350 permitted facilities within the Central Valley Region.

Discussion

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

Less than Significant Impact: The proposed project will require the extension of existing utility services into the project area, including water, wastewater, and storm water drainage connections. Additionally, the Project will include connections for electric power and telecommunications facilities. This is not anticipated to cause a significant environmental effect because extension/relocation would occur within the right-of-way prior to street construction to minimize environmental impacts.

See Section 3.10 Hydrology and Water Quality for a discussion of wastewater disposal. Construction would include excavation, grading, and other earthwork that may occur across most of the 14.06-acre project site. During storm events, exposed construction areas across the project site may cause runoff to carry pollutants, such as chemicals, oils, sediment, and debris. In addition, soil erosion will require implementation of a Stormwater Pollution Prevention Plan (SWPPP) for the project. A SWPPP identifies all potential sources of pollution that could affect stormwater discharges from the project site and identifies best management practices (BMPs) related to stormwater runoff.

Additionally, the proposed Project would be subject to the payment of any applicable connection charges and/or fees and extension of services in a manner which is compliant with the Tulare Water Division standards, specifications, and policies. All applicable local, State, and federal requirements and best management practices will be incorporated into construction and operation of the Project. The impact is *less than significant.*

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

Less than Significant Impact: Water services will be provided by the City of Tulare upon development. The City's water supply source is comprised of 23 wells that extract water from an underground aquifer. According to City's Urban Water Management Plan (2020), the projected water supply for Tulare in year 2025 is 10,554 million gallons, which is comprised of both groundwater and recycled water.

The Project consists of 125 dwelling units and the average household size in Tulare is 3.52 people; therefore, the Project would house approximately 440 people. According to the UWMP, the amount of groundwater predicted to be pumped in 2025 is 6,255 million gallons or 17.14 million gallons per day. For a population of 440 and a target of 220 gallons per day per person, the 125-lot subdivision would be expected to use approximately 96,800 gallons of water per day under normal operation, including domestic and landscape irrigation. This equates to approximately 35 million gallons per year, which is 0.6% of the groundwater predicted to be pumped in 2025.

The City engages is a variety of strategies to ensure that adequate water resources area available throughout normal, dry, and multiple dry years. These strategies include a water conservation staging ordinance, which establishes five progressively more restrictive stages of water conservation to be implemented during dry and consecutive-dry years. The city also utilizes conjunctive use techniques, which involve diverting excess surface water for groundwater recharge during wet years so that it will be available during dry years. The proposed project is planned to be consistent with the 2020 UWMP, which demonstrates adequate water supply to serve development in the City. Additionally, Tulare General Plan Policy LU-P11.3 requires all new development to be responsible for expansion of existing facilities, such as water systems, made necessary to serve the new development. The use of these strategies greatly improves the City's control over water supply and demand, which provides water supply flexibility and significantly reduces the City's vulnerability in the event of dry and multiple dry years. Therefore, the impact is *less than significant.*

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

Less Than Significant Impact: As previously discussed above for item a) in this section, wastewater generated by the project would be collected and treated at the City's domestic wastewater treatment train (WWTT). Although the proposed project will increase in wastewater generation due to the addition of 125 residential units, the wastewater produced would not exceed the City's WWTF capacity of 6.0 MGD because the WWTF has been designed to serve and accommodate demand within the City's growth boundary, and this project is within the existing City limits. The impact is *less than significant*.

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

Less Than Significant Impact: Solid waste collection service will be provided by the City of Tulare and waste disposal will be provided by the County. Solid waste is anticipated as a result of project implementation; however, the project does not include any components that would generate excessive waste and the existing landfills have sufficient permitted capacity to accommodate the project's solid waste disposal needs. The impact is *less than significant.*

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

No Impact: This proposed project conforms to all applicable management and reduction statutes and regulations related to solid waste disposal. The development will comply with the adopted policies related to solid waste, and will comply with all applicable federal, state, and local statutes and regulations pertaining to disposal of solid waste, including recycling. Therefore, the proposed project would have *no impact* on solid waste regulations.

XX. 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 Incorporation	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 uncontrolled spread of a 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?	☐	☐	☐	☑

Regulatory Setting

Definitions:
Fire hazard severity zones: geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code, Sections 51175 through 51189.

Tulare Unit Strategic Fire Plan Key Goals and Objectives:

- *Support the implementation and maintenance of defensible space inspections around structures*
- *Analyze trends in fire cause and focus prevention and education efforts to modify behaviors and effect change to reduce ignitions within Tulare County*
- *Identify and evaluate wildland fire hazards and recognize assets at risk, collecting and analyzing data to determine fuel reduction project, and other projects.*
- *Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g. roads, fire lines, water sources) developed during fire suppression efforts, taking into consideration those identified in previous planning efforts*

Tulare County Disaster Preparedness Guide (2011): The Tulare County Preparedness Guide provides guidelines regarding disaster preparedness and evacuation planning for Tulare County residents.

Discussion

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

No Impact: The project would not substantially impair an adopted emergency response plan or emergency evacuation plan including the Tulare Unit Strategic Fire Plan and the Tulare County Disaster Preparedness Guide. There is *no impact.*

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

No Impact: The project is located on a flat area of land with insignificant risk of fire. The Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan identifies the risk of fire within the City of Tulare as having unlikely frequency, limited extent, limited magnitude, and low significance. The project would not exacerbate wildfire risks and expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. There is *no impact.*

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: The construction of the project involves adding new local residential streets, and new and relocated utilities. Utilities such as emergency water sources and power lines would be included as part of the proposed development, however all improvements would be subject to City standards and fire chief approval. The proposed project would not exacerbate fire risk and the impact would be *less than significant.*

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes?

No Impact: The project site is located on land with relatively flat topography. Therefore, the project would not be susceptible to downslope or downstream flooding or landslides as a result of post-fire instability or drainage changes. There is *no impact.*

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
b) Does the project have the potential substantially to 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?	☐	☐	☑	☐

Discussion

a) Does the project have the potential to 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact with Mitigation: This initial study/mitigated negative declaration found the project could have significant impacts on biological, cultural, water quality, and Tribal cultural resources. However, implementation of the identified mitigation measures for each respective section would ensure that impacts are *less than significant with mitigation incorporation.*

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: CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the

project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increased need for housing, increase in traffic, air pollutants, etc.). Impacts would be *less than significant*.

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 analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to less than significant, which results in a *less than significant* impact to this checklist item.

3.6 MITIGATION MONITORING AND REPORTING PROGRAM

As required by Public Resources Code Section 21081.6, subd. (a)(1), a Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the project in order to monitor the implementation of the mitigation measures that have been adopted for the project. This Mitigation Monitoring and Reporting Program (MMRP) has been created based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the Lago Subdivision Project proposed by San Joaquin Valley Homes in the City of Tulare.

The first column of the table identifies the mitigation measure. The second column names the party responsible for carrying out the required action. The third column, "Timing of Mitigation Measure" identifies the time the mitigation measure should be initiated. The fourth column, "Responsible Party for Monitoring," names the party ensuring that the mitigation measure is implemented. The last column will be used by the City of Tulare to ensure that the individual mitigation measures have been monitored.

Plan checking and verification of mitigation compliance shall be the responsibility of the City of Tulare.

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
Mitigation Measure BIO-1a: (*Construction Timing*) If feasible, the project will be implemented outside of the avian nesting season, typically defined as February 1 to August 31.	Project Sponsor	Prior to the Start of Construction	City of Tulare	
Mitigation Measure BIO-1b: *(Pre-construction Surveys*) If construction is to occur between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for active bird nests within 10 days prior to the start of construction. The survey area will encompass the site and accessible surrounding lands within 250 feet for nesting migratory birds and 500 feet for raptors (i.e., birds of prey).	Project Sponsor	Within 10 days prior to the start of construction, Ongoing during construction.	City of Tulare	
Mitigation Measure BIO-1c: *(Avoidance of Active Nests*) Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing and will be maintained until the biologist has determined that the young have fledged and are capable of foraging independently.	Project Sponsor	During Construction.	City of Tulare	
Mitigation Measure BIO-2a: *(Construction Timing)* If feasible, the project will be implemented outside of the Swainson's hawk nesting season, typically defined as March 1 to September 15.	Project Sponsor	Prior to the start of construction.	City of Tulare	
Mitigation Measure BIO-2b: *(Pre-construction Surveys*) If the project must be constructed during the March 1-September 15 nesting season,	Project Sponsor	Prior to the start of construction.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
surveys for nesting Swainson's hawks will be conducted. The surveys will follow the protocol established in the Swainson's Hawk Technical Advisory Committee's 2000 *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* and will encompass all mature trees within ½ mile of the project site. If no nesting pairs are found during the surveys, no further mitigation is required.				
Mitigation Measure BIO-2c: (*Establish Buffers*) If preconstruction surveys identify one or more active Swainson's hawk nests within ½ mile of the project site, suitable disturbance-free buffers would need to be established around the nest(s) and maintained until the end of construction or until a qualified biologist determines that the nest is no longer active, whichever comes first.	Project Sponsor	Ongoing during project construction.	City of Tulare	
Mitigation Measure CUL-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects.	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	
Mitigation Measure CUL-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	
Mitigation Measure HAZ-1: Prior to issuance of grading permits for ground clearance or	Project Sponsor	Prior to the start of	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
excavation, the project proponent shall prepare a soils report and investigation for the presence of environmentally persistent pesticides, such as organochlorinated pesticides, as well as aerially deposited lead in conjunction with the California Department of Toxic Substances Control (DTSC), and in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision*).		construction (Prior to Issuance of grading permits).		
Mitigation Measure HYD-1: Prior to the issuance of any construction/grading permit and/or the commencement of any clearing, grading, or excavation, the Applicant shall submit a Notice of Intent (NOI) for discharge from the Project site to the California SWRCB Storm Water Permit Unit. •Prior to issuance of grading permits for Phase 1 the Applicant shall submit a copy of the NOI to the City. •The City shall review noticing documentation prior to approval of the grading permit. City monitoring staff will inspect the site during construction for compliance.	Project Sponsor	Prior to the start of construction (Prior to Issuance of grading permits).	City of Tulare	
Mitigation Measure HYD-2: The Applicant shall require the building contractor to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the City 45 days prior to the start of work for approval. The contractor is responsible for understanding the State General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of one (1) acre, or where the area of disturbance is less than one acre but is part of the Project's plan of development that in total disturbs one or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to storm water and shall include specific BMPs to control the discharge of material from the site. The following BMP methods shall include, but would not be limited to: • Dust control measures will be implemented to ensure success of all onsite activities to control fugitive dust; • A routine monitoring plan will be implemented to ensure success of all onsite erosion and sedimentation control measures; • Provisional detention basins, straw bales, erosion control blankets, mulching, silt fencing, sand bagging, and soil stabilizers will be used; • Soil stockpiles and graded slopes will be covered	Project Sponsor	45 days prior to the start of construction and grading	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
after two weeks of inactivity and 24 hours prior to and during extreme weather conditions; and, • BMPs will be strictly followed to prevent spills and discharges of pollutants onsite, such as material storage, trash disposal, construction entrances, etc.				
Mitigation Measure HYD-3: A Development Maintenance Manual for the Project shall include comprehensive procedures for maintenance and operations of any stormwater facilities to ensure long-term operation and maintenance of post-construction stormwater controls. The maintenance manual shall require that stormwater BMP devices be inspected, cleaned and maintained in accordance with the manufacturer's maintenance conditions. The manual shall require that devices be cleaned prior to the onset of the rainy season (i.e., mid-October) and immediately after the end of the rainy season (i.e., mid-May). The manual shall also require that all devices be checked after major storm events. The Development Maintenance Manual shall include the following: • Runoff shall be directed away from trash and loading dock areas; • Bins shall be lined or otherwise constructed to reduce leaking of liquid wastes; • Trash and loading dock areas shall be screened or walled to minimize offsite transport of trash; and, • Impervious berms, trench catch basin, drop inlets, or overflow containment structures nearby docks and trash areas shall be installed to minimize the potential for leaks, spills or wash down water to enter the drainage system.	Project Sponsor & Construction Contractor	Prior to the start of construction and grading	City of Tulare	
Mitigation Measure TCR-1: If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any adverse effects	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	
Mitigation Measure TCR-2: The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner	Project Sponsor & Construction Contractor	Ongoing during construction.	City of Tulare	

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Responsible Party for Monitoring	Verification
has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.				
Mitigation Measure TCR-3: Upon coordination with the Tulare County Resource Management Agency, any archaeological artifacts recovered shall be donated to an appropriate Tribal custodian or a qualified scientific institution where they would be afforded long-term preservation. Documentation for the work shall be provided in accordance with applicable cultural resource laws and guidelines.	Project Sponsor, Construction Contractor, & Qualified Archaeologist	Ongoing during construction.	City of Tulare	

3.7 Supporting Information and Sources

1) City of Tulare General Plan
2) City of Tulare General Plan EIR
3) City of Tulare Climate Action Plan
4) City of Tulare Draft 2020 Urban Water Management Plan
5) City of Tulare Zoning Ordinance
6) City of Tulare Sewer System Master Plan
7) Improvement Standards of Tulare County
8) City of Tulare Municipal Service Review
9) Engineering Standards, City of Tulare
10) SJVAPCD Regulations and Guidelines
11) Sacramento Valley Land Use/Water Supply Analysis Handbook, 2007
12) Flood Insurance Rate Maps
13) California Air Resources Board's (CARB's) Air Quality and Land Use Handbook
14) 2008 (California Environmental Quality Act CEQA Guidelines
15) 2022 California Building Code
16) California Stormwater Pollution Prevention Program (SWPPP)
17) "Construction Noise Handbook." U.S. Department of Transportation/Federal Highway Administration.
18) Government Code Section 65962.5

19) California Environmental Protection Agency (CEPA)
20) Cypher, Brian, Et Al. Conservation of Endangered Tipton Kangaroo Rats (Dipodomys Nitratoides Nitratoides): Status Surveys, Habitat Suitability, And Conservation Strategies. California Department Of Fish And Wildlife, 2016.
21) California Energy Efficiency Strategic Plan: New Residential Zero Net Energy Action Plan 2015-2020, June 2015
22) California Energy Commission
23) San Joaquin Valley Air Pollution Control District Mitigation Measures (http://www.valleyair.org/transportation/Mitigation-Measures.pdf)
24) "Residential Water Use Trends and Implications for Conservation Policy." Legislative Analyst's Office/The California Legislature's Nonpartisan Fiscal and Policy Advisor. March 2017.
25) US Census (2023). QuickFacts Tulare city, California. https://www.census.gov/quickfacts/fact/table/tularecitycalifornia/PST045222

Section 4

List of Preparers

City of Tulare
411 East Kern Avenue
Tulare, CA 93274

SECTION 4
List of Preparers

Project Title: Lago Subdivision

List of Preparers

4-Creeks Inc.
- David Duda, AICP, GISP
- Ellie Krantz, Associate Planner

Persons and Agencies Consulted

The following individuals and agencies contributed to this Initial Study/Mitigated Negative Declaration:

City of Tulare
- Steven Sopp, Principal Planner

Peak & Associates, Inc.
- Melinda A. Peak, Senior Historian/Archaeologist

LSA Associates, Inc.
- Ambarish Mukherjee, P.E., AICP

Live Oak Associates, Inc.
- Austin Pearson, Vice President
- Colleen Del Vecchio, Project Manager/Staff Ecologist and Arborist

Appendix A

CalEEMod Report

Lago Subdivision - Tulare County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Lago Subdivision

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	131.00	Dwelling Unit	14.06	235,800.00	375

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acerage based on project Site Plan.

Construction Phase -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	42.53	14.06
tblWoodstoves	NumberCatalytic	14.06	0.00
tblWoodstoves	NumberNoncatalytic	14.06	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2024	0.2446	2.1959	2.4626	4.8000e-003	0.2913	0.0949	0.3862	0.1202	0.0888	0.2089	0.0000	419.8600	419.8600	0.0939	5.5200e-003	423.8543
2025	2.2841	0.6120	0.8459	1.5500e-003	0.0201	0.0255	0.0456	5.4300e-003	0.0239	0.0294	0.0000	135.5223	135.5223	0.0283	1.9000e-003	136.7957
Maximum	**2.2841**	**2.1959**	**2.4626**	**4.8000e-003**	**0.2913**	**0.0949**	**0.3862**	**0.1202**	**0.0888**	**0.2089**	**0.0000**	**419.8600**	**419.8600**	**0.0939**	**5.5200e-003**	**423.8543**

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					
2024	0.2446	2.1959	2.4626	4.8000e-003	0.2913	0.0949	0.3862	0.1202	0.0888	0.2089	0.0000	419.8596	419.8596	0.0939	5.5200e-003	423.8539
2025	2.2841	0.6120	0.8459	1.5500e-003	0.0201	0.0255	0.0456	5.4300e-003	0.0239	0.0294	0.0000	135.5222	135.5222	0.0283	1.9000e-003	136.7956
Maximum	**2.2841**	**2.1959**	**2.4626**	**4.8000e-003**	**0.2913**	**0.0949**	**0.3862**	**0.1202**	**0.0888**	**0.2089**	**0.0000**	**419.8596**	**419.8596**	**0.0939**	**5.5200e-003**	**423.8539**

Lago Subdivision - Tulare County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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**	**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	**1-1-2024**	**3-31-2024**	0.8732	0.8732
2	**4-1-2024**	**6-30-2024**	0.5136	0.5136
3	**7-1-2024**	**9-30-2024**	0.5193	0.5193
4	**10-1-2024**	**12-31-2024**	0.5205	0.5205
5	**1-1-2025**	**3-31-2025**	0.4736	0.4736
6	**4-1-2025**	**6-30-2025**	2.4171	2.4171
		Highest	2.4171	2.4171

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	1.1772	0.0602	0.9926	3.6000e-004		9.3500e-003	9.3500e-003		9.3500e-003	9.3500e-003	0.0000	58.3390	58.3390	2.6100e-003	1.0400e-003	58.7143
Energy	0.0170	0.1451	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	353.2915	353.2915	0.0189	4.9800e-003	355.2457
Mobile	0.5572	0.8994	5.1654	0.0122	1.2852	0.0103	1.2956	0.3439	9.7100e-003	0.3536	0.0000	1,125.5702	1,125.5702	0.0591	0.0598	1,144.8596
Waste						0.0000	0.0000		0.0000	0.0000	27.4038	0.0000	27.4038	1.6195	0.0000	67.8917
Water						0.0000	0.0000		0.0000	0.0000	2.7078	11.5305	14.2383	0.2791	6.6800e-003	23.2077
Total	**1.7513**	**1.1047**	**6.2197**	**0.0135**	**1.2852**	**0.0314**	**1.3167**	**0.3439**	**0.0308**	**0.3747**	**30.1116**	**1,548.7312**	**1,578.8428**	**1.9792**	**0.0725**	**1,649.9190**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	1.1772	0.0602	0.9926	3.6000e-004		9.3500e-003	9.3500e-003		9.3500e-003	9.3500e-003	0.0000	58.3390	58.3390	2.6100e-003	1.0400e-003	58.7143
Energy	0.0170	0.1451	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	353.2915	353.2915	0.0189	4.9800e-003	355.2457
Mobile	0.5346	0.8294	4.7752	0.0110	1.1599	9.4100e-003	1.1693	0.3103	8.8400e-003	0.3192	0.0000	1,019.0356	1,019.0356	0.0556	0.0551	1,036.8554
Waste						0.0000	0.0000		0.0000	0.0000	27.4038	0.0000	27.4038	1.6195	0.0000	67.8917
Water						0.0000	0.0000		0.0000	0.0000	2.7078	11.5305	14.2383	0.2791	6.6800e-003	23.2077
Total	**1.7287**	**1.0347**	**5.8296**	**0.0123**	**1.1599**	**0.0305**	**1.1904**	**0.3103**	**0.0299**	**0.3403**	**30.1116**	**1,442.1966**	**1,472.3082**	**1.9757**	**0.0678**	**1,541.9149**

	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	**1.29**	**6.34**	**6.27**	**8.61**	**9.75**	**2.96**	**9.59**	**9.75**	**2.83**	**9.18**	**0.00**	**6.88**	**6.75**	**0.18**	**6.40**	**6.55**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/23/2024	5	30	
3	Building Construction	Building Construction	2/24/2024	4/18/2025	5	300	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	4/19/2025	5/16/2025	5	20	
5	Architectural Coating	Architectural Coating	5/17/2025	6/13/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 0

Residential Indoor: 477,495; Residential Outdoor: 159,165; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	47.00	14.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2024

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6600e-003	5.6600e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6600e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2024

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	2.9000e-004	1.9000e-004	2.2500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5499	0.5499	2.0000e-005	2.0000e-005	0.5554
Total	**2.9000e-004**	**1.9000e-004**	**2.2500e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5499**	**0.5499**	**2.0000e-005**	**2.0000e-005**	**0.5554**

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e-004		6.1500e-003	6.1500e-003		5.6500e-003	5.6500e-003	0.0000	16.7285	16.7285	5.4100e-003	0.0000	16.8638
Total	**0.0133**	**0.1359**	**0.0917**	**1.9000e-004**	**0.0983**	**6.1500e-003**	**0.1044**	**0.0505**	**5.6500e-003**	**0.0562**	**0.0000**	**16.7285**	**16.7285**	**5.4100e-003**	**0.0000**	**16.8638**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2024

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	2.9000e-004	1.9000e-004	2.2500e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5499	0.5499	2.0000e-005	2.0000e-005	0.5554
Total	**2.9000e-004**	**1.9000e-004**	**2.2500e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5499**	**0.5499**	**2.0000e-005**	**2.0000e-005**	**0.5554**

3.3 Grading - 2024

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					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e-004		0.0200	0.0200		0.0184	0.0184	0.0000	81.7793	81.7793	0.0265	0.0000	82.4405
Total	**0.0483**	**0.4857**	**0.4158**	**9.3000e-004**	**0.1381**	**0.0200**	**0.1581**	**0.0548**	**0.0184**	**0.0732**	**0.0000**	**81.7793**	**81.7793**	**0.0265**	**0.0000**	**82.4405**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

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	9.6000e-004	6.5000e-004	7.4900e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8330	1.8330	6.0000e-005	6.0000e-005	1.8513
Total	**9.6000e-004**	**6.5000e-004**	**7.4900e-003**	**2.0000e-005**	**2.3900e-003**	**1.0000e-005**	**2.4000e-003**	**6.4000e-004**	**1.0000e-005**	**6.5000e-004**	**0.0000**	**1.8330**	**1.8330**	**6.0000e-005**	**6.0000e-005**	**1.8513**

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					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e-004		0.0200	0.0200		0.0184	0.0184	0.0000	81.7792	81.7792	0.0265	0.0000	82.4404
Total	**0.0483**	**0.4857**	**0.4158**	**9.3000e-004**	**0.1381**	**0.0200**	**0.1581**	**0.0548**	**0.0184**	**0.0732**	**0.0000**	**81.7792**	**81.7792**	**0.0265**	**0.0000**	**82.4404**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2024

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	9.6000e-004	6.5000e-004	7.4900e-003	2.0000e-005	2.3900e-003	1.0000e-005	2.4000e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.8330	1.8330	6.0000e-005	6.0000e-005	1.8513
Total	**9.6000e-004**	**6.5000e-004**	**7.4900e-003**	**2.0000e-005**	**2.3900e-003**	**1.0000e-005**	**2.4000e-003**	**6.4000e-004**	**1.0000e-005**	**6.5000e-004**	**0.0000**	**1.8330**	**1.8330**	**6.0000e-005**	**6.0000e-005**	**1.8513**

3.4 Building Construction - 2024

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	0.1633	1.4923	1.7945	2.9900e-003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3525	257.3525	0.0609	0.0000	258.8739
Total	**0.1633**	**1.4923**	**1.7945**	**2.9900e-003**		**0.0681**	**0.0681**		**0.0640**	**0.0640**	**0.0000**	**257.3525**	**257.3525**	**0.0609**	**0.0000**	**258.8739**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

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	1.7000e-003	0.0700	0.0206	3.1000e-004	0.0103	4.5000e-004	0.0107	2.9700e-003	4.3000e-004	3.4000e-003	0.0000	29.7412	29.7412	1.3000e-004	4.4700e-003	31.0760
Worker	0.0167	0.0112	0.1302	3.5000e-004	0.0416	2.0000e-004	0.0418	0.0111	1.9000e-004	0.0112	0.0000	31.8756	31.8756	1.0200e-003	9.8000e-004	32.1934
Total	**0.0184**	**0.0812**	**0.1508**	**6.6000e-004**	**0.0518**	**6.5000e-004**	**0.0525**	**0.0140**	**6.2000e-004**	**0.0146**	**0.0000**	**61.6168**	**61.6168**	**1.1500e-003**	**5.4500e-003**	**63.2695**

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	0.1633	1.4923	1.7945	2.9900e-003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3522	257.3522	0.0609	0.0000	258.8736
Total	**0.1633**	**1.4923**	**1.7945**	**2.9900e-003**		**0.0681**	**0.0681**		**0.0640**	**0.0640**	**0.0000**	**257.3522**	**257.3522**	**0.0609**	**0.0000**	**258.8736**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

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	1.7000e-003	0.0700	0.0206	3.1000e-004	0.0103	4.5000e-004	0.0107	2.9700e-003	4.3000e-004	3.4000e-003	0.0000	29.7412	29.7412	1.3000e-004	4.4700e-003	31.0760
Worker	0.0167	0.0112	0.1302	3.5000e-004	0.0416	2.0000e-004	0.0418	0.0111	1.9000e-004	0.0112	0.0000	31.8756	31.8756	1.0200e-003	9.8000e-004	32.1934
Total	**0.0184**	**0.0812**	**0.1508**	**6.6000e-004**	**0.0518**	**6.5000e-004**	**0.0525**	**0.0140**	**6.2000e-004**	**0.0146**	**0.0000**	**61.6168**	**61.6168**	**1.1500e-003**	**5.4500e-003**	**63.2695**

3.4 Building Construction - 2025

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	0.0533	0.4863	0.6273	1.0500e-003		0.0206	0.0206		0.0194	0.0194	0.0000	90.4486	90.4486	0.0213	0.0000	90.9801
Total	**0.0533**	**0.4863**	**0.6273**	**1.0500e-003**		**0.0206**	**0.0206**		**0.0194**	**0.0194**	**0.0000**	**90.4486**	**90.4486**	**0.0213**	**0.0000**	**90.9801**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

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	5.9000e-004	0.0245	7.1200e-003	1.1000e-004	3.6100e-003	1.6000e-004	3.7700e-003	1.0400e-003	1.5000e-004	1.1900e-003	0.0000	10.2650	10.2650	5.0000e-005	1.5400e-003	10.7250
Worker	5.4100e-003	3.4900e-003	0.0421	1.2000e-004	0.0146	7.0000e-005	0.0147	3.8800e-003	6.0000e-005	3.9400e-003	0.0000	10.8196	10.8196	3.2000e-004	3.2000e-004	10.9226
Total	**6.0000e-003**	**0.0280**	**0.0492**	**2.3000e-004**	**0.0182**	**2.3000e-004**	**0.0184**	**4.9200e-003**	**2.1000e-004**	**5.1300e-003**	**0.0000**	**21.0846**	**21.0846**	**3.7000e-004**	**1.8600e-003**	**21.6476**

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	0.0533	0.4863	0.6273	1.0500e-003		0.0206	0.0206		0.0194	0.0194	0.0000	90.4485	90.4485	0.0213	0.0000	90.9800
Total	**0.0533**	**0.4863**	**0.6273**	**1.0500e-003**		**0.0206**	**0.0206**		**0.0194**	**0.0194**	**0.0000**	**90.4485**	**90.4485**	**0.0213**	**0.0000**	**90.9800**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

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	5.9000e-004	0.0245	7.1200e-003	1.1000e-004	3.6100e-003	1.6000e-004	3.7700e-003	1.0400e-003	1.5000e-004	1.1900e-003	0.0000	10.2650	10.2650	5.0000e-005	1.5400e-003	10.7250
Worker	5.4100e-003	3.4900e-003	0.0421	1.2000e-004	0.0146	7.0000e-005	0.0147	3.8800e-003	6.0000e-005	3.9400e-003	0.0000	10.8196	10.8196	3.2000e-004	3.2000e-004	10.9226
Total	**6.0000e-003**	**0.0280**	**0.0492**	**2.3000e-004**	**0.0182**	**2.3000e-004**	**0.0184**	**4.9200e-003**	**2.1000e-004**	**5.1300e-003**	**0.0000**	**21.0846**	**21.0846**	**3.7000e-004**	**1.8600e-003**	**21.6476**

3.5 Paving - 2025

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	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1500e-003**	**0.0858**	**0.1458**	**2.3000e-004**		**4.1900e-003**	**4.1900e-003**		**3.8500e-003**	**3.8500e-003**	**0.0000**	**20.0193**	**20.0193**	**6.4700e-003**	**0.0000**	**20.1811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2025

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	4.4000e-004	2.9000e-004	3.4500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8854	0.8854	3.0000e-005	3.0000e-005	0.8938
Total	**4.4000e-004**	**2.9000e-004**	**3.4500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.8854**	**0.8854**	**3.0000e-005**	**3.0000e-005**	**0.8938**

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	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.1500e-003**	**0.0858**	**0.1458**	**2.3000e-004**		**4.1900e-003**	**4.1900e-003**		**3.8500e-003**	**3.8500e-003**	**0.0000**	**20.0192**	**20.0192**	**6.4700e-003**	**0.0000**	**20.1811**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2025

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	4.4000e-004	2.9000e-004	3.4500e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8854	0.8854	3.0000e-005	3.0000e-005	0.8938
Total	**4.4000e-004**	**2.9000e-004**	**3.4500e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.8854**	**0.8854**	**3.0000e-005**	**3.0000e-005**	**0.8938**

3.6 Architectural Coating - 2025

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	2.2132					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**2.2149**	**0.0115**	**0.0181**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

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	2.7000e-004	1.7000e-004	2.0700e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5312	0.5312	2.0000e-005	2.0000e-005	0.5363
Total	**2.7000e-004**	**1.7000e-004**	**2.0700e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5312**	**0.5312**	**2.0000e-005**	**2.0000e-005**	**0.5363**

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	2.2132					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0115	0.0181	3.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5567
Total	**2.2149**	**0.0115**	**0.0181**	**3.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5567**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2025

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	2.7000e-004	1.7000e-004	2.0700e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5312	0.5312	2.0000e-005	2.0000e-005	0.5363
Total	**2.7000e-004**	**1.7000e-004**	**2.0700e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5312**	**0.5312**	**2.0000e-005**	**2.0000e-005**	**0.5363**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Provide Traffic Calming Measures

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	0.5346	0.8294	4.7752	0.0110	1.1599	9.4100e-003	1.1693	0.3103	8.8400e-003	0.3192	0.0000	1,019.0356	1,019.0356	0.0556	0.0551	1,036.8554
Unmitigated	0.5572	0.8994	5.1654	0.0122	1.2852	0.0103	1.2956	0.3439	9.7100e-003	0.3536	0.0000	1,125.5702	1,125.5702	0.0591	0.0598	1,144.8596

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,236.64	1,249.74	1120.05	3,444,086	3,108,288
Total	1,236.64	1,249.74	1,120.05	3,444,086	3,108,288

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
Single Family Housing	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
Single Family Housing	0.525357	0.051382	0.167800	0.162287	0.028850	0.007480	0.012195	0.015949	0.000630	0.000469	0.022910	0.001396	0.003296

5.0 Energy Detail

Historical Energy Use: N

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.1 Mitigation Measures 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	185.2532	185.2532	0.0156	1.9000e-003	186.2089
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	185.2532	185.2532	0.0156	1.9000e-003	186.2089
NaturalGas Mitigated	0.0170	0.1451	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	168.0383	168.0383	3.2200e-003	3.0800e-003	169.0369
NaturalGas Unmitigated	0.0170	0.1451	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	168.0383	168.0383	3.2200e-003	3.0800e-003	169.0369

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					
Single Family Housing	3.14892e+006	0.0170	0.1451	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	168.0383	168.0383	3.2200e-003	3.0800e-003	169.0369
Total		**0.0170**	**0.1451**	**0.0617**	**9.3000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**	**0.0000**	**168.0383**	**168.0383**	**3.2200e-003**	**3.0800e-003**	**169.0369**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

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					
Single Family Housing	3.14892e+006	0.0170	0.1451	0.0617	9.3000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	168.0383	168.0383	3.2200e-003	3.0800e-003	169.0369
Total		**0.0170**	**0.1451**	**0.0617**	**9.3000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**	**0.0000**	**168.0383**	**168.0383**	**3.2200e-003**	**3.0800e-003**	**169.0369**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.04459e+006	185.2532	0.0156	1.9000e-003	186.2089
Total		**185.2532**	**0.0156**	**1.9000e-003**	**186.2089**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	1.04459e+006	185.2532	0.0156	1.9000e-003	186.2089
Total		**185.2532**	**0.0156**	**1.9000e-003**	**186.2089**

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	1.1772	0.0602	0.9926	3.6000e-004		9.3500e-003	9.3500e-003		9.3500e-003	9.3500e-003	0.0000	58.3390	58.3390	2.6100e-003	1.0400e-003	58.7143
Unmitigated	1.1772	0.0602	0.9926	3.6000e-004		9.3500e-003	9.3500e-003		9.3500e-003	9.3500e-003	0.0000	58.3390	58.3390	2.6100e-003	1.0400e-003	58.7143

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.2213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9209					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.7300e-003	0.0490	0.0209	3.1000e-004		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	56.7502	56.7502	1.0900e-003	1.0400e-003	57.0874
Landscaping	0.0292	0.0112	0.9718	5.0000e-005		5.3900e-003	5.3900e-003		5.3900e-003	5.3900e-003	0.0000	1.5889	1.5889	1.5200e-003	0.0000	1.6269
Total	**1.1772**	**0.0602**	**0.9926**	**3.6000e-004**		**9.3500e-003**	**9.3500e-003**		**9.3500e-003**	**9.3500e-003**	**0.0000**	**58.3390**	**58.3390**	**2.6100e-003**	**1.0400e-003**	**58.7143**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.2213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9209					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.7300e-003	0.0490	0.0209	3.1000e-004		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	56.7502	56.7502	1.0900e-003	1.0400e-003	57.0874
Landscaping	0.0292	0.0112	0.9718	5.0000e-005		5.3900e-003	5.3900e-003		5.3900e-003	5.3900e-003	0.0000	1.5889	1.5889	1.5200e-003	0.0000	1.6269
Total	**1.1772**	**0.0602**	**0.9926**	**3.6000e-004**		**9.3500e-003**	**9.3500e-003**		**9.3500e-003**	**9.3500e-003**	**0.0000**	**58.3390**	**58.3390**	**2.6100e-003**	**1.0400e-003**	**58.7143**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.2383	0.2791	6.6800e-003	23.2077
Unmitigated	14.2383	0.2791	6.6800e-003	23.2077

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	8.53518 / 5.38087	14.2383	0.2791	6.6800e-003	23.2077
Total		**14.2383**	**0.2791**	**6.6800e-003**	**23.2077**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	8.53518 / 5.38087	14.2383	0.2791	6.6800e-003	23.2077
Total		**14.2383**	**0.2791**	**6.6800e-003**	**23.2077**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.4038	1.6195	0.0000	67.8917
Unmitigated	27.4038	1.6195	0.0000	67.8917

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	135	27.4038	1.6195	0.0000	67.8917
Total		**27.4038**	**1.6195**	**0.0000**	**67.8917**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	135	27.4038	1.6195	0.0000	67.8917
Total		**27.4038**	**1.6195**	**0.0000**	**67.8917**

9.0 Operational Offroad

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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 Evaluation

LIVE OAK
ASSOCIATES, INC.

BIOLOGICAL EVALUATION
CARTMILL-MOONEY RESIDENTIAL SUBDIVISION PROJECT
TULARE, TULARE COUNTY, CA

By:

LIVE OAK ASSOCIATES, INC.

Austin Pearson, Vice President
Colleen Del Vecchio, Project Manager/Staff Ecologist and Arborist

For:

Molly Baumeister
4-Creeks, Inc.
324 South Santa Fe Street, Suite A
Visalia, CA 93292

May 9, 2023 Project No. 2735-01

OAKHURST
P.O. Box 2697 | 39930 Sierra Way #B
Oakhurst, CA 93644
P: (559) 642-4880 | F: (559) 642-4883

SAN JOSE
6840 Via Del Oro, Suite 220
San Jose, CA 95119
(408) 224-8300

TRUCKEE
P.O. Box 8810
Truckee, CA 96161
(530) 214-8947

SOUTH LAKE TAHOE
P.O. Box 7314
South Lake Tahoe, CA 96158
(408) 281-5885

WWW.LOAINC.COM

EXECUTIVE SUMMARY

San Joaquin Valley Homes proposes to construct a low density residential subdivision on an existing vacant lot previously used for agriculture. The project site is 14.06 acres and is located in the northeast corner of the city of Tulare in Tulare County.

Live Oak Associates, Inc. conducted an investigation of the biotic resources of the project site and prepared a technical report in support of the California Environmental Quality Act. This document provides a general description of the project site's regional setting and identifies in more detail the existing conditions of the project site itself, describing its characteristics, features, and resources. Specifically, this document identifies: (1) the biotic habitats of the site, including those that may be used by special status plant and animal species; (2) known and/or possible waters of the United States that may be present; and (3) other significant biotic resources that may be affected by site development.

The project site is located in California's Central Valley. Two land uses were identified on the project site during the site survey: ruderal grassland and ruderal/developed. The site consisted of a vacant field with a dirt road along the west and south side of the parcel.

Proposed site development will result in impact to some biotic resources of the site. Potentially significant effects include: (1) disturbance of active raptor and other migratory bird nests, specifically including the loggerhead shrike; and (2) potential construction related injury or mortality of Swainson's hawks.

The project can potentially avoid all significant effects to biotic resources of the site. This can be accomplished by implementing the following measures: (1) timing the project to avoid the general avian nesting season; (2) conduct pre-construction surveys for loggerhead shrike, active raptor, and other migratory bird nests during the nesting season (including protocol surveys for Swainson's hawk); and (3) avoid such nests during the nesting season with appropriate buffers for each species, as determined by a qualified biologist.

TABLE OF CONTENTS

1.0 INTRODUCTION

The following technical report, prepared by Live Oak Associates, Inc. (LOA) in support of California Environmental Quality Act (CEQA) review, describes the biotic resources of 14.06 acres of land ("area of potential effect" or APE) proposed for a residential development ("project") and evaluates potential impacts to those resources that could result from the project.

The project APE (also referred to as "project site" or "site") encompasses Assessor's Parcel Numbers (APN) 149-038-032 and 149-039-022, and is located at the intersection of East Cartmill Avenue and North Mooney Boulevard, at the northeast limits of the City of Tulare, Tulare County, California (Figure 1). The site may be found entirely on the *Tulare* U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 24, Township 18 South, Range 23 East (Figure 2).

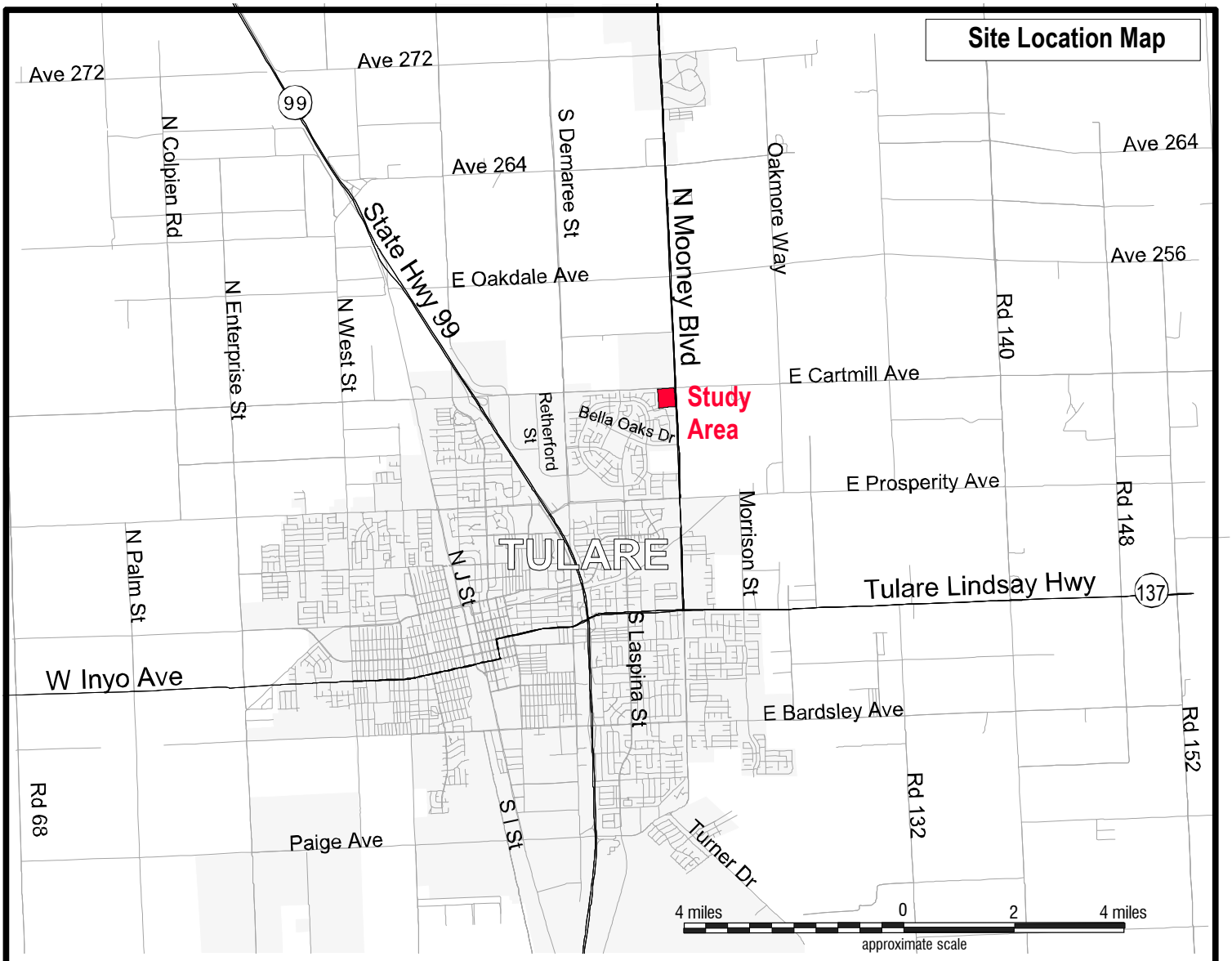
1.1 PROJECT DESCRIPTION

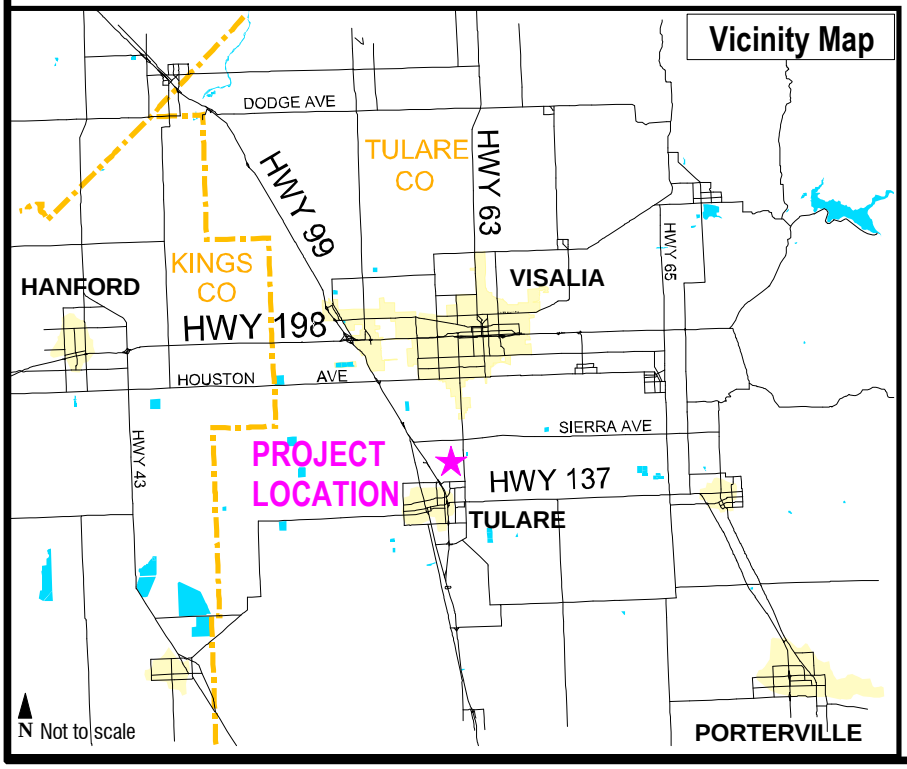
The project is an effort by San Joaquin Valley Homes to construct a low density residential subdivision on an existing vacant lot. This subdivision will consist of 130 units over 14.06 acres (see Appendix A). Units will be constructed on 3 different lot sizes. The project will also include infrastructure associated with a housing subdivision (i.e. utilities and roads).

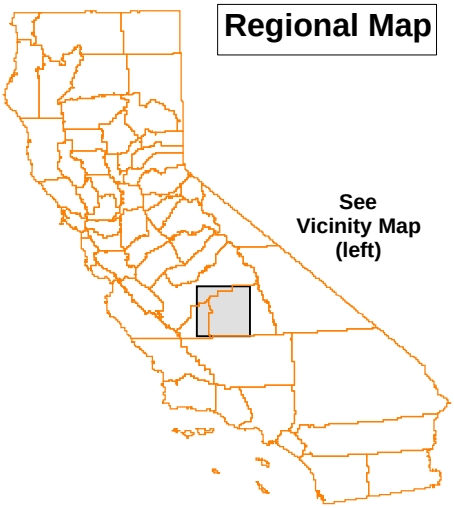
1.2 REPORT OBJECTIVES

Housing subdivision projects such as those proposed by the project partners may damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to review under CEQA and/or subject to local policies and ordinances. This report addresses issues related to: 1) sensitive biotic resources occurring within the project site; 2) the federal, state, and local laws regulating such resources; and 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. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources.





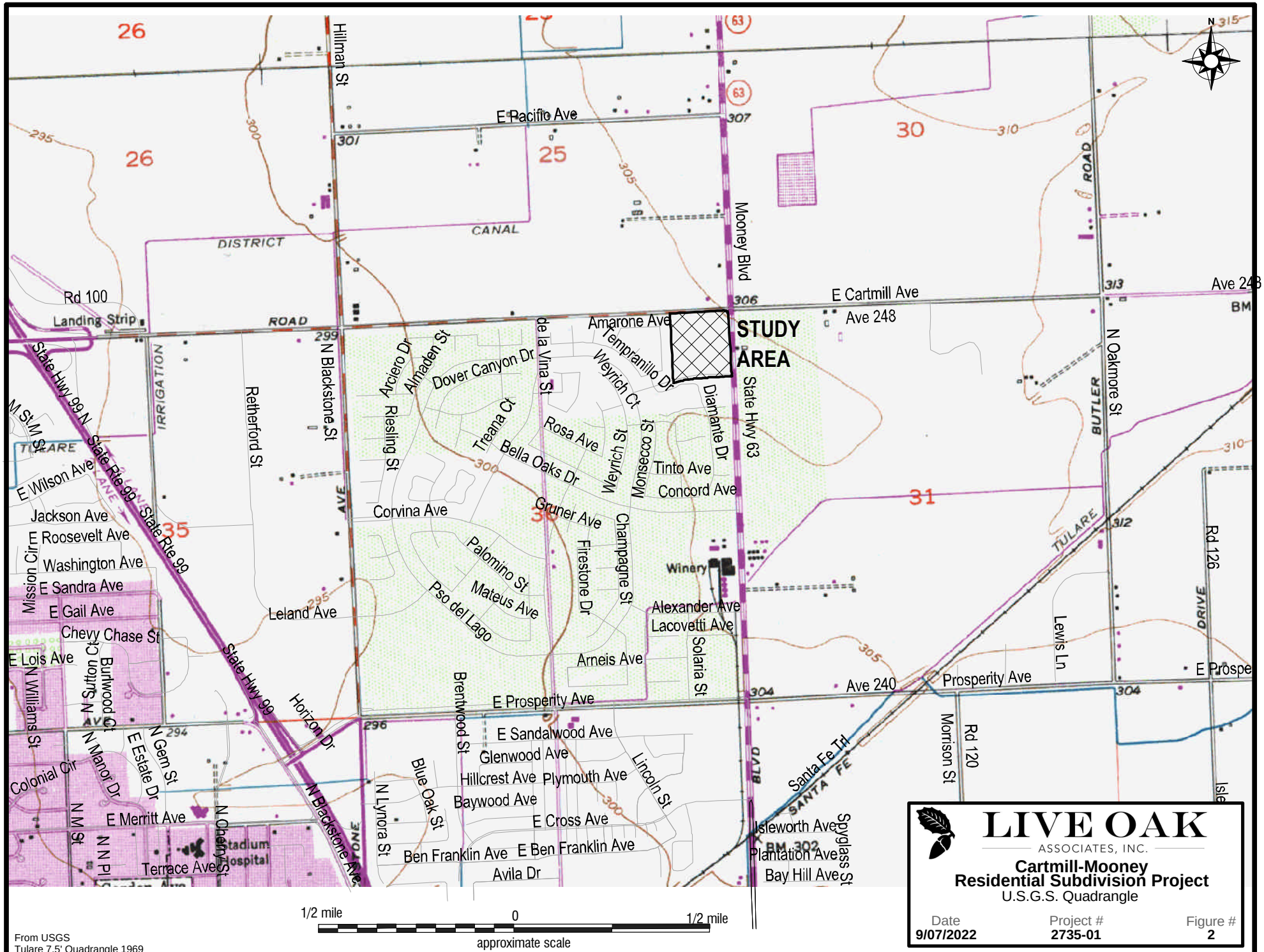


LIVE OAK
ASSOCIATES, INC.

Cartmill-Mooney Residential Subdivision Project

Vicinity Map

Date	Project #	Figure #
9/07/2022	2735-01	1



1/2 mile 0 1/2 mile

approximate scale

From USGS
Tulare 7.5' Quadrangle 1969

LIVE OAK
ASSOCIATES, INC.

Cartmill-Mooney
Residential Subdivision Project
U.S.G.S. Quadrangle

Date	Project #	Figure #
9/07/2022	**2735-01**	**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.

- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development.

- Identify and discuss project impacts to biological resources that may occur within the project site within the context of CEQA guidelines and relevant state and federal laws.

- Identify avoidance and mitigation measures that would reduce the magnitude of project impacts in a manner consistent with the requirements of CEQA and that are generally consistent with recommendations of the resource agencies regulating affected biological resources.

1.3 STUDY METHODOLOGY

Prior to any field investigations, a literature review of the project site and region was conducted. Sources of information used in preparation included: (1) the *California Natural Diversity Database* (CDFW 2022), (2) the *Online Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2022), and (3) manuals, reports, and references related to plants and animals of the San Joaquin Valley region.

A reconnaissance-level field survey of the project site was conducted on August 29, 2022, by LOA ecologist Colleen Del Vecchio. The survey was conducted at a reconnaissance level and consisted of walking through the APE while identifying its principal land uses and the constituent plants and animals of each land use. The field survey conducted for this study was sufficient to assess the significance of possible biological impacts associated with the development plans for the project site. LOA then conducted an analysis of potential project impacts based on the known and potential biotic resources of the project site discussed in Section 2.0.

LOA's field investigation did not include an aquatic resources delineation or focused surveys for special status species. The field survey was sufficient to generally describe those features of the project site that could be subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and/or the Regional Water Quality Control Board (RWQCB), and to assess the significance of possible biological impacts associated with development of the project site.

2.0 EXISTING CONDITIONS

2.1 REGIONAL SETTING

The project site is located in the San Joaquin Valley, a region that has, for decades, experienced intensive agricultural disturbances and more recently intensive urban development. The site is surrounded by residential housing to the north, west, and south, with agriculture to the east. Current agricultural endeavors in the region include orchards, row crops, pasture, and dairies. The site is located just inside the current urban development limits in Tulare.

Like most of California, the San Joaquin Valley has a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures commonly exceed 100 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely rise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the project site is about 11 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain. Stormwater readily infiltrates the soils of and surrounding the project site.

Native plant and animal species once abundant in the region have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

2.2 PHYSICAL CONDITIONS OF PROJECT SITE

The overall topography of the project site is flat with elevations between 306 and 308 feet National Geodetic Vertical Datum (NGVD) across the site (west to east). One soil-mapping unit was identified within the site: Nord fine sandy loam, 0 to 2 percent slopes (NRCS 2021). This soil type is classified as well drained, with no hydric soil rating, meaning it does not have the propensity to pond water in depressions or form vernal pools. Furthermore, the soil within the project APE and surrounding lands have been subjected to decades of soil-disturbing activities associated with agriculture and urban development, so that their native soil characteristics may no longer be present.

2.3 LAND USES AND/OR BIOTIC HABITATS

Two biotic habitats and/or land uses were identified on the project site during the site surveys: Ruderal grassland and ruderal/developed (Figure 3). Analysis of historical aerial photographs shows this site was used for agriculture from 1946 to 2005 when the adjacent housing developments to the west and south began construction. A comprehensive list of the vascular plants observed on the project site is provided in Appendix B. A list of the terrestrial vertebrates observed and those that likely use habitats on and adjacent to the project site is provided in Appendix C. Photos taken during the site visit are presented in Appendix D.

2.3.1 Ruderal Grassland

The majority of the project site is best described as a ruderal grassland. Since 2005, when the site was abandoned and stopped being used for agriculture, the vegetation converted to a ruderal grassland dominated by non-native species. Based on aerial imagery, this site appears to have been regularly mowed since the land use changed, and was mowed at the time of the survey. Moreover, in 2007, approximately 1/3 of the field on the west side was graded, experiencing heavy soil disturbance from construction of the residential housing to the west. Then, again in 2021, aerial imagery shows 1/4 of the field was graded on the west side. This site has historically experienced heavy use and disturbance.

In the ruderal grassland, the dominant grass species is non-native barley (*Hordeum* sp.). The grass was mowed at the time of the survey and it was not possible to identify it to species level. Other plant species observed include Russian thistle (*Salsola tragus*), Canada horseweed (*Erigeron canadensis*), flat-leaved horseweed (*Erigeron bonariensis*), saltscale (*Atriplex serenana*), short-podded mustard (*Hirschfeldia incana*), and puncture vine (*Tribulus terrestris*).

Amphibian use of this habitat is expected to be minimal due to the absence of breeding habitat on and adjacent to the site, but due to the irrigated landscapes in the adjacent residential developments, it may be possible to find western toads (*Anaxyrus boreas*) or Pacific treefrogs

LEGEND

- Ruderal Grassland
- Ruderal / Disturbed

100' 0 50' 100 feet

approximate scale

Aerial Photograph courtesy of Google Earth

LIVE OAK ASSOCIATES, INC.

Cartmill-Mooney Residential Subdivision Project

Biotic Habitats / Land Uses

Date	Project #	Figure #
9/07/2022	**2735-01**	**3**

(*Pseudacris sierra*) utilizing the field. Reptile species common to grasslands of the San Joaquin Valley are likely to occur in the site's grassland habitat. Lizard species may include San Joaquin fence lizard (*Sceloporus occidentalis biseriatus*), western side-blotched lizard (*Uta stansburiana elegans*), southern alligator lizard (*Elgaria multicarinata multicarinata*), and California whiptail (*Aspidoscelis tigris munda*). Snake species may include California kingsnake (*Lampropeltis californiae*), Pacific gophersnake (*Pituophis catenifer catenifer*), and northern Pacific rattlesnake (*Crotalus oreganus oreganus*). None of these species were observed at the time of the survey, but would be reasonably attracted to this habitat based on the prey species and habitat observed during the field survey.

The grassland provides foraging and nesting habitat for many avian species. Mourning doves (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), lesser goldfinch (*Carduelis psaltria*), and California scrub jay (*Aphelocoma californica*) were observed foraging, soaring, and/or perching in this habitat at the time of the survey. Other species that may be reasonably expected to utilize grassland include western meadowlark (*Sturnella neglecta*), California horned lark (*Eremophila alpestris actia*), white-crowned sparrow (*Zonotrichia leucophrys*), and loggerhead shrike (*Lanius ludovicianus*). Birds of prey anticipated to hunt in the grassland include red-tailed hawks (*Buteo jamaicensis*), American kestrels (*Falco sparverius*), and Swainson's hawks (*Buteo swainsoni*). Great horned owls (*Bubo virginianus*) and barn owls (*Tyto alba*) also have a potential to forage in the grassland.

Several mammal species are expected to occur in this grassland habitat. Those species observed or positively identified by their sign (i.e. burrows, scats, and tracks) included the California ground squirrel (*Otospermophilus beecheyi*) and raccoon (*Procyon lotor*). Other small mammal burrows were observed and are anticipated to be use by the common Heerman's kangaroo rat (*Dipodomys heermanni*), Botta's pocket gopher (*Thomomys bottae*), and/or a mouse species. In turn, they may provide foraging opportunities for predators such as the introduced red fox (*Vulpes vulpes*), domestic or feral cats/dogs, and coyotes (*Canis latrans*).

2.3.2 Ruderal/Developed

Surrounding the ruderal grassland is a graded dirt road that is used by vehicles for the entire perimeter. This area is generally bare dirt, with ruderal plant species growing along the fence line of the adjacent housing developments. Plant species include Bermuda grass (*Cynodon dactylon*), American black nightshade (*Solanum americanum*), sunflower (*Helianthus* sp.), and prickly lettuce (*Lactuca serriola*). Additionally, some of the trees from the neighboring developments have grown through the fence or are leaning onto the project site. Tree species observed include ginkgo (*Ginkgo biloba*), Mexican fan palm (*Washingtonia robusta*), Siberian elm (*Ulnus pumila*), and Chinese pistache (*Pistacia chinensis*). All wildlife utilizing this ruderal/developed area are anticipated to be the same as the adjacent field.

Historically this area on the western side of the project site has been highly disturbed and based on aerial imagery, experienced grading in 2007 when the housing development to the west was constructed. Furthermore, aerial imagery shows this area was graded again in 2021.

2.4 SPECIAL-STATUS PLANTS AND ANIMALS

Many species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.0, state and federal laws have provided CDFW and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as "threatened" or "endangered" under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as "species of special concern" by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists (i.e., California Rare Plant Ranks, or CRPR) of native plants considered rare, threatened, or endangered (CNPS 2022). Collectively, these plants and animals are referred to as "special status species."

Special-status plants and wildlife of the project vicinity and their potential for occurrence on the project site, have been identified in Table 1. The list of species for Table 1 was obtained using the *California Natural Diversity Database* (CDFW 2022) and entailed a records search for the nine 7.5-minute quadrangles containing and surrounding the project site (*Goshen, Tulare, Exeter, Paige, Visalia, Cairns Corner, Tipton, Taylor Weir,* and *Woodville*). Other sources of information for this table included *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2022), iNaturalist (iNaturalist 2022), eBird (eBird 2022), and California Herps (Nafis 2022). Note that only federally and state listed plants listed as 1A, 1B, 2A, 2B, or 3 with threat ranks 0.1, 0.2, and 0.3 by the California Rare Plant Ranking (CRPR) were included in this analysis. Other special status plants with a CRPR 4 may be considered for CEQA evaluation if they meet the criteria for rare or locally significant, addressed in the *2022 CEQA Statute & Guidelines* Section 15380 and Section 15125(c) (AEP 2022).

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

PLANTS (adapted from CDFW 2022 and CNPS 2022)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat Description	Occurrence in the Project Site*
California jewelflower (*Caulanthus californicus*)	FE, CE, CRPR 1B.1	Occurs in chenopod scrub, pinyon and juniper woodland, sandy valley and foothill grassland at elevations between 250 and 3,300 feet. Blooms February- May.	**Absent.** Long-term agricultural use of the site, combined with past grading and ongoing vegetation management, has rendered it unsuitable for this species. Moreover, the nearest record in City of Tulare states the population is extirpated.
San Joaquin adobe sunburst (*Pseudobahia peirsonii*)	FT, CE, CRPR 1B.1	Occurs in grasslands of the Sierra Nevada foothills in heavy clay soils of the Porterville and Centerville series at elevations between 300 and 2,625 feet. Blooms March-April.	**Absent.** The site does not support heavy clay soils, and the nearest record of this species in the City of Tulare states the population is extirpated.

CNPS Listed Species

Species	Status	Habitat Description	Occurrence in the Project Site*
Heartscale (*Atriplex cordulata* var. *cordulata*)	CRPR 1B.2	Occurs on saline or alkaline soils in chenopod scrub, meadows, seeps, and grasslands at elevations below 1,230 feet. Blooms April- October.	**Absent.** Required soil conditions and plant associations are absent from the site and surrounding lands.
Earlimart orache (*Atriplex cordulata* var. *erecticaulis*)	CRPR 1B.2	Occurs in valley and foothill grasslands at elevations between 130 and 330 feet. Blooms August-September.	**Absent.** Long-term agricultural use of the site, combined with past grading and ongoing vegetation management, has rendered the site unsuitable for this species.
Brittlescale (*Atriplex depressa*)	CRPR 1B.2	Occurs in chenopod scrub, valley and foothill grassland, and wetland habitats at elevations below 1,050 feet. Blooms April- October.	**Absent.** Long-term agricultural use of the site, combined with past grading and ongoing vegetation management, has rendered it unsuitable for this species.
Lesser saltscale (*Atriplex minuscula*)	CRPR 1B.1	Occurs in cismontane woodland and valley and foothill grasslands of the San Joaquin Valley; alkaline/sandy soils at elevations between 50 and 660 feet. Blooms May- October.	**Absent.** Long-term agricultural use of the site, combined with past grading and ongoing vegetation management, has rendered it unsuitable for this species.
Subtle orache (*Atriplex subtilis*)	CRPR 1B.2	Occurs in valley and foothill grasslands of the San Joaquin Valley at elevations between 130 and 330 feet. Blooms August-October.	**Absent.** Long-term agricultural use of the site, combined with past grading and ongoing vegetation management, has rendered it unsuitable for this species.
Recurved larkspur (*Delphinium recurvatum*)	CRPR 1B.2	Occurs in cismontane woodland and valley and foothill grasslands with alkaline soils at elevations below 2,500 feet. Blooms March-June.	**Absent.** Required soil conditions (alkaline) are absent from the site and surrounding lands.
Spiny-sepaled button celery (*Eryngium spinosepalum*)	CRPR 1B.2	Vernal pools and wetland or riparian areas, or some disturbed sites such as swales and roadside ditches, within valley and foothill grasslands, at elevations between 260 and 3,200 feet. Blooms April-July.	**Absent.** Suitable wetland habitat is absent from the site and surrounding lands.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

PLANTS (cont'd)

CNPS Listed Species

Species	Status	Habitat Description	Occurrence in the Project Site*
California satintail (*Imperata brevifolia*)	CRPR 2B.1	This perennial grass is found in scrubland and chaparral habitats where water is available at elevations less than 1,640 feet. Blooms September- May.	**Absent.** Suitable scrubland and chaparral habitats are absent from the site and surrounding lands.
Alkali-sink goldfields (*Lasthenia chrysantha*)	CRPR 1B.1	Occurs in vernal pools or wet saline flats of valley grassland, alkali sink, or wetland-riparian habitats at elevations below 330 feet. Blooms February- April.	**Absent.** Suitable wetland habitat is absent from the site and surrounding lands. Moreover, the nearest record of this species in the City of Tulare states the population is possibly extirpated.
California alkali-grass (*Puccinellia simplex*)	CRPR 1B.2	Occurs in saline flats and mineral springs in the Central Valley, San Francisco Bay area, and western Mojave Desert at elevations less than 2,955 feet. Blooms March-May.	**Absent.** The site does not support spring or saline features required by this plant species.

ANIMALS (adapted from CDFW 2022)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat Description	Occurrence in the Project Site*
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Occurs in vernal pools, clear to tea-colored water in grass or mud-bottomed swales, and basalt depression pools.	**Absent.** Suitable habitat is absent because the project site lacks seasonal pools to support this species.
Crotch bumble bee (*Bombus crotchii*)	CCE	This bee is found in Coastal California east to the Sierra-Cascade crest and south into Mexico, where it occupies open grassland and scrub habitats. Its food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.	**Absent.** Suitable habitat is/was absent and none of this species' food genera were present on site at the time of LOA's survey. It is anticipated that these plant species are likely not supported in the non-native grassland or developed/ruderal habitats.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature blue elderberry shrubs (*Sambucus mexicana*) of California's Central Valley and Sierra Foothills. Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	**Absent.** The USFWS has determined that the range of this species no longer includes Tulare County (USFWS 2019a).
Blunt-nosed leopard lizard (*Gambelia sila*)	FE, CE, CFP	A resident of sparsely vegetated alkali and desert scrub habitats, in areas of low topographic relief. Seeks cover in mammal burrows, under shrubs or structures such as fence posts; they do not excavate their own burrows.	**Absent.** The project site and City of Tulare are within this species' historic range (USFWS 2010). However, the site is situated in an area dominated by urban and agricultural uses, within which the blunt-nosed leopard lizard has not persisted.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (cont'd)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat Description	Occurrence in the Project Site*
Tricolored blackbird (*Agelaius tricolor*)	CT	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in many open habitats.	**Unlikely.** Suitable habitat is absent since the project site and vicinity lacks wetlands and associated vegetation for breeding. This species is known to forage in fields, and has limited potential to be on site as a transient.
Swainson's hawk (*Buteo swainsonii*)	CT	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	**Likely.** Suitable foraging habitat is present at the project site. No breeding habitat is present since the site lacks any trees. In the vicinity, an active Swainson's hawk nest was observed approximately 0.3 miles west by LOA in May 2022. See expanded discussion.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FT, CE	Occurs in valley foothill and desert riparian habitats in scattered locations in California. Requires extensive gallery riparian forests for nesting. Breeds in California, then migrates to South America.	**Absent.** Suitable habitat is absent from the project site since the site is lacking riparian forests with watercourses that support breeding. Moreover, this species is extirpated from most of its historic range, with known breeding populations limited to the South Fork Kern River and Sacramento River.
Tipton kangaroo rat (*Dipodomys nitratoides nitratoides)*	FE, CE	Habitats include saltbrush scrub and sink scrub communities in the Tulare Lake Basin of the southern San Joaquin Valley. Needs soft friable soils which escape seasonal flooding. Digs burrows in elevated soil mounds at bases of shrubs.	**Absent.** The project site and City of Tulare are within this species' historic range (USFWS 2019b); however, recent observations for this species are only in the southwestern portion of the San Joaquin Valley (USFWS 2019b).
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, CT	Found in desert alkali scrub and annual grasslands; may forage in adjacent agricultural habitats. Use underground dens for thermoregulation, cover, and reproduction. Dens are either self-dug or modified rodent burrows.	**Absent.** All CNDDB records within 10 miles of the site are historic, from 1973 to 1975, and one from 1992. Since this time, many of the suitable habitat locations have been converted to agriculture or development making it difficult for this species to travel to the site from suitable habitat. See expanded discussion.

State Species of Special Concern

Species	Status	Habitat Description	Occurrence in the Project Site*
Western spadefoot (*Spea hammondii*)	CSC	Ranges throughout the Central Valley and adjacent foothills. Occurs primarily in grassland situations. Reproduction occurs in shallow, temporary ponds.	**Absent.** Suitable habitat is absent since the entire site has been disturbed since 1946 for agriculture, and more recently from the adjacent housing developments. Moreover, the project site and vicinity are lacking breeding habitat.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (cont'd)

State Species of Special Concern

Species	Status	Habitat Description	Occurrence in the Project Site*
Northern California legless lizard (*Anniella pulchra*)	CSC	Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	**Absent.** Suitable habitat is absent since the entire site has been disturbed since 1946 for agriculture, and more recently from the adjacent housing developments. Moreover, the site is lacking loose substrate and leaf litter preferred by this species.
Western pond turtle (*Emys marmorata*)	CSC	Associated with permanent bodies of water. Requires partially submerged rocks or logs for basking sites. Eggs are deposited in a variety of soil types near water's edge. Seasonal hibernation/ estivation includes use of upland habitat from water sources including ground squirrel burrows and loose substrate for burying themselves.	**Absent.** Suitable habitat is absent since the project site and vicinity are lacking bodies of water to support this species.
Burrowing owl (*Athene cunicularia*)	CSC	Frequents open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon burrowing mammals, most notably the California ground squirrel, for nest burrows.	**Unlikely.** The site is conceivably suitable for foraging by this species, and the numerous ground squirrel burrow complexes throughout the site's ruderal grassland could support nesting or roosting. However, the surrounding urban environment and busy adjoining roadways likely deter individuals from using this small field. The nearest CNDDB occurrence is 12 miles east of Tulare (CDFW 2022).
Mountain plover (*Charadrius montanus*)	CSC	Habitats include short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents.	**Absent.** This species spends the majority of their time on tilled fields in the Central Valley, but prefers heavily grazed annual grasslands or burned fields (Knopf and Rupert 1995).
Loggerhead shrike (*Lanius ludovicianus*)	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. Can often be found in cropland.	**Likely.** Suitable foraging habitat and marginal breeding habitat are present. This species is known to nest in Russian thistle (*Salsola tragus*) when taller vegetation is limited (Yousef, R., 2020). Numerous eBird records exist for this species in the City of Tulare area.
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 many also use tree cavities, caves, bridges, and buildings.	**Possible.** Foraging habitat is present at the project site and this species is documented within 10 miles of the project site. No roosting habitat is present on site; however, the nearby residential housing, commercial buildings, and/or bridges over the nearby canals could provide suitable roosting habitat.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (cont'd)

State Species of Special Concern

Species	Status	Habitat Description	Occurrence in the Project Site*
Western mastiff bat (*Eumops perotis californicus*)	CSC	Forages over dry washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas. Generally, roosts under exfoliating rock slabs, sometimes in large boulders and high buildings. Needs vertical faces to drop off to take flight.	**Possible.** Foraging habitat is present at the project site since this species is known to feed over agricultural areas and is documented within 5 miles of the project site. No roosting habitat is present due to the lack of high structures and cliffs.
American badger (*Taxidea taxus*)	CSC	Uncommon resident statewide; most abundant in drier open stages of most shrub, forest, and herbaceous habitats. Needs sufficient food, friable soils, uncultivated ground. Preys on burrowing rodents. Digs its own burrows.	**Absent.** Suitable habitat is absent from the project site since the site location is urban and regularly disturbed by humans.

OCCURRENCE TERMINOLOGY

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 because habitat requirements not met.

STATUS CODES

FE Federally Endangered
FT Federally Threatened

CE California Endangered
CCE California Candidate Endangered
CT California Threatened
CFP California Fully Protected
CSC California Species of Special Concern

CRPR California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and elsewhere
2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere

0.1 Seriously Threatened in California
0.2 Moderately Threatened in California

2.5 ENDANGERED, THREATENED, OR SPECIAL STATUS ANIMAL SPECIES MERITING FURTHER DISCUSSION

2.5.1 Expanded Discussion of the Swainson's Hawk

Ecology of the Species. Swainson's hawks (*Buteo swainsoni*; California Threatened) are large, broad-winged hawks. As is typical with most birds of prey, they can be monogamous and will aggressively defend their breeding ground year after year. They are breeding season migrants to

most of California, with some small non-migratory populations in the California Delta region (Bechard et al. 2020). In central California they typically arrive at their nesting sites in March, initiating their pair formation and bonding. Nest building typically begins within 7-15 days of arriving at their breeding ground and lasts about 1 week. Nest sites are selected by the male and can favor agricultural areas in central California. Swainson's hawks typically nest in a single tree, bush, grove, or row of trees at any height along a riparian corridor, isolated oak woodland, lone trees, roadside trees, or farmyard trees (Bechard et al. 2020). Eggs are typically laid in April or May, and the young hatch in May or June. Juveniles associate with their parents for 30 days on average during the post-fledgling period, remaining in the parent's territory and being largely dependent on them for food (Bechard et al. 2020). By the end of October, adults and juveniles have separated and most birds have left for wintering grounds in South America. Some hawks will stay in California into November.

Swainson's hawks forage in large, open fields with abundant prey, including grasslands or lightly grazed pastures, irrigated alfalfa fields, and row, grain and hay crop agricultural particularly before and after harvest when prey is both numerous and conspicuous (Bechard et al. 2020). In the Central Valley, California voles (*Microtus californicus*) account for about 45% of non-insect prey taken by the Swainson's hawk, followed by ground birds (32%) and pocket gophers, deer mice, and other small mammals (20%) (Estep 1989). Insects comprise a large proportion of individual prey items, but a negligible proportion of total prey biomass. The designation of the Swainson's hawk as Threatened under the California Endangered Species Act is based on population decline due in part to loss of nesting and foraging habitat to urban development, pesticides, shooting, and disturbance of nest sites (CDFG 1994a).

Potential to Occur Onsite. Swainson's hawks are known to nest in the project vicinity. It is possible for Swainson's hawk to forage on the project site; however, the project site lacks nesting habitat. The near vicinity of the project has suitable habitat for nesting. An active Swainson's hawk nest was detected by an LOA ecologist in May of 2022 approximately 0.25 miles west of the project site. The CNDDB lists four nesting occurrences of this species within 4 to 8 miles south of the project site. Additionally, the CNDDB lists three unprocessed nesting occurrences

within 3 to 5 miles of the project site. Lastly, eBird documents Swainson's hawk observations within 1 mile of the project site during the breeding season.

Because Swainson's hawks are known to nest in the region and have many local observations documented, it is likely for individuals of this species to forage on the project site, with no potential to nest on the project site. It is known that Swainson's hawk nest in the project vicinity, within 0.5 miles. At the time of the field survey, there were corn fields to the east and a small vacant lot to the north that potentially supports sufficient prey for this species.

2.5.2 Expanded Discussion of San Joaquin Kit Fox

Ecology of the species. By the time the San Joaquin kit fox (*Vulpes macrotis mutica*; SJKF) was listed as federally endangered in 1967 and California threatened in 1971, it had been extirpated from much of its historic range. The smallest North American member of the dog family (Canidae), the kit fox historically occupied the dry plains of the San Joaquin Valley, from San Joaquin County to southern Kern County (Grinnell et al. 1937). Local surveys, research projects, and incidental sightings indicate that kit foxes currently occupy available habitat on the Central Valley floor and in the surrounding foothills. Core SJKF populations are located in the natural lands of western Kern County, the Carrizo Plain Natural Area in San Luis Obispo County, and the Ciervo-Panoche Natural Area in western Fresno and eastern San Benito Counties (USFWS 1998).

The SJKF prefers habitats of open or low vegetation with loose soils. In the southern and central portion of the Central Valley, kit fox is found in valley sink scrub, valley saltbrush scrub, upper Sonoran subshrub scrub, and annual grassland (USFWS 1998). Kit fox may also be found in grazed grasslands, urban settings, and in areas adjacent to tilled or fallow fields (USFWS 1998). They require underground dens to raise pups, regulate body temperature, and avoid predators and other adverse environmental conditions (Golightly and Ohmart 1984). In the central portion of their range, they usually occupy burrows excavated by small mammals such as California ground squirrels. The SJKF is primarily carnivorous, feeding on black-tailed hares, desert cottontails, rodents, insects, reptiles, and some birds.

Potential to occur onsite. The project area consists largely of ruderal grassland habitat which could provide habitat for this species. However, the project site is only 14.06 acres and is surrounded by residential housing to the north, west, and south; a four-lane road to the north and east; and active agriculture to the east. In effect, the site represents a small island of potential SJKF habitat in a matrix of incompatible uses, and is exposed to ambient disturbance from these uses on an ongoing basis; these factors decrease its potential to be used by SJKF.

Moreover, for the SJKF to occur within the project area, it must first have some potential to occur in the project vicinity. Although the SJKF has been historically documented in the vicinity, modern kit fox occurrences are scarce. The most recent CNDDB occurrence of this species within 10 miles of the project area was recorded in 1992 approximately 1 mile south of the site and does not have an exact location (Occurrence No. 1120). This sighting was for a non-specific area in the vicinity of Tulare. The record describes "a kit fox population was noted as being present in the vicinity of Tulare by Gail Presley (Department of Fish and Game) (CDFW 2022)." The remaining 13 CNDDB occurrences within the 10-mile vicinity were recorded between 1973 to 1975. As discussed, the project is surrounded by expanding urban development to the north, west, and south, with agriculture/commercial facilities to the east, most of which are unsuitable for this species. The general unsuitability of the project area and surrounding lands, and the lack of recent detections suggests that kit fox are absent from project vicinity and within the project area itself.

2.6 JURISDICTIONAL WATERS

Jurisdictional waters are those rivers, creeks, drainages, lakes, ponds, reservoirs, and wetlands that are subject to the authority of the USACE, CDFW, and/or the RWQCB. In general, the USACE regulates navigable waters, tributaries to navigable waters, and wetlands adjacent to these waters, where wetlands are defined by the presence of hydric soils, hydrophytic vegetation, and wetland hydrology. The CDFW asserts jurisdiction over waters in California that have a defined bed and bank, and the RWQCB has jurisdiction over California surface water and groundwater.

The project site does not contain jurisdictional waters or any other type of aquatic resource.

2.7 DESIGNATED CRITICAL HABITAT

USFWS often designates areas of "critical habitat" when it lists species as threatened or endangered. Critical habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

Designated critical habitat is absent from the project site and surrounding lands (USFWS 2022).

2.8 SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are those that are of limited distribution, distinguished by significant biological diversity, home to special status species, etc. CDFW is responsible for the classification and mapping of all natural communities in California. Natural communities are assigned state and global ranks according to their degree of imperilment. Any natural community with a state rank of 3 (S3) or lower (on a 1 to 5 scale) is considered sensitive. Natural communities with ranks of S1-S3 are considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents. Examples of sensitive natural communities in the vicinity of the project area include Northern Basalt Flow Vernal Pool and various types of Central Valley Drainage Streams (Sawyer, Keeler-Wolf and Evens 2009).

The project site supports no sensitive natural communities.

2.9 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, ridgelines, and rivers and creeks supporting riparian vegetation.

The project site contains no regular or predictable wildlife movement corridors.

3.0 RELEVANT GOALS, POLICIES, AND LAWS

3.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

In California, any project carried out or approved by a public agency that will result in a direct or reasonably foreseeable indirect physical change in the environment must comply with CEQA. The purpose of CEQA is to ensure that a project's potential impacts on the environment are evaluated, and methods for avoiding or reducing these impacts are considered before the project is allowed to move forward. A secondary aim of CEQA is to provide justification to the public for the approval of any projects involving significant impacts on the environment.

According to Section 15382 of the CEQA Guidelines, a 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." Although the lead agency may set its own CEQA significance thresholds, project impacts to biological resources are generally considered to be significant if they would meet any of the following criteria established in Appendix G of the CEQA Guidelines:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS.
- 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.
- 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 site.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- 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) requires the lead agency to make "mandatory findings of significance" if there is substantial evidence that a project may:

- 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, or substantially reduce the number or restrict the range of an endangered, rare or threatened species.
- Achieve short-term environmental goals to the detriment of long-term environmental goals.
- Produce environmental effects that are individually limited but cumulatively considerable, meaning that the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects.

3.2 GENERAL PLAN POLICIES OF CITY OF TULARE

In compliance with CEQA, the lead agency must consider project conformance with applicable goals and policies of the General Plan of the City of Tulare. The City of Tulare General Plan includes goals and policies designed to preserve and protect sensitive significant habitats, enhance biodiversity, and promote healthy ecosystems throughout the urban development boundary. The City of Tulare General Plan policies related to biological resources can be found in Appendix E.

3.3 THREATENED AND ENDANGERED SPECIES

In California, imperiled plants and animals may be afforded special legal protections under the California Endangered Species Act (CESA) and/or Federal Endangered Species Act (FESA). Species may be listed as "threatened" or "endangered" under one or both Acts, and/or as "rare" under CESA. Under both Acts, "endangered" means a species is in danger of extinction throughout all or a significant portion of its range, and "threatened" means a species is likely to become endangered within the foreseeable future. Under CESA, "rare" means a species may become endangered if their present environment worsens. Both Acts prohibit "take" of listed species, defined under CESA as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86), and more broadly defined under FESA to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3).

When state and federally listed species have the potential to be impacted by a project, the USFWS and CDFW must be included in the CEQA process. These agencies review the environmental document to determine the adequacy of its treatment of endangered species issues and to make project-specific recommendations for the protection of listed species. Projects that may result in the "take" of listed species must generally enter into consultation with the USFWS and/or CDFW pursuant to FESA and CESA, respectively. In some cases, incidental take authorization(s) from these agencies may be required before the project can be implemented.

3.4 CALIFORNIA FULLY PROTECTED SPECIES

The classification of certain animal species as "fully protected" was the State of California's initial effort in the 1960s, prior to the passage of the California Endangered Species Act, to identify and provide additional protection to those species that were rare or faced possible extinction. Following CESA enactment in 1970, many fully protected species were also listed as California threatened or endangered. The list of fully protected species are identified, and their protections stipulated, in California Fish and Game Code Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and fish (5515). Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except in conjunction with necessary scientific research and protection of livestock.

3.5 MIGRATORY BIRDS

The Federal Migratory Bird Treaty Act (FMBTA: 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 FMBTA encompasses whole birds, parts of birds, and bird nests and eggs.

Native birds are also protected under California state law. The California Fish and Game Code makes it unlawful to take or possess any non-game bird covered by the FMBTA (Section 3513), as well as any other native non-game bird (Section 3800), even if incidental to lawful activities.

3.6 BIRDS OF PREY

Birds of prey are protected in California under provisions of the 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.

Additionally, the Bald and Golden Eagle Protection Act (16 U.S.C., scc. 668-668c) prohibits anyone from taking (pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb) bald or golden eagles, including their parts, nests, or eggs, unless authorized under a federal permit. In addition to immediate acts of take, the act prohibits any disturbance that directly affects an eagle or an active eagle nest as well as any disturbance caused by humans around a previously used nest site during a time when eagles are not present such that it agitates or bothers an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

3.7 NESTING BIRDS

In California, protection is afforded to the nests and eggs of all birds. California Fish and Game Code (Section 3503) states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Breeding-season disturbance that causes nest abandonment and/or loss of reproductive effort is considered a form of "take" by the CDFW.

4.0 IMPACTS AND MITIGATIONS

The following discussions assume the 14.06 acres of the APE will be developed as described in Section 1.1 and as shown on the site plan in Appendix A. Potential project impacts to biological resources and recommended mitigation measures are discussed below.

4.1 POTENTIALLY SIGNIFICANT PROJECT IMPACTS/MITIGATION

4.1.1 Disturbance to Loggerhead Shrike, Active Raptor, and Other Migratory Bird Nests from Construction Activities During Project Implementation

Potential Impacts. The project site has the potential to be used for nesting by native avian species protected by the Migratory Bird Treaty Act and related state laws. The site does not contain trees or shrubs, but certain ground-nesting species such as the western meadowlark, mourning dove, and killdeer could be expected to nest on site. The loggerhead shrike (*Lanius ludovicianus*), a California species of special concern, has some potential to nest in the site's Russian thistle plants. A variety of other native birds could nest immediately outside of APE boundaries, in the trees and shrubs associated with the adjoining neighborhoods.

If project construction takes place during the nesting season (generally February 1- August 31), birds nesting on the site could be injured or killed by construction activities or disturbed such that they would abandon their nests. Significant construction-related disturbance is also a possibility for birds nesting adjacent to the project site. Project-related injury, mortality, or disturbance of nesting birds that results in abandonment are potentially significant adverse environmental effects of the project.

Mitigation. To avoid and minimize the potential for construction-related mortality/disturbance of nesting birds, the following measures will be implemented:

> ***Measure 4.1.1a (Construction Timing).*** If feasible, the project will be implemented outside of the avian nesting season, typically defined as February 1 to August 31.

***Measure 4.1.1b (Pre-construction Surveys*).** If construction is to occur between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for active bird nests within 10 days prior to the start of construction. The survey area will encompass the site and accessible surrounding lands within 250 feet for nesting migratory birds and 500 feet for raptors (i.e., birds of prey).

***Measure 4.1.1c (Avoidance of Active Nests*).** Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground with flagging or fencing and will be maintained until the biologist has determined that the young have fledged and are capable of foraging independently.

Implementation of the above measures will reduce potential effects of future development of the project site on nesting migratory birds including the loggerhead shrike to a less than significant level under CEQA and will ensure compliance with state and federal laws protecting nesting birds.

4.1.2 Project Impacts to Swainson's Hawk

Potential Impacts. The project site is likely to be used by Swainson's hawks for foraging, and there is potential that they nest within 0.5 miles of the project site. No suitable nesting habitat is present on site. If project construction takes place during the Swainson's hawk nesting season (generally March 1- September 15), hawks nesting in the near vicinity could be disturbed such that they would abandon their nests. Project-related disturbance of nesting Swainson's hawks that results in nest abandonment is a potentially significant adverse environmental effect of the project.

If Swainson's hawks are foraging within the project's ruderal grassland habitat during project activities, it is anticipated that the hawk will move to adjacent active agricultural lands where prey and more suitable habitat are present, resulting in less than significant impacts. Additionally, the project will not result in significant loss of potential nesting or foraging habitat for Swainson's hawk. After construction is completed, the project site is not anticipated to be used by Swainson's hawks other than as a transient or fly over. With the small size of the project (14.06 acres) and the

adjacent agricultural lands with equal or higher quality foraging and nesting habitat, the loss of habitat for this species is not a significant impact of the project under CEQA.

Mitigation. To avoid and minimize the potential for construction-related mortality/disturbance of Swainson's hawks while nesting, the following measures will be implemented:

> ***Measure 4.1.2a (Construction Timing).*** If feasible, the project will be implemented outside of the Swainson's hawk nesting season, typically defined as March 1 to September 15.
>
> ***Measure 4.1.2b (Pre-construction Surveys*).** If the project must be constructed during the March 1-September 15 nesting season, surveys for nesting Swainson's hawks will be conducted. The surveys will follow the protocol established in the Swainson's Hawk Technical Advisory Committee's 2000 *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* and will encompass all mature trees within ½ mile of the project site. If no nesting pairs are found during the surveys, no further mitigation is required.
>
> ***Measure 4.1.2c* (*Establish Buffers*).** If preconstruction surveys identify one or more active Swainson's hawk nests within ½ mile of the project site, suitable disturbance-free buffers would need to be established around the nest(s) and maintained until the end of construction or until a qualified biologist determines that the nest is no longer active, whichever comes first.

4.2 LESS THAN SIGNIFICANT PROJECT IMPACTS

4.2.1 Special Status Animal Species that May Occur on the Project Site as Occasional or Regular Foragers but Breed Elsewhere

Potential Impacts. Two California species of special concern, the pallid bat (*Antrozous pallidus*) and western mastiff bat (*Eumops perotis californicus*), have the potential to forage on the site from time to time but would not breed or roost on the site (see Table 1). Potential foraging habitat on the project site is not uniquely important for these species and similar or higher quality foraging

habitat is relatively abundant in the region. These species would not be vulnerable to construction-related injury or mortality because they are nocturnal, and their active period of foraging is expected to be at night when construction has ceased. Even if one or more individuals were to occur on the site during construction, their high level of mobility would allow them to easily evade any danger. For these reasons, project impacts to the pallid bat are considered less than significant under CEQA.

Mitigation. Mitigation is not warranted.

4.2.2 Project Impacts to Special Status Plant Species

Potential Impacts. Twelve special status plant species, vascular and bryophyte, are known to occur in the region (see Table 1). The project site is adjacent to an existing residential neighborhood with a high level of human disturbance, and the site experienced decades of agricultural use dating back to 1946, as well as recent grading activities. All of these plant species are considered to be absent from the site due to the absence of any present or historically suitable habitat. These species include heartscale (*Atriplex cordulata* var. *cordulata*), Earlimart orache (*Atriplex cordulata* var. *erecticaulis*), brittlescale (*Atriplex depressa*), lesser saltscale (*Atriplex minuscula*), subtle orache (*Atriplex subtilis*), California jewel-flower (*Caulanthus californicus*), recurved larkspur (*Delphinium recurvatum*), spiny-sepaled button celery (*Eryngium spinosepalum*), California satintail (*Imperata brevifolia*), alkali-sink goldfields (*Lasthenia chrysantha*), San Joaquin adobe sunburst (*Pseudobahia peirsonii*), and California alkali-grass (*Puccinellia simplex*).The proposed project is not expected to affect these species or their habitats, and impacts would be less than significant under CEQA.

Mitigation. Mitigation measures are not warranted.

4.2.3 Project Impacts to Special Status Animal Species Absent from or Unlikely to Occur on Site

No Impact. Of the eighteen special status animal species known from the regional vicinity, twelve are considered absent from the project site due to the absence of suitable habitat, the site's being located outside of the known geographical or elevational range of the species, or the species'

having been extirpated from the region. Species considered absent from the site include the vernal pool fairy shrimp (*Branchinecta lynchi*), western spadefoot (*Spea hammondii*), Crotch bumble bee (*Bombus crotchii*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), western pond turtle (*Emys marmorata*), northern California legless lizard (*Anniella pulchra*), blunt-nosed leopard lizard (*Gambelia sila*), mountain plover (*Charadrius montanus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), San Joaquin kit fox (*Vulpes macrotis mutica*), and American badger (*Taxidea taxus*), (see Table 1).

Two species, the burrowing owl (*Athene cunicularia*) and tricolored blackbird (*Agelaius tricolor*), have an unlikely potential to occur on site (see Table 1). While there is habitat for the burrowing owl in the ruderal grassland in the form of California ground squirrel burrow complexes, due to the small size of the parcel, close proximity of existing housing, and two sides of the parcel being surrounded by a four-lane road, the habitat is marginal with a low value. It is anticipated that if an owl were present on site, it would be temporary due to the regular human disturbances from the adjacent agricultural operations. Additionally, there is no breeding habitat in the vicinity for tricolored blackbirds, however, they are known to forage in ruderal fields and thus conceivably may use the site from time to time as a transient.

Since there is little to no likelihood that these species occur on site, they have no appreciable potential to be affected through construction-related injury or mortality or loss of habitat. Project impacts to these species are considered less than significant.

Mitigation. Mitigation measures are not warranted.

4.2.4 Project Impact to Sensitive Natural Communities and Designated Critical Habitat

No Impact. Designated critical habitat and sensitive natural communities are absent from the project site. The only land use present within the project site is ruderal grassland and ruderal/developed.

Project development will have no impact on sensitive natural communities or designated critical habitat.

Mitigation. No mitigation is warranted.

4.2.5 Project Impact to Wildlife Movement Corridors

No Impact. As noted in Section 2.9 of this report, this project site does not contain any wildlife movement corridors. This site lacks the typical topographic and/or water features of wildlife movement corridors.

Mitigation. No mitigation is warranted.

4.2.6 Project Impacts to Waters of the U.S. and State

No Impact. As noted in Section 2.6 of this report, this project site does not contain any aquatic features. The project as designed will have no impacts on potentially jurisdictional waters of the U.S. and state.

Mitigation. No mitigation is warranted.

4.0 LITERATURE CITED

Association of Environmental Professionals (AEP). 2022. 2022 CEQA Statute & Guidelines.

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, and T. J. Rosatti, Eds. 2012. The Jepson Manual: Vascular Plants of California, 2nd edition. University of California Press, Berkeley, CA.

Bechard, M. J., C. S. Houston, J. H. Sarasola, and A. S. England (2020). Swainson's Hawk (Buteo swainsoni), version 1.0. In Birds of the World (A. F. Poole, Editor). Cornell Lab of Ornithology, Ithaca, NY, USA. Available: https://doi.org/10.2173/bow.swahaw.01.

Calflora. 2022. Calflora: An online database of plant identification and distribution [web application]. Calflora, Berkeley, California. Available: http://www.calflora.org. (Accessed September 2022).

California Department of Fish and Game (CDFG). 1994a. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California.

CDFG. 1994b. Amphibian and Reptile Species of Special Concern in California. Jennings and Hayes. Rancho Cordova, CA. 255 p.

California Department of Fish and Wildlife (CDFW). 2014. California Interagency Wildlife Task Group. CWHR version 9.0 personal computer program. Sacramento, CA. Available: https://wildlife.ca.gov/Data/ CWHR/ Life-History-and-Range. (Accessed September 2022).

CDFW. 2023. California Natural Diversity Database. *BIOS* and *Rarefind 6.0*. The Resources Agency, Sacramento, CA. (Accessed May 2023).

California Native Plant Society (CNPS), Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Available: https://www.rareplants.cnps.org. (Accessed August 2022).

eBird. 2023. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org. (Accessed May 2022).

Estep, J. A. 1989. Biology, movements, and habitat relationships of the Swainson's Hawk in the Central Valley of California, 1986-87. Nongame Bird and Mammal Sec. Rep: Calif. Dep. Fish Game.

Golightly, R. T. and R. D. Ohmart. 1984. Water economy of two desert canids: coyote and kit fox. Journal of Mammalogy 65:51–58.

Grinnell, J., J.S. Dixon and J.M. Linsdale. 1937. Fur-bearing mammals of California. Vol. 2. Univ. California Press, Berkeley.

iNaturalist. 2022. Available: https://www.inaturalist.org. (Accessed September 2022).

Jepson Flora Project (eds.) 2022. Jepson eFlora. Available: https://ucjeps.berkeley.edu/eflora/. (Accessed September 2022).

Knopf, F. L. and J. R. Rupert. (1995). Habits and habitats of Mountain Plovers in California. Condor 97:743-751.

Nafis, G. (2023) California Herps - A Guide to the Amphibians and Reptiles of California. Available: http://www.californiaherps.com/. (Accessed May 2023).

Natural Resources Conservation Service (NRCS). September 8, 2021, Version 15. Custom Soil Resources Report for Tulare County Area, California. U.S. Department of Agriculture. Available: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. (Accessed August 2022).

Orloff, Susan G. 2011. Herpetological Conservation and Biology: Movement Patterns and Migration Distances in An Upland Population of California Tiger Salamander (Ambystoma californiense). Volume 6 (2): 266-276. Accepted April 1, 2011.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, CA 1300pp.

Sherwin, Rick and Rambaldini, Daniela A. 2005. Species Account: Pallid Bat (Antrozous pallidus). Western Bat Working Group. Available: https://www.co.monterey.ca.us /Home/ShowDocument?id=51322. Accessed September 2022.

U.S. Army Corps of Engineers (USACE). 1987. Corps of Engineers wetlands delineation manual. Department of the Army.

United States Fish and Wildlife (USFWS). 1998. Recovery Plan for Upland Species of the San Joaquin Valley, California. Region 1, Portland, Oregon.

United States Fish and Wildlife Service (USFWS). 2010. Blunt-nosed leopard lizard (*Gambelia sila*) 5-Year Review: Summary and Evaluation. Published February 2010.

USFWS. 2014. Federal Register, Vol. 79, No. 180. Endangered and Threatened Wildlife and Plants; Withdrawal of the Proposed Rule to Remove the Valley Elderberry Longhorn Beetle from the Federal List of Endangered and Threatened Wildlife; Proposed Rule. Published September 17, 2014. Available: https://www.federalregister.gov/d/2014-21585.

USFWS. 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.

USFWS. 2019a. Revised Recover Plan for Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus). Published October 4, 2019.

USFWS. 2019b. Endangered and Threatened Wildlife and Plants: Initiation of 5-Year Status Reviews of 58 Species in California, Nevada, and the Klamath Basin of Oregon. Federal Register 84:36116-36118.

USFWS. 2023. Environmental Conservation Online System (ECOS): Threatened and Endangered Species Critical Habitat Report. Updated March 23, 2023. Available: https://ecos.fws.gov/ecp/report/table/critical-habitat.html. (Accessed May 2023).

United States Geological Survey (USGS). 2021. The National Map: US Topo. Tulare Quadrangle, California- Madera County. 7.5-Minute Series.

Yosef, R. (2020). Loggerhead Shrike (*Lanius ludovicianus*), version 1.0. In Birds of the World (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. Available: https://doi.org/10.2173/bow.logshr.01. Accessed: May 2023.

Zeiner, David C., William F. Laudenslayer, Kenneth E. Mayer and Marshal White. Ed. 1988-1990. California's Wildlife. Volume I-III. California Department of Fish and Game, Sacramento, California.

APPENDIX A: SITE PLAN

CARTMILL - MOONEY

TENTATIVE SUBDIVISION MAP

PREPARED FOR: SAN JOAQUIN VALLEY HOMES
5607 AVE DE LOS ROBLES
VISALIA, CA 93291

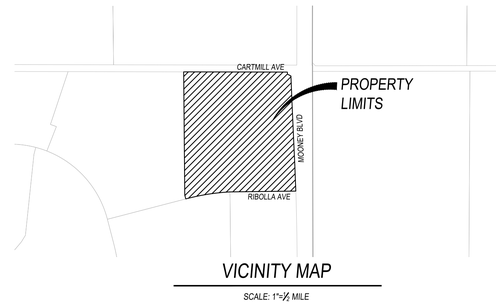
PREPARED BY: 4CREEKS, INC.
324 S. SANTA FE ST., STE. A
VISALIA ,CA 93292

ACREAGE
14.06 AC 130 UNITS

LEGEND

APN:	149-038-032, 149-039-022
EXISTING ZONING:	C-3
PROPOSED ZONING:	R-1-4
GENERAL PLAN:	RETAIL COMMERCIAL
FLOOD ZONE:	X
ELECTRICITY:	SOUTHERN CALIFORNIA EDISON
TELEPHONE:	AT&T
NATURAL GAS:	SOUTHERN CALIFORNIA GAS
REFUSE:	CITY OF TULARE
EXISTING USE:	VACANT
PROPOSED USE:	LOW DENSITY RESIDENTIAL

TYPICAL LOT SIZES:
2880 SF LOTS± (32' X 90') (54 UNITS)
3136 SF LOTS± (32' X 99') (41 UNITS)
3626 SF LOTS± (37' X 99') (5 UNITS)
MISCELLANEOUS (25 UNITS)



VICINITY MAP
SCALE: 1"=½ MILE

NORTH
50' 0' 50

PREPARED BY:
4CREEKS
324 S. SANTA FE, STE. A
P.O. BOX 7593
VISALIA, CA 93292
TEL: 559.802.3052
FAX: 559.802.3215

APPENDIX B: VASCULAR PLANTS OF THE PROJECT SITE

VASCULAR PLANTS OF THE PROJECT SITE

The plants species listed below were observed on the project site during a survey conducted by Live Oak Associates, Inc. on August 29, 2022. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland
+/- - Higher/lower end of category
NR - No review
NA - No agreement
NI - No investigation

AMARANTHACEAE – Amaranth Family		
Amaranthus sp.		
ANACARDIACEAE – Cashew Family		
Pistacia chinensis	Chinese pistache	UPL
ARECACEAE – Palm Family		
Washingtonia robusta	Mexican fan palm	FACW
ASTERACEAE – Daisy Family		
Erigeron bonariensis	Flax-leaved horseweed	FACU
Erigeron canadensis	Canadian horseweed	FAC
Helianthus sp.	Sunflower	
Lactuca serriola	Prickly lettuce	FAC
BRASSICACEAE – Mustard Family		
Hirschfeldia incana	Shortpod mustard	UPL
CHENPODIACEAE – Goosefoot Family		
Atriplex lentiformis	Big saltbrush	FACU
Atriplex serenana	Saltscale	FAC
Salsola tragus	Russian thistle	FACU
GINKGOACEAE – Ginkgo Family		
Ginkgo biloba	Ginkgo	UPL
POACEAE – Grass Family		
Cynodon dactylon	Bermuda grass	FACU
Digitaria sanguinalis	Hairy crabgrass	FACU
Distichilis spicata	Saltgrass	FAC
Hordeum sp.	Barley	
PODOCARPACEAE – Podocarp Family		
Afrocarpus gracilior	African fern pine	UPL

SOLANACEAE – Nightshade Family		
Solanum americanum	American black nightshade	FACU
ULNACEAE – Elm Family		
Ulnus pumila	Siberian elm	UPL
ZYGOPHYLLACEAE – Caltrop Family		
Tribulus terrestris	Puncture vine	UPL

APPENDIX C: TERRESTRIAL VERTEBRATES OF THE PROJECT SITE

TERRESTRIAL VERTEBRATES OF THE PROJECT SITE

The species listed below are those that may reasonably be expected to use the habitats of the project site routinely or from time to time. The list was not intended to include birds that are vagrants or occasional transients. Terrestrial vertebrate species observed in or adjacent to the project site during the August 29, 2022 survey have been noted with an asterisk.

CLASS: AMPHIBIA
ORDER: ANURA (Frogs and Toads)
FAMILY: BUFONIDAE (True Toads)
Western Toad (*Bufo boreas*)
FAMILY: HYLIDAE (Treefrogs and Relatives)
Sierran Treefrog (*Pseudacris sierra*)

CLASS: REPTILIA
ORDER: SQUAMATA (Lizards and Snakes)
SUBORDER: SAURIA (Lizards)
FAMILY: PHRYNOSOMATIDAE (Spiny, Side-blotched, Horned, and relatives)
San Joaquin Fence Lizard (*Sceloporus occidentalis biseriatus*)
Western side-blotched Lizard (*Uta stansburiana elegans*)
FAMILY: TELLIDAE (Whiptails and Racerunners)
California Whiptail (*Aspidoscelis tigris munda*)
SUBORDER: SERPENTES (Snakes)
FAMILY: COLUBRIDAE (Colubrids)
San Joaquin Coachwhip (*Coluber flagellum ruddocki*)
California Kingsnake (*Lampropeltis californiae*)
Pacific Gopher Snake (*Pituophis catenifer catenifer*)
Long-nosed Snake (*Rhinocheilus lecontei*)
Valley Gartersnake (*Thamnophis sirtalis fitchi*)
FAMILY: VIPERIDAE
Northern Pacific Rattlesnake (*Crotalus oreganus oreganus*)

CLASS: AVES
ORDER: APODIFORMES (Swifts and Hummingbirds)
FAMILY: TROCHILIDAE (Hummingbirds)
Black-chinned Hummingbird (*Archilochus alexandri*)
Anna's Hummingbird (*Calypte anna*)
Calliope Hummingbird (*Selasphorus calliope*)
Rufous Hummingbird (*Selasphorus rufus*)
Allen's Hummingbird (*Selasphorus sasin*)
ORDER: CAPRIMULGIFORMES (Goatsuckers and Relatives)
FAMILY: CAPRIMULGIDAE (Goatsuckers)
Lesser Nighthawk (*Chordeiles acutipennis*)

Common Nighthawk (*Chordeiles minor*)

ORDER: CHARADRIIFORMES (Shorebirds and Allies)

FAMILY: CHARADRIIDAE (Plovers and relatives)

Killdeer (*Charadrius vociferus*)

ORDER: CICONIIFORMES (Herons, Storks, Ibises, and relatives)

FAMILY: ARDEIDAE (Herons and Bitterns)

Great Egret (*Ardea alba*)

Great Blue Heron (*Ardea herodias*)

ORDER: COLUMBIFORMES (Pigeons and Doves)

FAMILY: COLUMBIDAE (Pigeons and Doves)

Band-tailed Pigeon (*Columba fasciata*)

*Rock Pigeon (*Columba livia*)

*Eurasian Collared-dove (*Streptopelia decaocto*)

Mourning Dove (*Zenaida macroura*)

ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)

FAMILY: CATHARTIDAE (American Vultures)

*Turkey Vulture (*Cathartes aura*)

FAMILY: ACCIPITRIDAE (Hawks, Eagles, and Kites)

Cooper's Hawk (*Accipiter cooperi*)

Sharp-shinned Hawk (*Accipiter striatus*)

Red-shouldered Hawk (*Buteo lineatus*)

Red-tailed Hawk (*Buteo jamaicensis*)

Swainson's Hawk (*Buteo swansonii*)

FAMILY: FALCONIDAE (Caracaras and Falcons)

Merlin (*Falco columbarius*)

Prairie Falcon (*Falco mexicanus*)

American Kestrel (*Falco sparverius*)

ORDER: PICIFORMES (Woodpeckers and Relatives)

FAMILY: PICIDAE (Woodpeckers and Wrynecks)

Acorn Woodpecker (*Melanerpes formicivorous*)

ORDER: STRIGIFORMES (Owls)

FAMILY: TYTONIDAE (Barn Owls)

Barn Owl (*Tyto alba*)

FAMILY: STRIGIDAE (Typical Owls)

Great Horned Owl (*Bubo virginianus*)

ORDER: PASSERIFORMES (Perching Birds)

FAMILY: ALAUDIDAE

California Horned Lark (*Eremophila alpestris actia*)

FAMILY: CORVIDAE (Jays, Magpies, and Crows)

*California Scrub Jay (*Aphelocoma californica*)

American Crow (*Corvus brachyrhynchos*)

Common Raven (*Corvus corax*)

FAMILY: FRINGILLIDAE (Finches)

*House Finch (*Carpodacus mexicanus*)
*Lesser Goldfinch (*Carduelis psaltria*)
American Goldfinch (*Spinus tristis*)

FAMILY: HIRUNDINIDAE (Swallows)
Cliff Swallow (*Hirundo pyrrhonota*)
Barn Swallow (*Hirundo rustica*)
Tree Swallow (*Tachycineta bicolor*)
Violet-green Swallow (*Tachycineta thalassina*)
Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)

FAMILY: ICTERIDAE (Blackbirds, Orioles and Allies)
Brewer's Blackbird (*Euphagus cyanocephalus*)
Bullock's Oriole (*Icterus bullockii*)
Hooded Oriole (*Icterus cucullatus*)
Brown-headed Cowbird (*Molothrus ater*)
Western Meadowlark (*Sturnella neglecta*)

FAMILY: LANIDAE (Shrikes)
Loggerhead Shrike (*Lanius ludovivianus*)

FAMILY: MIMIDAE (Mockingbirds and Thrashers)
*Northern Mockingbird (*Mimus polyglottos*)

FAMILY: PASSERELLIDAE (New World Sparrows)
Lark Sparrow (*Chondestes grammacus*)
Lincoln's Sparrow (*Melospiza lincolnii*)
California Towhee (*Melozone crissalis*)
Dark-eyed Junco (*Junco hyemalis*)
House Sparrow (*Passer domesticus*)
Savannah Sparrow (*Passerculus sandwichensis*)
Golden-crowned Sparrow (*Zonotrichia atricapilla*)
White-crowned Sparrow (*Zonotrichia leucophrys*)

FAMILY: STURNIDAE (Starlings)
European Starling (*Sturnus vulgaris*)

FAMILY: SYLVIIDAE (Sylviid Warblers, Parrotbills, and Allies)
Wrentit (*Chamaea fasciata*)

FAMILY: TYRANNIDAE (Tyrant Flycatchers)
Black Phoebe (*Sayornis nigricans*)
Say's Phoebe (*Sayornis saya*)
Ash-throated Flycatcher (*Myiarchus cinerascens*)
Western Kingbird (*Tyrannus verticalis*)

CLASS: MAMMALIA

ORDER: CARNIVORA (Carnivores)

FAMILY: CANIDAE (Foxes, Wolves, and Relatives)
Coyote (*Canis latrans*)
Domestic/Feral Dog (*Canis lupus*)
Red Fox (*Vulpes vulpes*)

FAMILY: PROCYONIDAE (Raccoons and Relatives)

*Raccoon (*Procyon lotor*)

FAMILY: MUSTELIDAE (Weasels, Badgers, and Relatives)

Striped Skunk (*Mephitis mephitis*)

FAMILY: FELIDAE (Cats)

Domestic/Feral Cat (*Felis catus*)

ORDER: CHIROPTERA (Bats)

FAMILY: MOLOSSIDAE (Free-tailed Bat)

Western mastiff bat (*Eumops perotis californicus*)

Brazilian Free-tailed Bat (*Tadarida brasiliensis*)

FAMILY: VESPERTILIONIDAE (Vespertilionid Bats)

Pallid Bat (*Antrozous pallidus*)

Big Brown Bat (*Eptesicus fuscus*)

Silver-haired Bat (*Lasionycteris noctivagans*)

Yuma Myotis (*Myotis yumanensis*)

Long-eared Myotis (*Myotis evotis*)

Fringed Myotis (*Myotis thysanodes*)

Long-legged Myotis (*Myotis volans*)

California Myotis (*Myotis californicus*)

Small-footed Myotis (*Myotis leibii*)

Western Pipistrelle (*Pipistrellus hesperus*)

ORDER: DIDELPHIMORPHIA (Opossums)

FAMILY: DIDEPHIDAE (Opossums)

Virginia Opossum (*Didephis virginiana*)

ORDER: INSECTIVORA (Shrews and Moles)

FAMILY: SORCIDAE (Shrews)

Ornate shrew (*Sorex ornatus*)

FAMILY: TALPIDAE (Moles)

Broad-footed Mole (*Scapanus latimanus*)

ORDER: LAGOMORPHA (Rabbits, Hares, and Pikas)

FAMILY: LEPORIDAE (Rabbits and Hares)

Audubon's Cottontail (*Sylvilagus audubonii*)

ORDER: RODENTIA (Squirrels, Rats, Mice, and Relatives)

FAMILY: CRICETIDAE (Deer Mice, Voles, and Relatives)

Deer Mouse (*Peromyscus maniculatus*)

Western Harvest Mouse (*Reithrodontomys megalotis*)

FAMILY: GEOMYIDAE (Pocket Gophers)

Botta's Pocket Gopher (*Thomomys bottae*)

FAMILY: HETEROMYIDAE (Kangaroo Rats and Mice, Pocket Mice)

*Heerman's Kangaroo Rat (*Dipodomys heermanni*)

San Joaquin Pocket Mouse (*Perognathus inornatus*)

FAMILY: MURIDAE (Old World Rats and Mice)

Norway Rat (*Rattus norvegicus*)

House Mouse (*Mus musculus*)

FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)

*California Ground Squirrel (*Otospermophilus beecheyi*)

APPENDIX D: SELECTED PHOTOGRAPHS OF THE PROJECT SITE

Photo 1. Overview of the project site with the existing housing to the south and North Mooney Boulevard to the east, facing northwest.

Photo 2. Overview of the project site with the existing housing to the west and south, facing northeast.

Photo 3. California ground squirrel burrow complexes in center of ruderal grassland, facing south.

Photo 4. Overview of ruderal/developed dirt road on west side of project site with existing housing to the west, facing south.

APPENDIX E: CITY OF TULARE GENERAL PLAN

Adopted October 7, 2014

Tulare General Plan

For the City of Tulare

Adopted October 7, 2014

Prepared By:

The Planning Center | DC&E
1625 Shattuck Avenue, Suite 300
Berkeley, California 94709
510 848 3815
510 848 4315 (f)

Tulare General Plan

For the City of Tulare

TABLE OF CONTENTS

List of Figures

List of Tables

COS-P1.9 **Maintain Appropriate Water Rates**. The City shall maintain a water rate structure that fully recovers the costs of providing water, including the costs of water conservation programs.

COS-P1.10 **Reclaimed Wastewater.** The City shall continue the use of reclaimed wastewater for agricultural use. Such programs may include: dual water systems for potable and non-potable water; reuse of grey water in homes or businesses for irrigation; and reuse of sewage effluent for irrigation of crops, golf courses, or city irrigation.

COS-P1.11 **Water for Irrigation**. Whenever possible, the City shall require new development to use recycled or non-potable water for irrigation in landscaped areas.

COS-P1.12 **Urban Runoff.** To the maximum extent practicable, the City shall adopt and enforce regulations and engage in educational efforts to reduce pollution from urban runoff.

COS-P1.13 **Pollution from Runoff.** New projects (excluding residential parcel maps) will be required to provide onsite detention facilities designed to retain the first inch of runoff from a site.

2. Biological Resources

Goal COS-2 **To preserve and protect sensitive significant habitats, enhance biodiversity, and promote healthy ecosystems throughout the Urban Development Boundary (UDB).**

Policies

COS-P2.1 **Protection of Rare and Endangered Species.** The City shall support preservation, restoration, and enhancement of designated habitats of State or federally-listed rare, threatened, endangered and/or other sensitive and special status species.

COS-P2.2 **Protection of Natural Areas.** The City shall support preservation, maintenance, restoration, and enhancement of natural systems, waterways, and open space.

COS-P2.3 **Development in Environmentally-Sensitive Areas.** The City shall require careful planning of new development in environmentally sensitive habitat areas and to avoid or otherwise mitigate potential significant impacts whenever feasible. The focus of efforts shall be on project design to avoid impacts whenever feasible. Environmentally-sensitive habitat shall include, at a minimum, the following:

- Any habitat for a federally- or State-listed rare, threatened or endangered animal or plant; and
- Identifiable wildlife movement corridors, including, but not limited to, non-fragmented stream environment zones, and avian and mammalian migratory routes.

COS-P2.4 **Site Planning.** The City shall encourage site planning that incorporates and protects creek and wetland edges.

COS-P2.5 **Open Space Buffers.** The City shall require buffer areas between development projects and significant watercourses, riparian vegetation, wetlands, and other sensitive habitats and natural communities.

COS-P2.6 **Planting of Native Vegetation.** The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation and wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.

COS-P2.7 **Valley Oaks.** The City shall preserve mature Valley Oaks and their habitats located within the UDB to the extent possible.

COS-P2.8 **Wetlands Dedication.** The City shall require all preserved wetlands be dedicated to the City or a non-profit organization approved by the City and preserved through perpetual covenants enforceable by the City or other appropriate agencies.

COS-P2.9 **Wetlands Management.** The City shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, and wildlife habitats. Such communities

shall be restored or expanded, where possible and as appropriate. Any project that proposes to restore or enhance riparian habitat shall require a Streambed Alteration Agreement in compliance with California Fish and Game Code sections 1600-1616. Any project that proposes to restore, enhance, or otherwise affect a jurisdictional wetland shall require consultation with the US Army Corps of Engineers and compliance with the Clean Water Act.

COS-P2.10 **Stream Buffer**. The City shall require a conservation easement or setback of a minimum of 100 feet from the edge of the Elk Bayou riparian zone to avoid the stream channel and the surrounding riparian vegetation. The riparian zone should encompass the edge of the bayou bank (minimally) to the edge of the riparian vegetation bordering the stream (maximally).

3. Agricultural Resources

Goal COS-3 **To promote the productivity of agricultural lands surrounding Tulare and the continued viability of Tulare County agriculture.**

Policies

COS-P3.1 **Protect Interim Agricultural Activity.** The City shall protect the viability of existing interim agricultural activity in the UDB to the extent possible.

COS-P3.2 **Agricultural Buffers.** The City shall require that agricultural land uses designated for long-term protection (in a Williamson Act contract or under a conservation easement located outside the City's UDB) shall be buffered from urban land uses through the use of techniques including, but not limited to, spatial separations (e.g. greenbelts, open space setbacks, etc.), transitions in density, soundwalls, fencing, and/or berming.

COS-P3.3 **Agricultural Disclosures.** The City shall require that developers of residential projects, which are within general proximity of agricultural operations in the city, to provide notification to new homeowners within their deeds of the City's right to farm ordinance.

Appendix C

Cultural Records Search Results

CULTURAL RESOURCE SURVEY FOR THE

CARTMILL-MOONEY PROJECT,

CITY OF TULARE, KINGS COUNTY, CALIFORNIA

Prepared by

Melinda A. Peak
Peak & Associates, Inc.
3941 Park Drive, Suite 20-329
El Dorado Hills, CA 95762
(916) 939-2405

Prepared for

4Creeks, Inc.
324 S. Santa Fe Street, Suite A
Visalia, CA 93292

May 1, 2023
(Job #22-065)

INTRODUCTION

The Cartmill-Mooney project will be located at the southwest corner of Cartmill Road and Mooney Boulevard within the City of Tulare. The project proposes to develop 131 single-family residential units on approximately 14.06 acres.

The project area is mapped in the northeast ¼ of the northeast ¼ of Section 36, Township 19 South, Range 2 East, on the Tulare United States Geological Survey 7.5-minute topographic quadrangle (Figures 1 and 2).

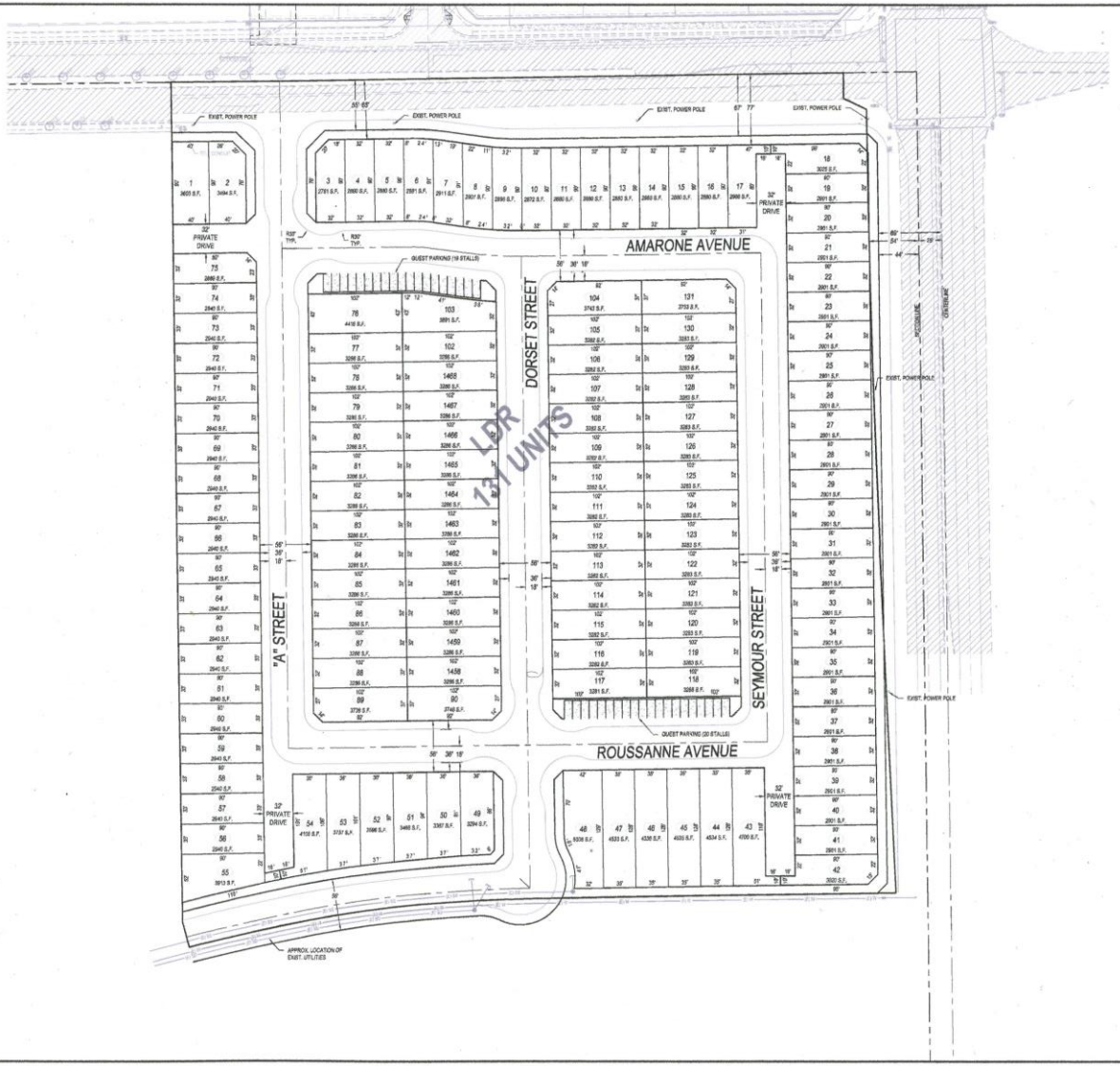
Melinda A. Peak, senior historian/archeologist with Peak & Associates, Inc. served as principal investigator for the study, with archeologist Michael Lawson completing the field survey (resumes, Appendix 1).

REGULATORY CONTEXT

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA; Public Resources Code sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA Section 15064.5 requires that lead agencies determine whether projects may have a significant effect on archaeological and historical resources. Public Resources Code Section 21098.1 further cites: A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

An "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (Public Resources Code section 5020.1).

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR), *CEQA and Archaeological Resources,* 1994. The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, historical associations and societies be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods, regardless of the antiquity, and also provides for the sensitive treatment and disposition of those remains (California Health and Safety Code Section 7050.5, California Public Resources Codes Sections 5097.94 et al).



CARTMILL - MOONEY

TENTATIVE SUBDIVISION MAP

PREPARED FOR: SAN JOAQUIN VALLEY HOMES
5607 AVE DE LOS ROBLES
VISALIA, CA 93291

PREPARED BY: 4CREEKS, INC.
324 S. SANTA FE ST., STE. A
VISALIA ,CA 93292

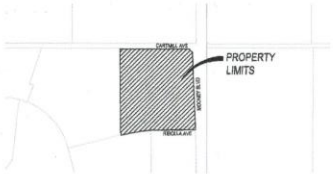
ACREAGE
14.06 AC

131 UNITS

LEGEND

APN:	149-038-032, 149-039-022
EXISTING ZONING:	C-3
PROPOSED ZONING:	R-1-4
GENERAL PLAN:	RETAIL COMMERCIAL
FLOOD ZONE:	X
ELECTRICITY:	SOUTHERN CALIFORNIA EDISON
TELEPHONE:	AT&T
NATURAL GAS:	SOUTHERN CALIFORNIA GAS
REFUSE:	CITY OF TULARE
EXISTING USE:	VACANT
PROPOSED USE:	LOW DENSITY RESIDENTIAL

TYPICAL LOT SIZES:
2880 SF LOTS± (32' X 90') (64 UNITS)
3136 SF LOTS± (32' X 99') (53 UNITS)
3626 SF LOTS± (37' X 99') (8 UNITS)
MISCELLANEOUS (6 UNITS)



PREPARED BY:
4CREEKS
324 S. SANTA FE, STE. A
P.O. BOX 7560
VISALIA, CA 93202
TEL: 559.802.3052
FAX: 559.802.3053

FIGURE 1

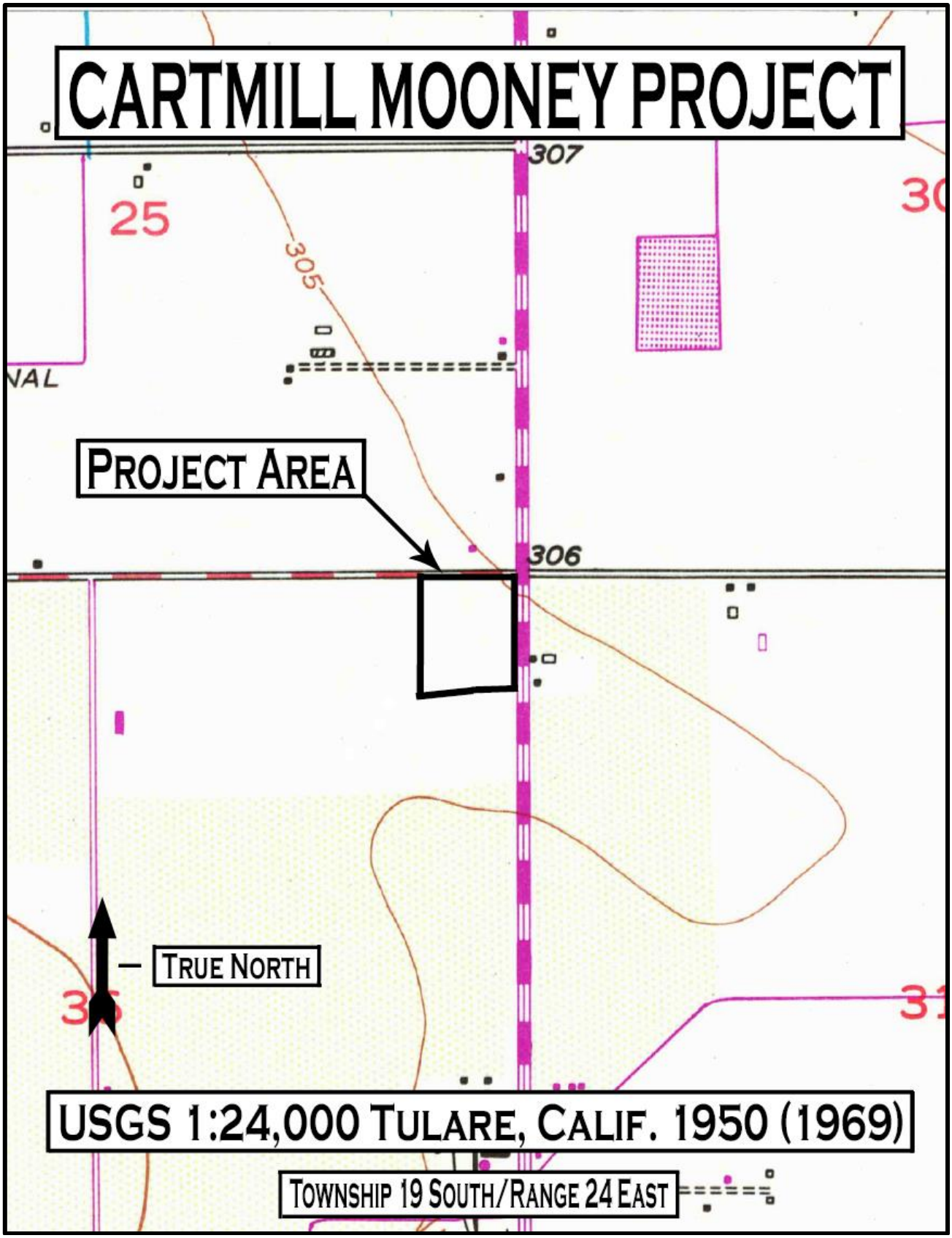

CARTMILL MOONEY PROJECT
307
25
305
306
PROJECT AREA
TRUE NORTH
USGS 1:24,000 TULARE, CALIF. 1950 (1969)
TOWNSHIP 19 SOUTH/RANGE 24 EAST

Figure 2

The California Register of Historical Resources (Public Resources Code Section 5020 et seq.)

The State Historic Preservation Office (SHPO) maintains the California Register of Historical Resources (CRHR). Properties listed, or formally designated as eligible for listing, in the National Register of Historic Places are automatically listed on the CRHR, as well as State Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

For the purposes of CEQA, an historical resource is a resource listed in, or determined eligible for listing in the California Register of Historical Resources. When a project will impact a site, it needs to be determined whether the site is an historical resource. The criteria are set forth in Section 15064.5(a) (3) of the CEQA Guidelines, and are defined as any resource that does any of the following:

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

B. Is associated with the lives of persons important in our past;

C. 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; or

D. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, the CEQA Guidelines, Section 15064.5(a) (4) states:

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

California Health and Safety Code Sections 7050.5, 7051, And 7054

These sections collectively address the illegality of interference with human burial remains, as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures.

California Public Resources Code Section 15064.5(e)

This law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction. The section establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project and establishes the Native American Heritage Commission as the entity responsible to resolve disputes regarding the disposition of such remains.

Assembly Bill 52

Assembly Bill (AB) 52 establishes a formal consultation process for California tribes as part of CEQA and equates significant impacts on tribal cultural resources with significant environmental impacts. AB 52 defines a "California Native American Tribe" as a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission. AB 52 requires formal consultation with California Native American Tribes prior to determining the level of environmental document if a tribe has requested to be informed by the lead agency of proposed projects. AB 52 also requires that consultation address project alternatives, mitigation measures, for significant effects, if requested by the California Native American Tribe, and that consultation be considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, or the agency concludes that mutual agreement cannot be reached. Under AB 52, such measures shall be recommended for inclusion in the environmental document and adopted mitigation monitoring program if determined to avoid or lessen a significant impact on a tribal cultural resource.

CULTURAL SETTING

Archeology

The Central Valley region was among the first in the state to attract intensive fieldwork, and research has continued to the present day. This has resulted in a substantial accumulation of data, but the emphasis has been in the northern portion of the valley. In the early decades of the 1900s, E.J. Dawson explored numerous sites near Stockton and Lodi, later collaborating with W.E. Schenck (Schenck and Dawson 1929). By 1933, the focus of work was directed to the Cosumnes locality, where survey and excavation were conducted by the Sacramento Junior College (Lillard and Purves 1936). Excavation data, in particular from the stratified Windmiller site (CA-Sac-107), suggested two temporally distinct cultural traditions. Later work at other mounds by Sacramento Junior College and the University of California, Berkeley, enabled the investigators to identify a third cultural tradition, intermediate between the previously postulated Early and Late Horizons. The three-horizon sequence, based on discrete changes in ornamental artifacts and mortuary practices, as well as on observed differences in soils within sites (Lillard, Heizer and Fenenga 1939), was later refined by Beardsley (1954). An expanded definition of artifacts diagnostic of each time period was developed, and its application extended to parts of the central California

coast. Traits held in common allow the application of this system within certain limits of time and space to other areas of prehistoric central California.

In the southern San Joaquin Valley, with the exception of Hewes's excavation at CA-FRE-48 (the Tranquility Site), the foci of early investigations have been the old shorelines of the interior lakes: Tulare, Kern, and Buena Vista. In 1899, Dr. P. M. Jones directed fieldwork in the Buena Vista-Tulare Lake area of Kern County. Jones investigated 150 mounds and conducted trenching of several sites including CA-Ker-53. In 1909, N. C. Nelson investigated prehistoric Site CA-Ker-49, which is located to the west of Buena Vista Lake. Later, four surveys and excavations were conducted in the same locale under the auspices of the University of California. A compilation of these investigation results was published in 1926 by Gifford and Schenck.

As a result of this early work, an elaborate culture complex was defined for the late prehistoric period. This complex can be ascribed probably to the Yokuts and their direct ancestors. The material culture of this late temporal period complex included steatite vessels and beads, finely-made projectile points, pottery, shaped stone mortars, *Tivela* disc beads, use of asphaltum, and the presence of metates and manos. Flexed burials were the predominant interment mode. Earlier complexes underlying the late cultural expressions were represented by chipped stone crescents, large projectile points, atlatl spurs, and weights. Mortuary practices, generally thought to be related, include extended rather than flexed burial position, a situation analogous to that of the northern valley (Gifford and Schenck 1926; Lillard, Heizer, and Fenenga 1939; Moratto 1972).

Presence of "Early Man," although not found in direct association with extinct animals, is demonstrated by the frequency of chipped stone crescents and fluted points similar to those of the Clovis-Folsom Complex in the American Southwest. Although fluted points have been found near the shores of Tulare Lake, an area that has also produced surface finds of extinct mammal bone of Pleistocene age, the association is not substantiated by controlled excavations and remains speculative (Riddell and Olsen 1969). Most of the point collection had been acquired by D. Witt over a period of 30 years.

Under the direction of Wedel (1941), the Civil Works Administration, in conjunction with the Smithsonian Institution, initiated the first major excavations using stratigraphic controls. Investigations of CA-KER-39 and CA-KER-60 as well as several smaller sites near Buena Vista Lake produced evidence of two distinct cultural entities or occupation periods. Wedel lacked methods for dating these two entities by cross-comparison of the assemblages, he tentatively stated that the early occupation at Buena Vista Lake appeared to be temporally older and less developed than the Early Horizon (Windmiller Pattern) of the Delta region. He compared this early component to the Oak Grove or Milling Stone culture of the Santa Barbara area (Rogers 1939). He divided the later cultural entity into two distinct phases, both clearly distinguished from the earlier cultural phase by artifact types. Wedel (1941:144-145) estimated that neither of these cultural periods exceeded 1500 B.P. (years Before the Present). Later, other investigators proposed far earlier ages for these early occupations, with dates ranging from 2000 to 7000 B.P. (Baumhoff and Olmstead 1963, 1964; Heizer 1964; Meighan 1959).

Later investigations in 1963 and 1964 at CA-KER-116 near Buena Vista Lake produced materials similar to Wedel's early occupation. These materials occurred in the lower levels of the "upper deposit," while an even deeper cultural deposit yielded materials similar to those of the San Dieguito Complex. Artifacts included a chipped stone crescent, crude point fragments, and an atlatl spur. Radiocarbon age determinations on shell from the lowest cultural levels returned a date of circa 8200 B.P. (Fredrickson and Grossman 1966, 1977; Fredrickson 1967).

Despite the previously mentioned investigations, the prehistory of the southern San Joaquin Valley remains as yet poorly understood, without a tightly defined chronological sequence of cultural development.

Ethnology

Ethnographic literature is often uncertain in definition of cultural boundaries for Indian groups. Early displacement by white intrusion resulted in population shifts to avoid conflict with the Spanish, and later with the miners and settlers. The ravages of disease and warfare decimated the native people, further weakening cultural identity. Informants were often uncertain of original territories of the various tribal groupings.

The Southern Valley Yokuts were members of the Penutian language family which held all of the Central Valley, San Francisco Bay Area, and the Pacific Coast from Marin County to near Point Sur. The Yokuts differed from other ethnographic groups in California as they had true tribal divisions with group names. The project area was occupied by the Tachi. Each tribe spoke a particular dialect, common to its members, but similar enough to other Yokuts that they were mutually intelligible (Kroeber 1925; Wallace 1978).

Trade was well developed, with mutually beneficial interchange of needed or desired goods. Obsidian, rare in the San Joaquin Valley, was obtained by trade with Paiute and Shoshoni groups on the eastern side of the Sierra Nevada, where numerous sources of this material are located, and to some extent from the Napa Valley to the north. Shell beads, obtained by the Yokuts from coastal people, and acorns, rare in the Great Basin, were among many items exported to the east by Yokuts traders (Davis 1961).

Economic subsistence was based on the acorn, with substantial dependency on gathering and processing of wild seeds and other vegetable foods. The rivers, streams, and sloughs which formed a maze within the valley provided abundant food resources such as fish, shellfish, and turtles. Game, wild fowl, and small mammals were trapped and hunted to provide protein augmentation of the diet. In general, the eastern portion of the San Joaquin Valley provided a lush environment of varied food resources, with the estimated large population centers reflecting this abundance (Cook 1955; Baumhoff 1963).

Settlements were oriented along the water ways, with their village sites normally placed adjacent to these features for their nearby water and food resources. House structures varied in size and

shape (Latta 1949; Kroeber 1925). The housepit depressions ranged in diameter between three to eighteen meters.

Latta (1949:99) reported that a village of 200 to 300 Yokuts might have four or five large houses that were used for ten or twelve years or until a family member died, at which time the Indians burned the house in which the death had occurred. If a sick or aged person died outside the dwelling, the family did not burn the house. When a Northern Yokuts died, his body was cremated or buried in a flexed position. Southern tribes normally buried their dead, although they did cremate shamans, persons who died away from their village and, among the Tachi, persons of great importance.

The Yokuts experienced severe depopulation after contact with the Spanish and subsequent explores. The most devastating impacts of the Spanish colonization effort were not the result of military conflicts, but came from Old World diseases newly introduced to the native people.

Historical Background

An increasing number of Euro-American enter the San Joaquin Valley after 1824 accelerating cultural change and the loss of cultural integrity by the native peoples. Although cultural retention was apparent until the early 1900s, there was a gradual weakening of attachment to the old lifeways and greater adoption of white styles.

More significant in terms of cultural deterioration were the ravages of disease--in particular, the documented drastic disease epidemic of 1831-1833 (Cook 1955). Native people had no natural immunity to introduced diseases, and nearly 75 percent of the valley population succumbed during the early 1830s to an illness Cook and other authorities believe to have been malaria. Decimation of the valley people essentially destroyed the Yokuts culture, with only partial continuation possible.

Although the immediate effects of the Gold Rush overleapt the Southern Central Valley, the decline of mining was accompanied by a shift of white attention to the rich agricultural promise of the valley. The remaining Valley Yokuts people became pressured from the lands they held, usually those with highest farming potential, and driven into the mountains. White newcomers quickly recognized the agricultural promise of the valley and began an intensive alteration of the area that made it increasingly suitable for cultivation. Farmers and ranchers drained the marshes and lakes and established irrigation systems. Today, the valley floor, for the most part, bears little resemblance to its pre-contact condition. The oak groves are gone and lakes are dry. The vast marshes, once the refuge for enormous flocks of waterfowl, no longer exist. The grazing lands of the elk and antelope have become cultivated fields, producing a wide variety of crops. The native faunal community, with the exception of burrowing mammals, has been replaced by domestic livestock.

The early interior route used by the Spanish to travel from El Pueblo de Los Angeles to the San Francisco Bay Area, followed the routes of earlier antelope and Indian trails. This roadway, known to the early Hispanic inhabitants of the San Joaquin Valley as El Camino Viejo á Los Angeles, was traversed by ox-cart, with individuals stopping their teams at the various watering holes along the west side of the Central Valley. Later, portions of the trail were turned into wagon roads (Latta 1936).

When the railroad authorities refused to cooperate with the Southern Pacific, the officials of the railroad the Sn Joaquin Valley line westward, founding the town of Tulare as the local station in 1872. Visalia was then bypassed, but has become large enough so that it did not suffer from the railroad re-rote, and did eventually become a waystation on the Southern Pacific line. Tulare is a rare example of a city taking its name from a county name, not the other way around (Kyle 2002).

RESEARCH

A record search was conducted for the project area and at the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System (RS#22-333; Appendix 2).

There are no cultural resources, either prehistoric or historic, reported in the project area or within a ¼ mile radius of the project area. There is one report within the project area (#TU-01085), that covered the eastern edge of project area along Mooney Boulevard. Another study is immediately adjacent for the roadway to the north, Cartmill Road (#TU-00102).

NATIVE AMERICAN CONSULTATION

We assume that the City of Tulare will conduct any necessary Native American consultation on a government-to-government basis.

FIELD ASSESSMENT

Michael Lawson (resume, Appendix 1) completed a field survey of the project site on April 28, 2023 with a complete inspection of the proposed project site (Figure 3).

The survey area is level and dry, square in shape, and shows no signs of previous occupation. The soil is uniformly tan silty sand with very little stone component. Observed stone is granitic; quartz, quartzite, feldspar, and black mica. No pieces are larger than 5 mm in diameter. No rodent or other burrowing animal disturbance was observed and excavated soil near the roadway demonstrated only one strata of soil to a depth of 9 inches.

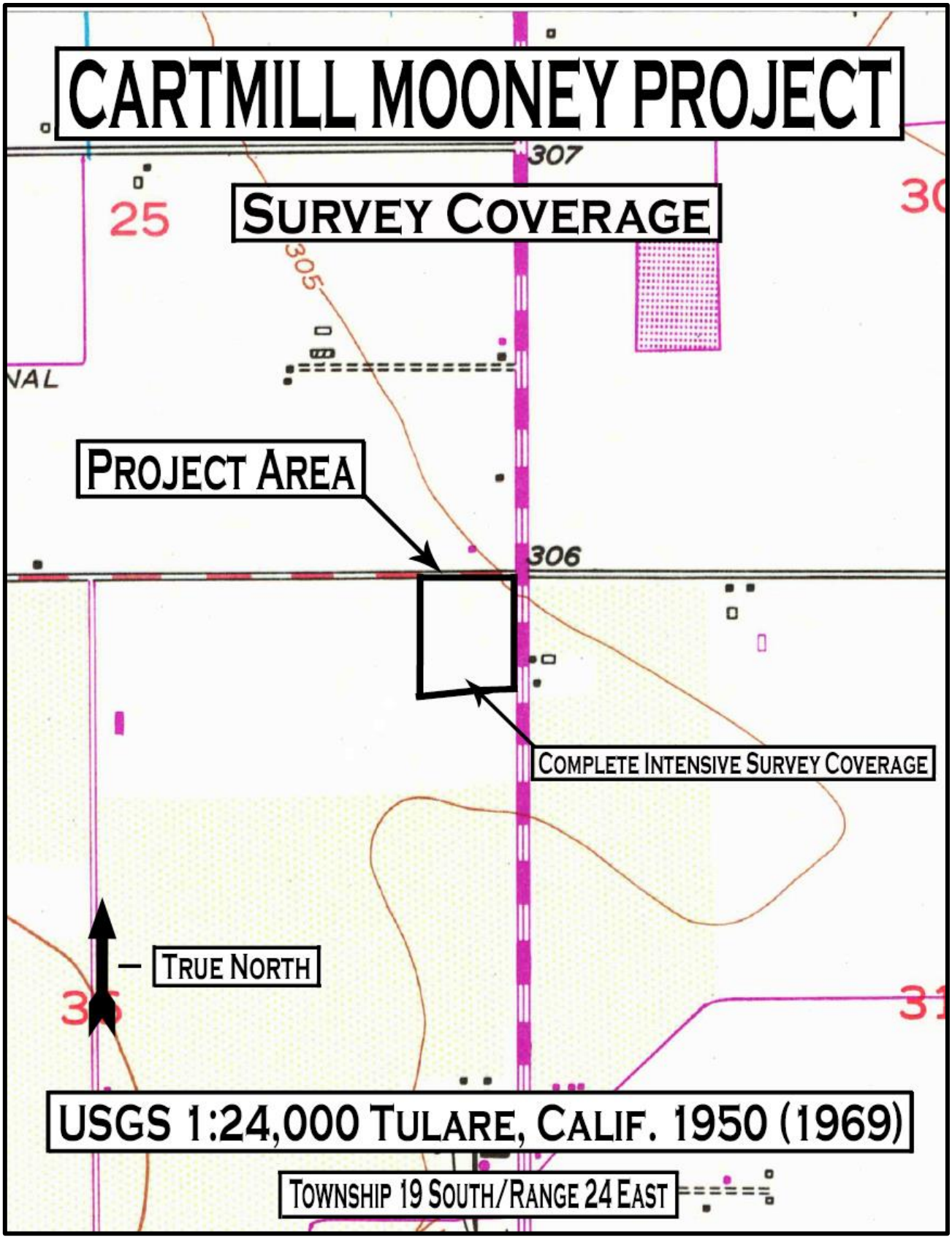

CARTMILL MOONEY PROJECT
SURVEY COVERAGE
PROJECT AREA
COMPLETE INTENSIVE SURVEY COVERAGE
TRUE NORTH
USGS 1:24,000 TULARE, CALIF. 1950 (1969)
TOWNSHIP 19 SOUTH/RANGE 24 EAST
307
306
305
25

Figure 3

Vegetation was dominated by introduced grasses with a few examples of native plant species, such as datura and wild radish present. No trees are currently growing in the survey area. Vegetation is drying out with lack of precipitation in recent weeks, allowing acceptable soil visibility throughout the survey area.

Parallel transects no wider than 10 meters were walked to provide adequate inspection of the entire parcel.

No evidence for the presence of cultural resources, prehistoric or historic period, was observed during the field survey.

CONCLUSIONS

For the purposes of CEQA, we conclude that there will be no impact to important cultural resources from implementation of the project.

RECOMMMENDATIONS

There is always a possibility that a site may exist in the project and be obscured by vegetation, siltation or historic activities, leaving no surface evidence. If artifacts, exotic rock, shell or bone are uncovered during the construction, work should stop in that area immediately. A qualified archeologist should be contacted to examine and evaluate the deposit, and should consult with the appropriate Native American group(s).

Discovery of Human Remains

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area suspected to overlie adjacent remains until the Tulare County Coroner has determined that the remains are not subject to any provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

If the Tulare County Coroner determines that the remains are not subject to his or her authority and if the County Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC).

After notification, the NAHC will follow the procedures outlined in Public Resources Code Section 5097.98, that include notification of most likely descendants (MLDs), and recommendations for treatment of the remains.

REFERENCES

Baumhoff, Martin A.

1963 Ecological Determinants of Aboriginal California Populations. *University of California Publications in American Archaeology and Ethnology* 49(2): 155-236. Berkeley.

Baumhoff, Martin A., and David Olmsted

1963 Radiocarbon support for Glottochronology. *American Anthropologist* 65(2): 278-284.

1964 Notes on Palaihnihan Culture History: Glottochronology and Archaeology. Studies in California linguistics, edited by William Bright, pp. 1-12. *University of California Publications in Linguistics* 34. Berkeley.

Beardsley, Richard K.

1954 Temporal and Areal Relationships in Central California Archeology (parts 1 and 2). *University of California Archaeological Survey Reports* 24, 25. Berkeley.

Cook, Sherburne F.

1960 Colonial Expeditions to the Interior of California: Central Valley 1800-1820. *University of California Anthropological Records* 16(6): 239-292. Berkeley.

1955a The Aboriginal Populations of the San Joaquin Valley, California. *University of California Press Anthropological Records* 16(2). Berkeley.

1955b The Epidemic of 1830-33 in California and Oregon. *University of California Publications in American Archaeology and Ethnology* 43(3): 303-326. Berkeley.

Davis, James T.

1961 Trade Routes and Economic Exchange among the Indians of California. *University of California Archaeological Survey Reports* 54:1-71. Berkeley.

Fredrickson, David A.

1967 Additional C-14 dates for Water Resources Investigations at Buena Vista Lake. *Society for California Archaeology Newsletter* 1(5).

Fredrickson, David A., and J. Grossman

1966 Radiocarbon Dating of an Early Site at Buena Vista Lake, California. Paper read before the annual meeting of the Society for American Archaeology, Reno.

1977 A San Dieguito Component at Buena Vista Lake, California. *The Journal of California Anthropology* 4(2): 173-190.

Frickstad, Walter
1955 *A Century of California Post Offices*. Pacific Rotapress Printing Company, Oakland.

Gifford, E. W., and W. E. Schenck
1926 Archaeology of the Southern San Joaquin Valley, California. *University of California Publications in American Archaeology and Ethnology*, Vol. 23, No. 1. Berkeley.

Gudde, Erwin
1969 *California Place Names* (Third Edition). University of California Press, Berkeley.

Hoover, Mildred, Hero E. Rensch, Ethel G. Rensch (William N. Abeloe, editor)
1970 *Historic Spots in California* (Third Edition). Stanford University Press, Stanford.

Kroeber, Alfred L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology Bulletin* 78. Washington, D.C.

Latta, Franklin F.
1936 *El Camino Viejo á Los Angeles: The Oldest Road of the San Joaquin Valley*. Reprinted 2006, Bear State Books, Exeter, CA.

1949 *Handbook of the Yokuts Indians*. Bear State Books, Oildale, California.

Lillard, Jeremiah B., Robert F. Heizer and Franklin Fenenga
1939 An Introduction to the Archaeology of Central California. *Sacramento Junior College, Department of Anthropology Bulletin* 2. Sacramento.

Lillard, Jeremiah B. and William K. Purves
1936 The Archeology of the Deer Creek-Cosumnes Area, Sacramento County, California. *Sacramento Junior College, Department of Anthropology Bulletin* 1.

Meighan, Clement W.
1959 California Cultures and the Concept of an Archaic Stage. *American Antiquity* 24(3): 289-318.

Meyer, Jack and Jeffery S Rosenthal
2008 A Geoarchaeological Overview and Assessment of Caltrans District 3: Cultural Resources Inventory of Caltrans District 3 Rural Conventional Highways. Ms. on file, Northeast Information Center, California State University, Chico.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Inc., New York.

Riddell, Francis A. and William H. Olsen
1969 An Early Man Site in the San Joaquin Valley, California. *American Antiquity* 34(2): 121-131. Washington, D.C.

Rosenthal, Jeffery S., and Jack Meyer
2004 Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways, Volume III: Geoarchaeological Study Landscape Evolution and the Archaeological Record of Central California. Ms. on file, Central California Information Center, California State University, Stanislaus.

Rogers, Malcolm J.
1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. *San Diego Museum Papers* 3. San Diego.

Schenck, W. Egbert and Elmer Dawson
1929 Archaeology of the Northern San Joaquin Valley. *University of California Publications in American Archaeology and Ethnology* 25(4): 289-413. Berkeley.

Smith, Wallace
1960 *Garden of the Sun*. Eighth edition. Privately printed.

Wallace, William J.
1978 Southern Valley Yokuts. In: *Handbook of North American Indians: California*, Volume 8, edited by Robert F. Heizer, pp. 448-461. William G. Sturtevant, general editor. Smithsonian Institution, Washington, D. C.

Wedel, Waldo R.
1941 Archaeological Investigations at Buena Vista Lake, Kern County, California. *Bureau of American Ethnology Bulletin* 130. Washington, D.C.

APPENDIX 1

Resumes

PEAK & ASSOCIATES, INC.
RESUME

MELINDA A. PEAK **January 2023**
Senior Historian/Archeologist
3941 Park Drive, Suite 20 #329
El Dorado Hills, CA 95762
(916) 939-2405

PROFESSIONAL EXPERIENCE

Ms. Peak has served as the principal investigator on a wide range of prehistoric and historic excavations throughout California. She has directed laboratory analyses of archeological materials, including the historic period. She has also conducted a wide variety of cultural resource assessments in California, including documentary research, field survey, Native American consultation and report preparation.

In addition, Ms. Peak has developed a second field of expertise in applied history, specializing in site-specific research for historic period resources. She is a registered professional historian and has completed a number of historical research projects for a wide variety of site types.

Through her education and experience, Ms. Peak meets the Secretary of Interior Standards for historian, architectural historian, prehistoric archeologist and historic archeologist.

EDUCATION

M.A. - History - California State University, Sacramento, 1989
Thesis: *The Bellevue Mine: A Historical Resources Management Site Study in Plumas and Sierra Counties, California*
B.A. - Anthropology - University of California, Berkeley

PROJECTS

In recent months, Ms. Peak has completed several determinations of eligibility and effect documents in coordination with the Corps of Engineers for projects requiring federal permits, assessing the eligibility of a number of sites for the National Register of Historic Places.

She has also completed historical research projects on a wide variety of topics for a number of projects including the development of navigation and landings on the Napa River, wineries, farmhouses dating to the 1860s, bridges, an early roadhouse, Folsom Dam and a section of an electric railway line.

In recent years, Ms. Peak has prepared a number of cultural resource overviews and predictive models for blocks of land proposed for future development for general and specific plans. She has been able to direct a number of surveys of these areas, allowing the model to be tested.

She served as principal investigator for the multi-phase Twelve Bridges Golf Club project in Placer County. She served as liaison with the various agencies, helped prepare the historic properties treatment plan, managed the various phases of test and data recovery excavations, and completed the final report on the analysis of the test phase excavations of a number of prehistoric sites. She is currently involved as the principal investigator for the Teichert Quarry project adjacent to Twelve Bridges in the City of Rocklin, coordinating contacts with Native Americans, the Corps of Engineers and the Office of Historic Preservation.

Ms. Peak has served as project manager for a number of major survey and excavation projects in recent years, including the many surveys and site definition excavations for the 172-mile-long Pacific Pipeline proposed for construction in Santa Barbara, Ventura and Los Angeles counties. She also completed an archival study in the City of Los Angeles for the project. She also served as principal investigator for a major coaxial cable removal project for AT&T.

Additionally, she completed a number of small surveys, served as a construction monitor at several urban sites, and conducted emergency recovery excavations for sites found during monitoring. She has directed the excavations of several historic complexes in Sacramento, Placer and El Dorado Counties.

Ms. Peak is the author of a chapter and two sections of a published history (1999) of Sacramento County, *Sacramento: Gold Rush Legacy, Metropolitan Legacy*. She served as the consultant for a children's book on California, published by Capstone Press in 2003 in the Land of Liberty series.

PEAK & ASSOCIATES, INC.
RESUME

MICHAEL LAWSON **January 2023**
Archeological Field Director
3941 Park Drive, Suite 20-329
El Dorado Hills, CA 95672
(916) 939-2405

PROFESSIONAL EXPERIENCE

Mr. Lawson has compiled an excellent record of undertaking excavation and survey projects for both the public and private sectors over the past thirty years. He has conducted a number of surveys throughout northern and central California and Hawaii, as well as serving as an archeological technician, site monitor, crew chief and field director for a number of excavation projects.

Mr. Lawson is qualified by the Bureau of Land Management as a field director for archeological surveys and excavations. In 2022, he led teams as the field director on several field surveys in the Sierras for the proposed undergrounding of PG&E transmission lines, dealing with both historic and prehistoric cultural resources. Lawson works for several firms based in the Sacramento Area and Bay Area.

EDUCATION

B.A. - Anthropology - California State University, Sacramento

Special Course: Comparative Osteology. University of Tennessee, Knoxville. Forensic Anthropology Center. January 2018.

The special course included: intensive lab and outdoor study with human example from outdoor research facility, including typical and non-metric examples, compared with fifty non-human species most commonly confused with human remains. Work at the outdoor research facility "The Body Farm" study included survey, photography, collection, and identification of faunal and human bone fragments, with a Power Point presentation discussing finds.

EXPERIENCE

- Extensive monitoring of open space, streets and project development areas for prehistoric period and historic period resources. Areas monitored include Sutter Street in Folsom; Mud Creek Archeological District in Chico; Camp Roberts, San Luis Obispo County; Avila Beach, San Luis Obispo County; Edgewood Golf Course, South Lake Tahoe; Davis Water Project, Davis; Star Bend levee section, Sutter County; Feather River levees, Sutter County; Bodega Bay, Sonoma County; San Jose BART line extension, Santa Clara County; and numerous sites for PG&E in San Francisco.

- Over thirty years of experience working in cultural resource management, volunteer, and academic settings in California historic, proto-historic, and prehistoric archaeology.

- Expertise in pedestrian survey, excavation, feature (including burial) exposure, laboratory techniques, research. Field positions include field director, assistant field director, crew chief and lead technician.

APPENDIX 2

SSJVIC Record 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

9/6/2022

Robert Gerry
Peak & Associates, Inc.
3941 Park Drive, Suite 30-329
El Dorado Hills, CA 95762

Re: Cartmill-Mooney Subdivision
Records Search File No.: 22-333

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Tulare USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.25 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ GIS data

Resources within project area:	None
Resources within 0.25 mile radius:	None
Reports within project area:	TU-01085
Reports within 0.25 mile radius:	TU-00102, 01498

Resource Database Printout (list):	☐ enclosed	☐ not requested	☒ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☐ not requested	☒ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☒ not requested	☐ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

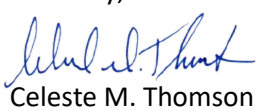
The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

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. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

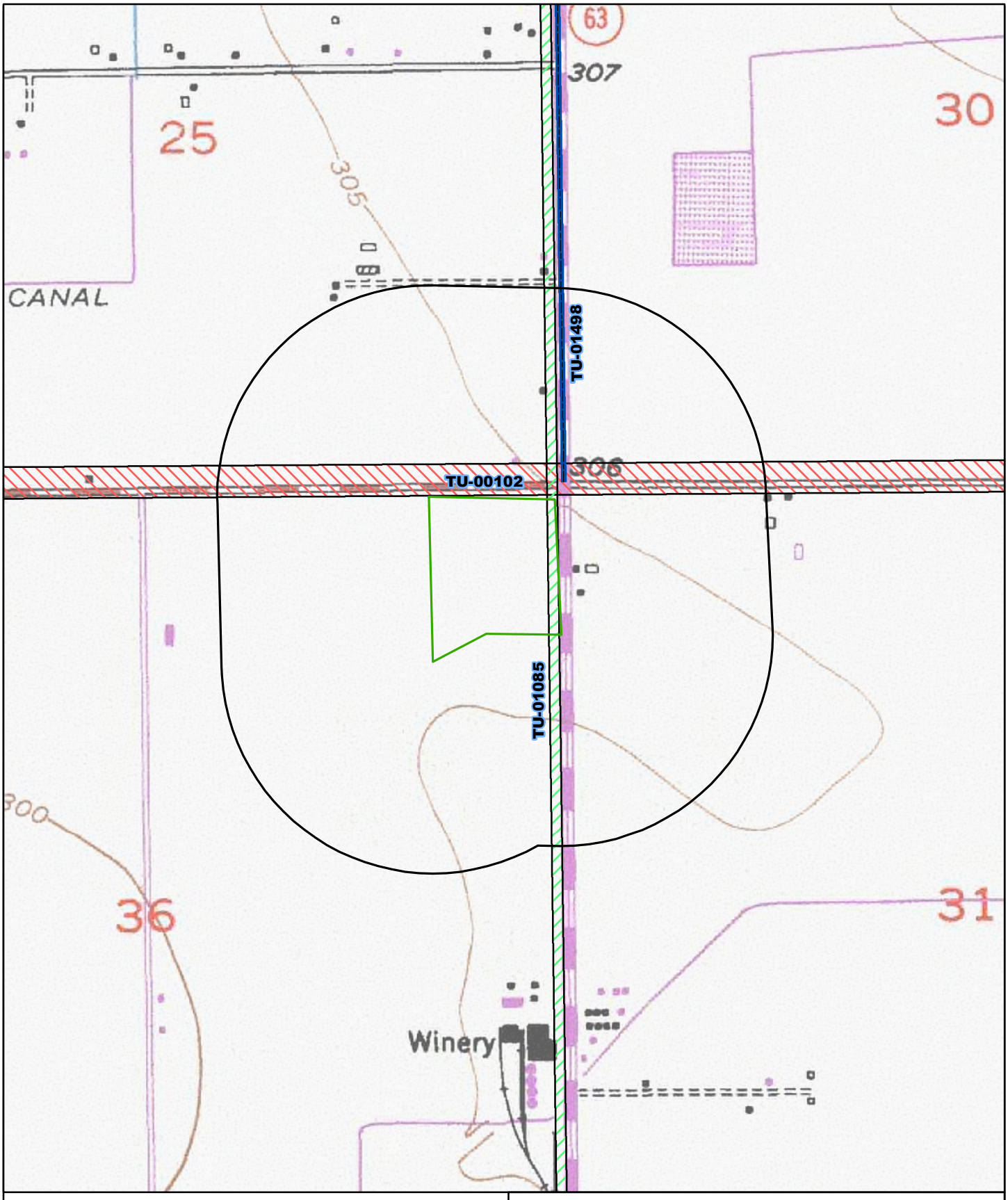
Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,



Celeste M. Thomson
Coordinator



May depict confidential cultural resource locations.
Do not distribute.

0 0.05 0.1 0.2 Miles

0 0.075 0.15 0.3 Kilometers

N

Project Area

Record Search radius

SSJV Information Center Record Search 22-333
Requester: Robert Gerry, Peak & Associates, Inc.
Project Name: Cartmill-Mooney Subdivision
USGS 7.5' Quad(s): Tulare
County: Tulare

Report List

SSJVIC Record Search 22-333

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
TU-00102	NADB-R - 1140863	1995	Hatoff, Brian, Voss, Barb, Waechter, Sharon, Wee, Stephen, and Benté, Vance	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project	Woodward-Clyde Consultants	54-002160
TU-01085		1999	Dodd, Douglas W.	Historical Architectural Survey Report/Historic Resource Evaluation Report for Roadbed Rehabilitation and Intersection Upgrades on State Route 63 Between Tulare and Visalia, Tulare County	California Department of Transportation, District 6	
TU-01498	Submitter - Contract No. 06A1106; Submitter - Expenditure Authorization No. 06-0A7408	2010	Leach-Palm, Laura, Brandy, Paul, King, Jay, Mikkelsen, Pat, Seil, Libby, Hartman, Lindsay, and Bradeen, Jill	Cultural Resources Inventory of Caltrans District 6 Rural Conventional Highways in Fresno, Western Kern, Kings, Madera, and Tulare Counties.	Far Western Anthropological Research Group, Inc.	54-000580, 54-001091, 54-001479, 54-004595, 54-004611, 54-004614, 54-004619, 54-004629, 54-004630

Appendix D

VMT Assessment

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: July 06, 2023

TO: Mario A. Anaya, AICP

FROM: Ambarish Mukherjee, P.E., AICP

SUBJECT: Cartmill-Mooney Residential Project Vehicle Miles Traveled Analysis Memorandum

LSA has prepared this Vehicle Miles Traveled (VMT) Analysis Memorandum (Memo) for the proposed residential development (project) that will be located at the southwest corner of Mooney Boulevard and Cartmill Avenue within the City of Tulare (City). The project proposes to develop 130 single family dwelling units.

BACKGROUND

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project generated VMT.

The City adopted its VMT guidelines (guidelines) through a memorandum (memo) "Implementing Vehicle Miles Traveled Thresholds in CEQA Analysis Required by SB 743", June 26, 2020. The memo contains the VMT screening criteria to determine whether a project could be screened out from a detailed VMT analysis, and analysis approach/methodology for non-screened development.

Project Screening Determination

The guidelines provide multiple screening criteria for land use projects based on project trip generation and project land use type. The project was compared with the screening criteria established guidelines to check if the project can be screened out. Following is a brief description about the project in relation with the project screening criteria:

- Daily Vehicle Trip thresholds: The guidelines established 110 or less weekday daily trips as the screening threshold. Therefore, if the project trip generation is less than 110 daily trips based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, latest edition, the project can be screened out of a detailed VMT analysis. The project generates 1,226 daily vehicle trips which is greater than 110and therefore the project cannot be screened out using this criterion.
- Transit Priority Area Screening: The project is not located within a ½ mile of existing major transit stop (Transit Priority Area), therefore this screening criteria does not apply to the project.

- Affordable Housing: Projects with 100% affordable housing in infill locations can be screened out of a detailed VMT analysis. The project is not proposing any affordable housing and therefore does not meet this screening criterion.
- Locally serving retail: Projects that can be categorized as locally serving retail can be screened out of a detailed VMT analysis. The project is a single family residential development and therefore this screening criterion is not applicable for the project.

  Map-based screening: The memo established that residential and office projects that are located within low VMT areas on a map or maps generated for cities or regions using VMT data modeling can be screened out of a VMT analysis. Based on the screening map from the memo, the project cannot be screened out of a VMT analysis because it is not located within a low VMT area.

As such, the project could not be screened out of a VMT analysis because it does not meet any of the city's VMT screening criteria. Therefore, a detailed VMT analysis was conducted to assess the project's VMT impact.

Detailed VMT Analysis Methodology

The memo recommends use of regional models to estimate project VMT and as such Tulare County Association of Governments (TCAG) travel demand model (TCAG Model) was used to develop the low VMT screening map presented in the memo. The memo established use of trip distance as the VMT evaluation metric for land use projects. Based on LSA's understanding the trip distance used in the memo represents VMT per capita for the region. Also, the memo suggests use of Tulare County as the region and 15% as the threshold, consistent with Office of Planning and Research (OPR) recommendation. Therefore, if the project VMT per capita is greater than 85% of baseline Tulare County VMT per capita, the project will have a significant VMT impact.

The memo established 11.48 miles as the baseline Tulare County VMT per capita/trip distance and 9.76 miles (85% of 11.48) as the regional threshold. However, the baseline average and threshold presented in the memo were developed using 2018 Regional Transportation Plan (RTP) TCAG model. TCAG has recently updated their model to 2022 RTP. LSA used 2022 RTP model to develop project VMT metrics. Therefore, to be consistent, a "no project" baseline model run was conducted to develop the average VMT per capita/trip distance for Tulare County and the corresponding threshold (85% of regional average). Based on the "no project" baseline model run using 2022 RTP model, the regional average VMT per capita/trip distance was estimated at 13.2 and the corresponding threshold would be 11.2 (85% of 13.2).The following is a detailed description of the VMT analysis:

Project Traffic Analysis Zone Update

To calculate the project VMT, the first step in preparation of this analysis was to update the traffic analysis zone (TAZ) in the model that includes the project area. The TCAG model includes the ability to add or split zones. In order to isolate the project VMT, a new zone was created in the model. The project households were included in the newly created zone for modeling purposes. No project-specific network modifications were required for the model run. A model run was conducted for the existing/base scenario with updated model inputs. The outputs from this updated model run were

used to calculate the project VMT per capita using same methodology as the regional average/threshold.

Model Runs and Project VMT Estimation

Baseline model run was conducted for this updated with project model scenario after incorporating the project land use as described above. Project VMT was estimated from TCAG model run using mode choice trip matrices and by multiplying them with the final assignment skim matrices. The extracted project homebased VMT was divided by the estimated project population to develop the project VMT per capita/trip distance.

VMT Analysis

Project VMT Impact

Table A summarizes the project and city's threshold VMT per capita/trip distance for the base year. As shown in Table A, the project's VMT per capita is 7.2 percent lower than the city's threshold. Therefore, based on the guidelines, the project will not have a significant VMT impact.

Detailed VMT calculation for the project is included in Appendix A.

Table A: Base Year Project and Threshold VMT per Capita/trip distance

2015	Cartmill Mooney Residential (Project)	City of Tulare Threshold *	Difference	% Difference
VMT per capita/trip distance	10.4	11.2	-0.8	-7.2%

* *Estimated using "no project" TCAG base year (2015) model runs*

Conclusion

Based on the VMT analysis as shown in above table A, the project doesn't constitute a significant impact for "project generated VMT".

ATTACHMENTS

Appendix A: VMT Calculation Worksheet

LSA

Appendix A - VMT Calculation Worksheet

Cartmill Mooney Residential, City of Tulare - VMT Analysis

2015	Cartmill Mooney Residential (Project)	Tulare County (regional average)	City of Tulare Threshold (85% of regional average)
Households	130	145,902	
Population	385	407,291	
Employment	-	172,776	
Total Home-based (HB) VMT	3,992	5,359,757	
HB VMT per capita/trip distance	10.4	13.2	11.2

** Estimated using "no project" TCAG base year (2015) model run*