Pecan Tozer Residential Project

Draft Initial Study / Mitigated Negative Declaration

April 2025

SCH No. XXX

Prepared by:

The City of MADERA

Planning Department
205 W. 4th Street
Madera, CA 93637

Table of Contents

Chapter 1 Introduction

Crawford & Bowen Planning, Inc. has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) on behalf of the City of Madera to address the environmental effects of the Pecan Tozer Residential Project (Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et.seq. The City of Madera is the CEQA lead agency for this proposed Project.

The site and the proposed Project are described in detail in the Project Description.

1.1 Regulatory Information

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

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

1.2 Document Format

This IS/MND contains five chapters plus appendices. Introduction, provides an overview of the proposed Project and the CEQA process. Project Description, provides a detailed description of proposed Project components. Chapter 3 Determination identifies the environmental factors potentially affected based on the analyses contained in this IS and includes with the Lead Agency's determination based upon those analyses.

Determination

Environmental Factors Potentially Affected

As indicated by the discussions of existing and baseline conditions, and impact analyses that follow in this Chapter, environmental factors not checked below would have no impacts or less than significant impacts

resulting from the project. Environmental factors that are checked below would have potentially significant impacts resulting from the project. Mitigation measures are recommended for each of the potentially significant impacts that would reduce the impact to less than significant.

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

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

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

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

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

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

1.3 Determination

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

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

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

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

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

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

_____ _____

Signature Date

_____

Printed Name/Position

Impact Analysis, presents the CEQA checklist and environmental analyses for all impact areas, mandatory findings of significance, and feasible mitigation measures, if applicable. If the proposed Project does not have the potential to significantly impact a given issue area, the relevant section provides a brief discussion of the reasons why the impact is anticipated to be less than significant or why no impacts are expected. If the proposed Project could have a potentially significant impact on a resource, the issue area discussion provides a description of potential impacts, and appropriate mitigation measures and/or permit requirements that would reduce those impacts to a less than significant level. Mitigation Monitoring and Reporting Program (MMRP), provides the proposed mitigation measures, implementation timelines, and the entity/agency responsible for ensuring implementation.

The Air Quality, Greenhouse Gas and Energy Technical Assessment is provided in Appendix A, The Biological Resource Evaluation report is provided in Appendix B, the Phase I Cultural Resource Survey Report is provided in Appendix C, and the Vehicle Miles Traveled Analysis is provided in Appendix D, at the end of this document.

Chapter 2 Project Description

2.1 Project Background

2.1.1 Project Title

Crown Construction: Pecan Tozer III Residential subdivision Project

2.1.2 Lead Agency Name and Address

City of Madera
Planning Department
205 W. 4th Street
Madera, CA 93637

2.1.3 Contact Person and Phone Number

Lead Agency Contact

Robert Smith
Senior Planner
City of Madera
559-661-5430

2.1.4 Project Location

The proposed Project site is located north and east of Road 28, and west of Robbins Lane in the southeastern portion of the City of Madera, less than 500 feet northeast of SR 99, and approximately 1.1 miles east of SR 145 (see

Figure 2-1). The proposed site is located within T11S R18E S29 and consists of one land parcel, APN 011-370-005, for a total of approximately 29 acres. The site currently consists of an irrigated and maintained almond orchard.

2.1.5 Project Sponsor

Joseph Crown
Crown Homes
5320 E. Pine Avenue
Fresno, CA 93727

2.1.6 General Plan Designation

The Project site is within the City of Madera limits. The site is designated by the City of Madera's General Plan as MD (Medium Density Residential), such as the proposed Project. The residential units planned as part of the proposed Project are within the allowed density range.

2.1.7 Zoning

The Project site is currently zoned by the City of Madera as Planned Development (6000), which is defined as one unit for each 6,000 sq. ft.

2.1.8 Description of Project

Project Background and Purpose

The proposed Project intends to provide single-family residential housing for the residents of the City of Madera in a growing part of the City.

Project Description

The proposed Project consists of development of 168 single-family residential units on an approximately 29-acre site in the southeastern part of the City of Madera. The proposed Project also includes associated improvements such as internal access roads, street lighting, and landscaping, as well as a four-acre detention basin and park (see Figure 2-3). Site access will be along Road 28 at three points.

To accommodate the Project a Tentative Subdivision Map approval for the entire site will be needed. The Project site is currently zoned and designated in the General Plan for residential uses by the City of Madera. Project development is expected to begin in mid 2025.

2.1.9 Site and Surrounding Land Uses and Setting

Project Setting

The proposed Project site is located north and east of Road 28, and west of Robbins Lane near the eastern edge of the City limits of Madera, on APN 011-370-005. The proposed Project site is located in the

southeastern part of the City of Madera, in a mix of urban and rural area, surrounded by rural residential housing, vacant/disturbed land and agricultural land further south. Single-family residences exist to the east, north and further northwest of the site, with vacant land and roads located to the south. Vacant/disturbed land also exists to the north, with roadways, vacant land, a park and a railroad to the west. State Route (SR) 99 is to the west of the site, with rural commercial, rural residences and a church immediately west of SR 99. The site can be characterized as agricultural land, active with almond orchards.

Table 2-1 Existing Uses, General Plan Designations, and Zone Districts of Surrounding Properties

Direction from Project Site	Existing Use	General Plan Designation	Zone District
North	Vacant/disturbed land, rural residences	MD Medium Density Residential	Residential (PZ-PD 4500 & PD 6000)
East	Rural Residences	MD Medium Density Residential	Residential (PZ-PD 4500)
South	Agricultural	LD Low Density Residential, C Commercial	Residential (PD 6000)
West	Road 28 Park, Vacant/disturbed land	C Commercial	C1 Light Commercial, CH Highway Commercial

See Figure 2-4 and Figure 2-5 for the zoning and general plan designations, respectively.

2.1.10 Other Public Agencies Whose Approval May Be Required

- San Joaquin Valley Air Pollution Control District (SJVAPCD)
- California Regional Water Quality Control Board
- Madera County LAFCO

2.1.11 Consultation with California Native American Tribes

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

Letters requesting consultation from tribes were sent out to tribes on February 14th, 2024. City of Madera has not received any written correspondence from a Tribe pursuant to Public Resources Code Section 21080.3.1 requesting notification of proposed Project.

Figure 2-1 Regional Location

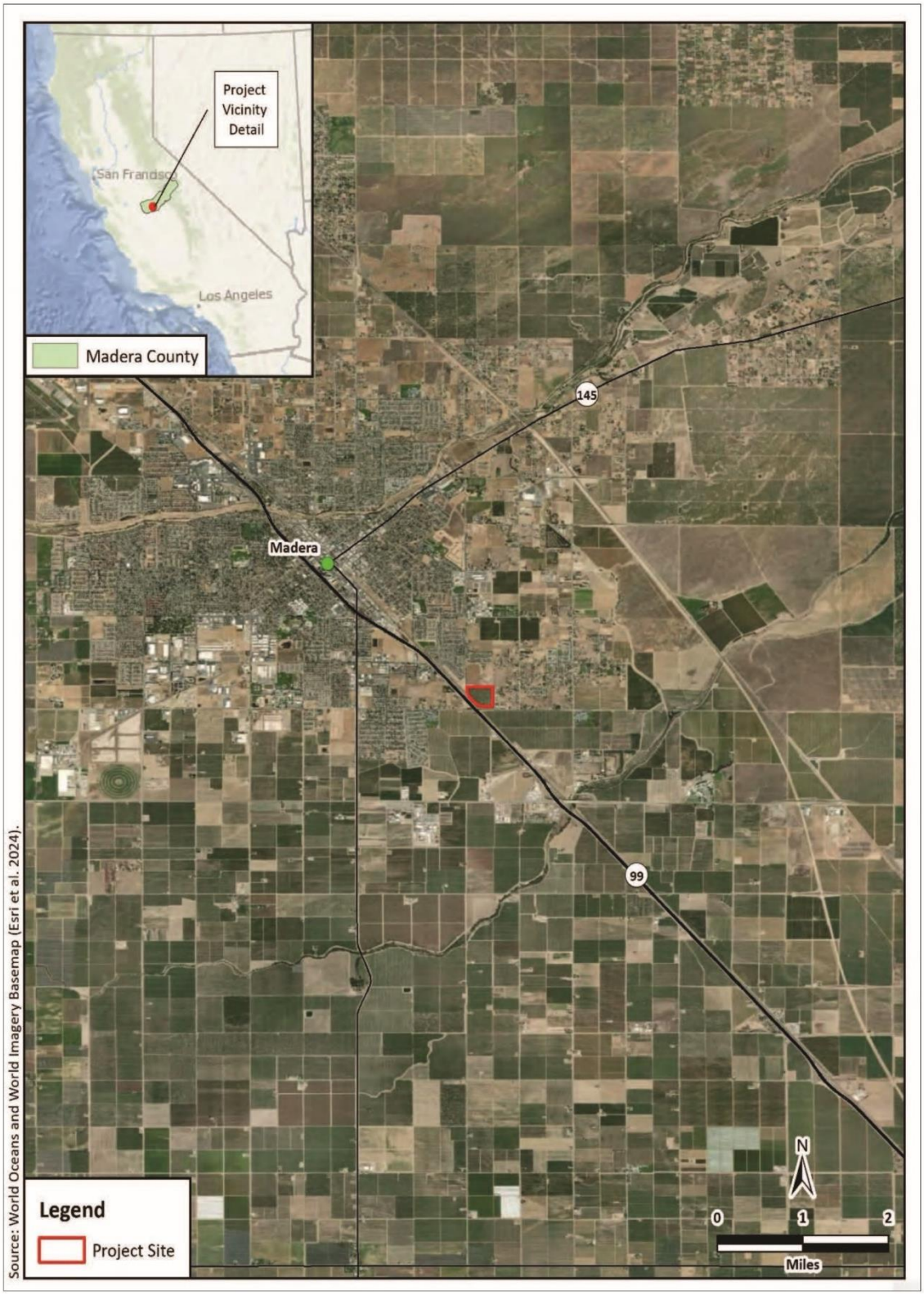


Figure 2-2 Vicinity Map

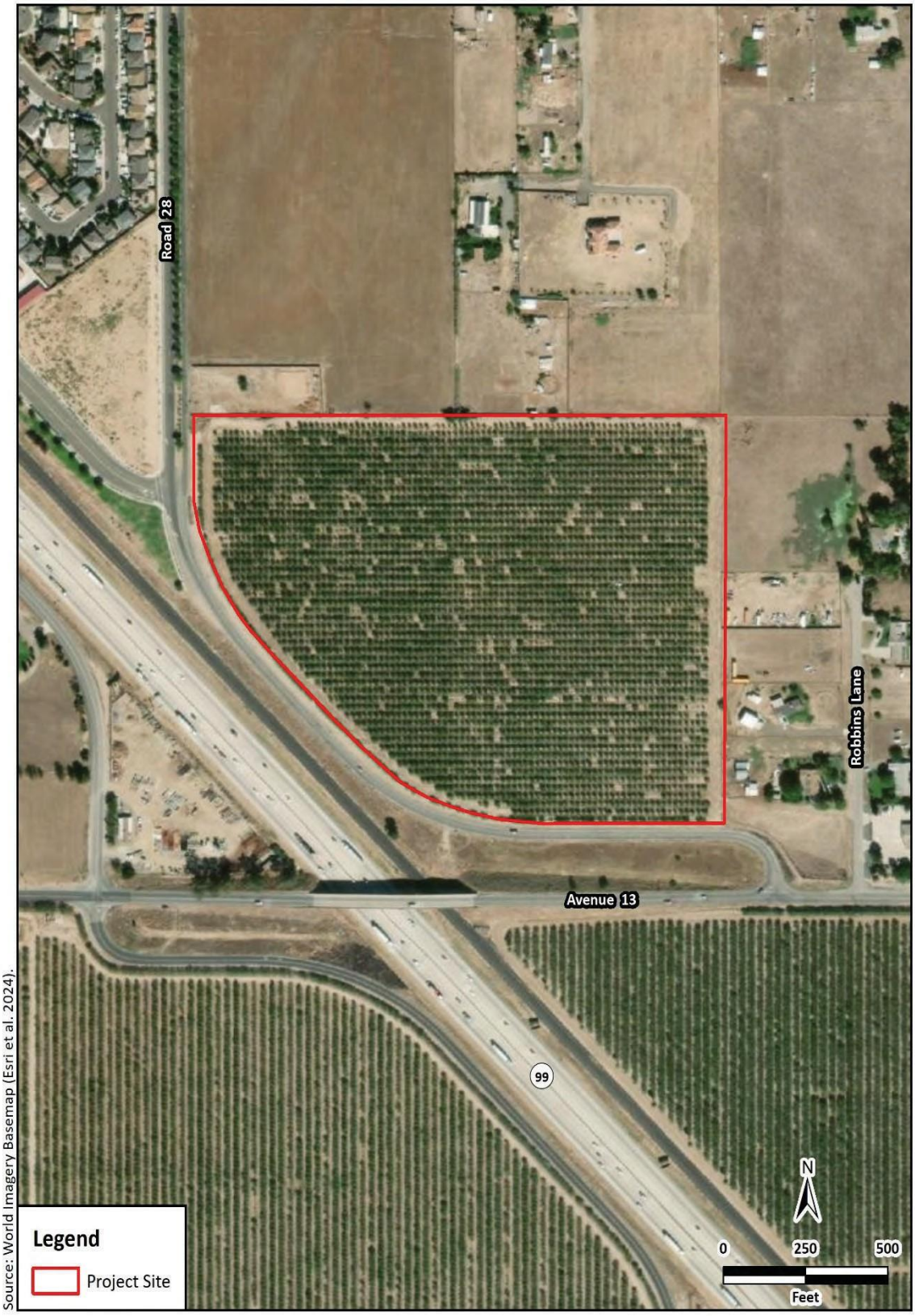
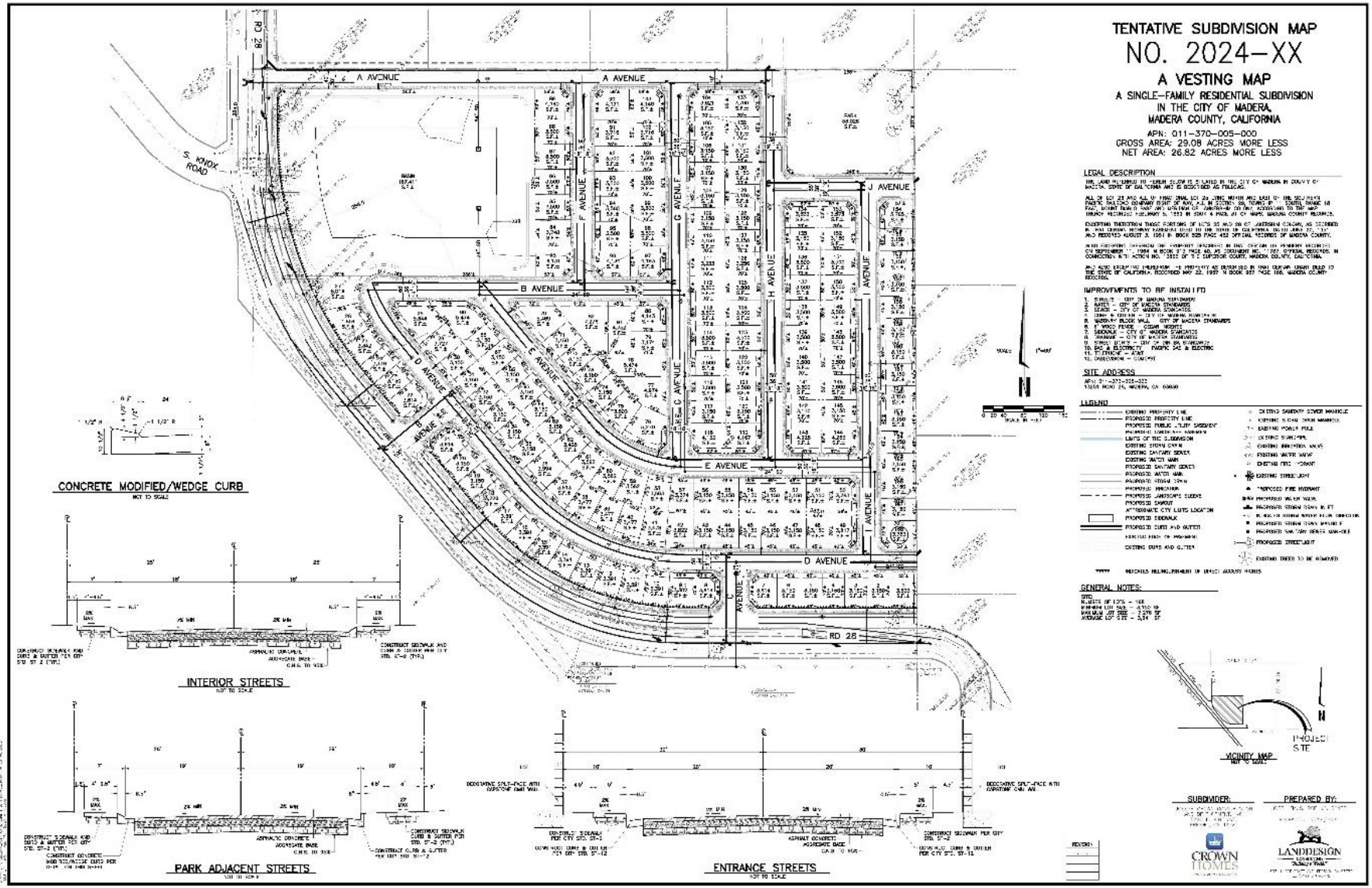


Figure 2-3 Site Map



Chapter 3 Determination

3.1 Environmental Factors Potentially Affected

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

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

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

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

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

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

No Impact. This category applies when a project would not create an impact in the specific environmental issue area. "No Impact" answers do not require a detailed explanation if they are adequately supported by the information sources cited by the lead agency, which show that the impact does not apply to the specific project (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where

it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

3.2 Determination

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

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

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

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

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

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

_____ _____
Signature Date

_____
Printed Name/Position

Chapter 4 Impact Analysis

4.1 Aesthetics

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

4.1.1 Environmental Setting

The City of Madera is located in central Madera County on the east side of the San Joaquin Valley floor. The City of Madera is characterized by flat terrain of approximately 250 to 275 feet above mean sea level. The City is approximately 15 miles from the Sierra Nevada foothills located to the east.

The proposed Project site is located north and east of Road 28, and west of Robbins Lane in the near the eastern edge of the City limits of Madera, and consists of an active almond orchard.

The aesthetic features in the proposed Project area are relatively uniform; consisting primarily of rural residences and vacant or disturbed land. There are no scenic resources or scenic vistas in the area. State Highway 99 is located less than 500 feet to the west.

4.1.2 Impact Assessment

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

The proposed Project consists of development of 168 single-family residential units on an approximately 29-acre site in the southeastern part of the City of Madera. The proposed Project includes associated improvements such

as access roads, street lighting, and landscaping, as well as a detention basin and park. The proposed Project site is located north and east of Road 28, and west of Robbins Lane in the near the eastern edge of the City limits of Madera, on APN 011-370-005.

The proposed residential development is located in a growing part of the City of Madera and will be consistent with the surrounding visual character which consists of single family and rural residential developments, and vacant/disturbed land. The City of Madera General Plan does not identify or designate any scenic vistas in the Project area. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. The Project is located in an area of minimal topographic relief, and views of the site are easily obscured by buildings, fences, other structures and trees. Neither the Project area nor any surrounding land use contains features typically associated with scenic vistas (e.g., ridgelines, peaks, overlooks).

The proposed structures will also conform to design standards set forth by the City's General Plan and Zoning Ordinance. Construction activities will be visible from the adjacent roadsides; however, the construction activities will be temporary in nature and will not affect a scenic vista. The impact will be ***less than significant***.

Mitigation Measures: None are required.

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

Less than Significant Impact. According to the California Department of Transportation Scenic Highway Mapping System, there are no state designated or eligible scenic highways within the immediate proximity to the Project site.[1] In addition, no scenic highways or roadways are listed within the Project area in the City of Madera's General Plan or Madera County's General Plan. Based on the National Register of Historic Places (NRHP) and the City's General Plan, no historic buildings exist on the Project site. The proposed Project would not damage any trees, rock outcroppings or historic buildings within a State scenic highway corridor. Any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

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

The proposed Project includes development of 168 single-family residences on an approximately 29-acre site, including associated roads, landscaping, and lighting, as well as a detention basin and park. The structures will conform to design standards set forth by the City's General Plan and Zoning Ordinance. The proposed Project site is located in an area that is substantially surrounded by urban and rural residential uses and will not result in a use that is visually incompatible with the surrounding area.

The site is visible from surrounding residences and from vehicles traveling along adjacent streets. However, the proposed Project site is planned for residential housing according to the City's General Plan and will be similar in visual character to the existing area, as similar urban uses are found in the area and throughout both rural and

[1] California Department of Transportation. California Scenic Highway Mapping System. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed October 2024.

urban parts of the Central Valley. As such, the proposed Project will not substantially degrade the existing visual character or quality of the area or its surroundings. The impact will be ***less than significant***.

Mitigation Measures: None are required.

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. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare and waste energy, and if designed incorrectly, could be considered unattractive. Light that falls beyond the intended area is referred to as "light trespass". Types of light trespass include spillover light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. A less obtrusive and well-designed energy efficient fixture would face downward, emit the correct intensity of light for the use, and incorporate energy timers.

Spillover light is light emitted by a lighting installation that falls outside the boundaries of the property on which the installation is sited. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Because light dissipates as it travels from the source, the intensity of a light fixture is often increased at the source to compensate for the dissipated light. This can further increase the amount of light that illuminates adjacent uses. Spillover light can be minimized by using only the level of light necessary, and by using cutoff type fixtures or shielded light fixtures, or a combination of fixture types.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare. Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles.

Currently the sources of light in the Project area are from streetlights, the vehicles traveling along Road 28 and nearby residences to the east and north. The Project would include nighttime lighting for security. Such lighting would be subject to the requirements of the City of Madera General Plan Policy CON-44, which ensures that outdoor lighting does not produce obtrusive glare onto the public right-of-way or adjoining properties. Lighting fixtures for security would be designed with "cutoff" type fixtures or shielded light fixtures, or a combination of fixture types to cast light downward, thereby providing lighting at the ground level for safety while reducing glare to adjacent properties. Accordingly, the Project would not create substantial new sources of light or glare. Potential impacts are ***less than significant***.

Mitigation Measures: None are required.

4.2 Agriculture and Forestry Resources

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

4.2.1 Environmental Setting

The proposed residential development is located in a growing part of the City, with the surrounding area consisting of rural residential developments and vacant/disturbed land.

4.2.2 Impact Assessment

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

Less Than Significant Impact. The proposed residential Project is located on approximately 29 acres of land that is currently being utilized as an almond orchard. The Project site is designated as primarily Prime Farmland, with two small strips designated as Farmland of Statewide Importance and one small strip designated as Unique Farmland

by the State Farmland Mapping and Monitoring Program.[2] The site is designated for residential development in the City's General Plan and impacts to farmland conversion were addressed in the City's General Plan EIR (State Clearinghouse Number 2007121153). No new impacts would occur from Project implementation. As such, impacts will be ***less than significant***.

Mitigation Measures: None are required.

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

No Impact. The proposed Project site is not under a Williamson Act Contract and is located in an area dominated by urban development to the east, north, and west with more vacant land to the north. The Project site is currently zoned by the City of Madera as Planned Development (6000), which is defined as one unit for each 6,000 sq. ft, which is the appropriate zoning for the proposed Project. Areas south of the site have a small portion of vacant land designated as Medium Density Residential, with more orchards past E. Pecan Avenue. As the site is appropriately zoned for residential development and there is no Williamson Act contract on-site, Project implementation will not conflict with existing zoning for agricultural use or a Williamson Act contract. There is ***no impact.*** Mitigation Measures: None are required.

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. There is no forest land, timberland, or timberland zoned Timberland Production on the proposed Project site. The site is zoned for residential development, such as the proposed Project. No loss of forest land or timberland would occur and no conflicts would occur. Therefore, ***no impacts*** would occur.

Mitigation Measures: None are required.

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

No Impact. There is no forest land zoning on the proposed Project site and there are no forest uses on the site. As such, no conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, would occur as a result of the Project. There is ***no impact.***

Mitigation Measures: None are required.

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

Less Than Significant Impact. The site is planned for residential uses according to the City of Madera's General Plan and is being developed as such. As discussed in Impact a), above, the proposed Project site contains land classified as Prime Farmland with a small portion of Farmland of Statewide Importance; however, impacts resulting from

[2] Department of Conservation, California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed October 2024.

farmland conversion on this site were addressed at the time the General Plan land use changed from agricultural to residential, in City's General Plan EIR (State Clearinghouse Number 2007121153). The proposed Project does not have the potential to result in the new conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. Impacts remain ***less than significant.***

Mitigation Measures: None are required.

4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

4.3.1 Environmental Setting

The climate of the San Joaquin Valley is characterized by long, hot summers and stagnant, foggy, winters. Precipitation is low and temperature inversions are common. These characteristics are conducive to the formation and retention of air pollutants and are in part influenced by the surrounding mountains which intercept precipitation and act as a barrier to the passage of cold air and air pollutants.

The proposed Project lies within the San Joaquin Valley Air Basin, which is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD or Air District). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2), particulate matter (PM10 and PM2.5), and lead (Pb). The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility.

Air quality plans or attainment plans are used to bring the applicable air basin into attainment with all state and federal ambient air quality standards designed to protect the health and safety of residents within that air basin. Areas are classified under the Federal Clean Air Act as either "attainment", "non-attainment", or "extreme non-attainment" areas for each criteria pollutant based on whether the NAAQS have been achieved or not. Attainment relative to the State standards is determined by the California Air Resources Board (CARB). The San Joaquin Valley is designated as a State and Federal extreme non-attainment area for O3, a State and Federal non-attainment area for PM2.5, a State non-attainment area for PM10, and Federal and State attainment area for CO, SO2, NO2, and Pb.[3]

[3] San Joaquin Valley Air Pollution Control District. Ambient Air Quality Standards & Valley Attainment Status. https://ww2.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/. Accessed November 2024.

4.3.2 Impact Assessment

Thresholds of Significance

To assist local jurisdictions in the evaluation of air quality impacts, the SJVAPCD has published the *Guide for Assessing and Mitigating Air Quality Impacts*. This guidance document includes recommended thresholds of significance to be used for the evaluation of short-term construction, long-term operational, odor, toxic air contaminant, and cumulative air quality impacts. Accordingly, the SJVAPCD-recommended thresholds of significance are used to determine whether implementation of the proposed Project would result in a significant air quality impact. Projects that exceed these recommended thresholds would be considered to have a potentially significant impact to human health and welfare. The thresholds of significance are summarized, as follows:

Short-Term Emissions of Particulate Matter (PM10): Construction impacts associated with the proposed Project would be considered significant if the feasible control measures for construction in compliance with Regulation VIII as listed in the SJVAPCD guidelines are not incorporated or implemented, or if project-generated emissions would exceed 15 tons per year (TPY).

Short-Term Emissions of Ozone Precursors (ROG and NOX): Construction impacts associated with the proposed Project would be considered significant if the project generates emissions of Reactive Organic Gases (ROG) or NO_X that exceeds 10 TPY.

Long-Term Emissions of Particulate Matter (PM10): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of PM_{10} that exceed 15 TPY.

Long-Term Emissions of Ozone Precursors (ROG and NOX): Operational impacts associated with the proposed Project would be considered significant if the project generates emissions of ROG or NOX that exceeds 10 TPY.

Conflict with or Obstruct Implementation of Applicable Air Quality Plan: Due to the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if the project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NO_x) or PM_{10} would exceed the SJVAPCD's significance thresholds, then the project would be considered to conflict with the attainment plans. In addition, if the project would result in a change in land use and corresponding increases in vehicle miles traveled, the project may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

Local Mobile-Source CO Concentrations: Local mobile source impacts associated with the proposed Project would be considered significant if the project contributes to CO concentrations at receptor locations in excess of the CAAQS (i.e. 9.0 ppm for 8 hours or 20 ppm for 1 hour).

Exposure to toxic air contaminants (TAC) would be considered significant if the probability of contracting cancer for the Maximally Exposed Individual (i.e., maximum individual risk) would exceed 10 in 1 million or would result in a Hazard Index greater than 1.

Odor impacts associated with the proposed Project would be considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

An Air Quality, Energy, and Greenhouse Gas Technical Memorandum (AQ Memo) was prepared for the proposed Project by LSA and is the basis for the impact analysis below. The AQ Memo is provided as Appendix A to this Initial Study.

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

Less than Significant Impact. The proposed Project includes development of 168 single-family residences on an approximately 29-acre site, including associated roads, landscaping, and lighting. The proposed residential development is located in a growing part of the City designated for residential development, with the surrounding area consisting of single family and rural residential developments, active agriculture and vacant/disturbed land.

An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and State air quality standards. To bring the San Joaquin Valley into attainment, the San Joaquin Valley Air Pollution Control District (SJVAPCD) adopted the 2022 Plan for the 2015 8-Hour Ozone Standard in December 2022 to satisfy Clean Air Act (CAA) requirements and ensure attainment of the 70 parts per billion (ppb) 8-hour ozone standard.

To assure the San Joaquin Valley Air Basin's (SJVAB) continued attainment of the United States Environmental Protection Agency (USEPA) PM10 standard, the SJVAPCD adopted the *2007 PM10 Maintenance Plan and Request for Redesignation* in September 2007.33 SJVAPCD Regulation VIII (Fugitive PM10 Prohibitions) is designed to reduce PM10 emissions generated by human activity. The SJVAPCD adopted the *2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards* to address the USEPA annual PM2.5 standard of 12 micrograms per cubic meter (µg/m3), established in 2012.34

CEQA requires that certain projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed in Impact (b) below, construction of the proposed Project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Implementation of SJVAPCD Regulation VIII would further reduce construction dust impacts. Operational emissions associated with the Project would not exceed SJVAPCD established significance thresholds for reactive organic gases (ROG), NOx, CO, sulfur oxides (SOx), PM10, or PM2.5 emissions. Therefore, the Project would not conflict with or obstruct implementation of SJVAPCD air quality plans. Impacts are ***less than significant.***

Mitigation Measures: None are required.

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 with Mitigation. The SJVAB is designated as non-attainment for O3 and PM2.5 for federal standards and nonattainment for O3, PM10, and PM2.5 for State standards. The SJVAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality

impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level construction- and operation-related air quality impacts.

Construction Emissions

During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, NOX,ROG, directly emitted PM2.5 or PM10, and TACs (e.g., diesel exhaust particulate matter).

Project construction activities would include site preparation, grading, building construction, paving, and architectural coating activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. The project would be required to comply with District Regulation VIII (Fugitive PM10 Prohibition) to control fugitive dust. SJVAPCD Rule 8011, General Requirements, and Rule 8021, Construction, Demolition Excavation, Extraction, and Other Earthmoving Activities, would also be applicable.

In addition to dust-related PM10 emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO2, NOx, VOCs, and some soot particulates (PM2.5 and PM10) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod. Construction-related emissions are presented in Table 4-1. CalEEMod output sheets are included in Appendix A.

Table 4-1 Short-Term Regional Construction Emissions

Construction Phase	Annual Pollutant Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	Total PM_{10}	Total $PM_{2.5}$
2025	0.1	2.7	2.1	<0.1	0.5	0.3
2026	0.1	2.6	2.1	<0.1	0.2	0.1
2027	<0.1	0.8	0.7	<0.1	<0.1	<0.1
Maximum Emissions	**0.1**	**2.7**	**2.1**	**<0.1**	**0.5**	**0.3**
SJVAPCD Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Significant Emissions?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (October 2024).
CO = carbon monoxide lbs/day = pounds per day NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

PM_{10} = particulate matter less than 10 microns in size SJVAPCD = San Joaquin Valley Air Pollution Control District SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table 4-1, construction emissions associated with Project implementation would not exceed the SJVAPCD's thresholds for ROG, NOx, CO, SOx, PM2.5, or PM10 emissions. In addition to the construction period thresholds of significance, the SJVAPCD has implemented Regulation VIII measures for dust control during construction. Implementation of Mitigation Measure AIR-1, below, would ensure that the proposed Project complies with the SJVAPCD's Regulation VIII. Construction emissions associated with the proposed Project would be less than significant with implementation of AIR-1. Therefore, construction of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard. Impacts resulting from construction emissions are ***less than significant with mitigation implementation.***

Operations Emissions

Long-term air pollutant emissions associated with operation of the proposed Project include emissions from area, energy, and mobile sources. Area-source emissions include architectural coatings, consumer products, and landscaping. Energy-source emissions result from activities in buildings that use natural gas. Mobile-source emissions are from vehicle trips associated with Project operations.

Mobile source emissions include ROG and NOX emissions that contribute to the formation of ozone. Additionally, PM10 emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy-source emissions result from activities in buildings that use natural gas. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source. However, the proposed project would not utilize natural gas. Therefore, energy source emissions would be minimal.

Area-source emissions consist of direct sources of air emissions at the project site, including architectural coatings, consumer products, and use of landscape maintenance equipment.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table 4-2 provides the estimated existing emission estimates and the proposed Project's estimated operational emissions. CalEEMod output sheets are provided in Appendix A.

Table 4-2 Project Operational Emissions

Emission Type	Pollutant Emissions (Tons per Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	1.1	0.9	5.4	<0.1	1.1	0.3
Area Sources	1.5	<0.1	2.4	<0.1	0.2	0.2
Energy Sources	0.0	0.0	0.0	0.0	0.0	0.0
Total Project Emissions	**2.6**	**0.9**	**7.8**	**<0.1**	**1.3**	**0.5**
SJVAPCD Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (October 2024).
CO = carbon monoxide lbs/day = pounds per day NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

PM_{10} = particulate matter less than 10 microns in size SJVAPCD = San Joaquin Valley Air Pollution Control District SO_X = sulfur oxides
VOCs = volatile organic compounds

The results shown in Table 4-2 indicate the Project would not exceed the significance criteria for annual ROG, NOX, CO, SOX, PM10, or PM2.5 emissions; therefore, the proposed Project would not have a significant effect on regional air quality. As shown in Table 4-2, SJVAPCD emissions of ROG, NOX, CO, SOX, PM10, and PM2.5 would be below the thresholds. Therefore, operation of the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project is nonattainment under applicable federal or State ambient air quality standards. Operational impacts are ***less than significant.***

Long Term Microscale (CO Hot Spot) Analysis

Vehicular trips associated with the proposed Project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed Project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, thereby affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of Project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Fresno Garland station located at 3727 North First Street, Fresno, in Fresno County, California (the closest station to the project site monitoring CO) showed a highest recorded 1-hour concentration of 2.2 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.8 ppm (the State standard is 9

ppm) from 2021 to 2023. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

The proposed Project is expected to generate 1,584 average daily trips, with 118 trips occurring in the a.m. peak hour and 158 trips occurring in the p.m. peak hour. Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the Project would not result in any project related impacts on CO concentrations. ***Less than significant impacts*** would occur resulting from CO concentrations.

Mitigation Measures:

AIR-1

Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM10 Prohibitions), the following controls are required to be included as specifications for the proposed Project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant or covered with a tarp or other suitable cover or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

- When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/ suppressant.

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

Less than Significant Impact with Mitigation. Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to diesel particulate matter. The proposed site is located in a rural area and is primarily surrounded with rural residences and agricultural land. The closest sensitive receptors to the Project site include single-family homes located 70 and 500 feet from the project boundaries to the east and north, respectively.

A construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for the proposed project. Table G, below, identifies the results of the analysis assuming the use of Tier 2 construction equipment as proposed by the project. Model snapshots of the sources are shown in Attachment C of Appendix A.

Table 4-3 Health Risks from Project Construction to Off-Site Receptors

Location	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index
Residential Receptor Risk	31.22	0.022	0.000
Worker Receptor Risk	0.64	0.022	0.000
SJVAPCD Significance Threshold	**20.0 in one million**	**1.0**	**1.0**
Significant?	**Yes**	**No**	**No**

Source: LSA (October 2024).
SJVAPCD = San Joaquin Valley Air Pollution Control District

As shown in Table 4-3, the maximum cancer risk for the residential MEI would be 31.22 in one million, which would exceed the SJVAPCD cancer risk threshold of 20 in one million. The worker MEI risk would be lower at 0.64 in one million, which would not exceed the SJVAPCD cancer risk thresholds. The total chronic HI would be 0.022 for both, the residential MEI and for the worker MEI, which is below the threshold of 1.0. In addition, the total acute HI would be nominal (0.000), which would also not exceed the threshold of 1.0. Therefore, implementation of Mitigation Measure AIR-2 would be required to reduce construction cancer risk. As shown in Table 4-4, with the implementation of AIR-2 the maximum cancer risk for the residential receptor MEI would be 4.97 in 1 million, which would not exceed the SJVAPCD cancer risk threshold of 20 in 1 million. Therefore, with implementation of MM-1, construction of the proposed project would not exceed SJVAPCD thresholds and would not expose nearby sensitive receptors to a significant health risk.

Once construction is complete, the Project would consist of a 168-unit single-family residential development, that would not include any stationary source emissions of TACs. As identified in Table 4-2, Project operational emissions of criteria pollutants would be below SJVAPCD significance thresholds; thus, they are not likely to have a significant impact on sensitive receptors. In addition, the proposed Project would be required to implement District Rule 9510, Indirect Source Review (ISR). Implementation of Rule 9510 would reduce operational emissions of NOX and PM10 by 33.3 percent and 50 percent, respectively. Compliance with SJVAPCD rules would further limit doses and exposures, reducing potential health risk related to gasoline vapors to a level that is not significant. Once the proposed Project is constructed, it would not be a source of substantial emissions. Therefore, implementation of the proposed project would not result in new sources of TACs and would not expose sensitive receptors to substantial levels of TACs. Impacts are ***less than significant with mitigation incorporation.***

Mitigation Measures:

AIR-2

All construction equipment over 50 horsepower (hp) used during construction of the project shall be equipped with at least Tier 2 engines with Level 3 Diesel Particulate Filters (DPF) or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. Prior to issuance of building permits, the project Applicant shall submit construction plans to the City of Madera denoting the projected equipment Tier rating that will be used during the construction period.

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

Less Than Significant Impact. Heavy-duty equipment in the Project area during construction would emit odors, primarily from the equipment exhaust. However, the construction activity would cease to occur after individual construction is completed. No other sources of objectionable odors have been identified for the Project, and no mitigation measures are required.

The SJVAPCD addresses odor criteria within the GAMAQI. The air district has not established a rule or standard regarding odor emissions; rather, the district has a nuisance rule, Rule 4102, which states: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact." The proposed uses are not anticipated to emit any objectionable odors. The gas station could release localized odors; however, all the gasoline dispensers would be equipped with vapor recovery systems. In addition, such odors in general would be confined mainly to the Project site and would readily dissipate. Therefore, objectionable odors affecting a substantial number of people would not occur as a result of the Project and resulting impacts are considered ***less than significant.***

Mitigation Measures: None are required.

4.4 Biological Resources

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

4.4.1 Environmental Setting

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include dairies, groves, and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the proposed Project site is about 10 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain and storm-water readily infiltrates the soils of the surrounding the sites.

Native plant and animal species once abundant in the region have become locally extirpated or 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.

The site primarily consists of an irrigated and maintained almond orchard. The site was bordered by rural residential development and ruderal vegetation to the north and east, ruderal vegetation and an orchard to the south, and a railroad and State Route 99 to the west.

A Biological Resource Evaluation (BRE) report was prepared on behalf of the Project by Colibri Ecological Consulting, LLC. in February of 2024. The following impact analysis directly references this report. The BRE report can be found in its entirety in Appendix B.

4.4.2 Impact Assessment

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

Less Than Significant Impact with Mitigation. The proposed Project includes development of 168 single-family residences on an approximately 29-acre site, including associated roads, landscaping, and lighting, as well as a detention basin and park. The site is primarily planted with an established almond orchard.

As part of the BRE report, a USFWS species list was included for the Project which identified 10 species listed as threatened, endangered, or proposed for listing under the FESA. None of those species could occur on or near the Project site due to the lack of habitat or because the Project site is outside the known range of the species. As stated in the species list, the Project site occurs outside any proposed or designated USFWS critical habitat.

Additionally, a query of California Natural Diversity Database records of special-status species from the Madera 7.5-minute USGS topographic quadrangle and the eight surrounding quadrangles produced 219 records of 35 species. Of those 35 species, 7 were not considered further because they are not CEQA-recognized as special status species by state or federal regulatory agencies or public interest groups or are considered extirpated in California. Of the remaining 28 species, 10 are known from within 5 miles of the Project site. Of those species, only the state listed as threatened Swainson's hawk *(Buteo swainsoni*) could occur on or near the Project site. None of the other species identified in the nine-quad search could occur on or near the Project site.

Searching the CNPS inventory of rare and endangered plants of California yielded 17 species, 16 of which have a CRPR of 1 or 2 and four of which are also state or federally listed. Of those 16 plant species, none could occur on or near the Project site due to the lack of habitat.

A reconnaissance survey was performed for the project site; a total of 25 plant species (four native and 21 nonnative), 15 bird species, and two mammal species were observed during the survey. No direct evidence of special-status animal or plant species were observed and the site currently provides little or no value to sensitive plants. Conversion of habitat in the Project vicinity to almond orchards has altered or eliminated habitat for these

species in the Project vicinity. However, the Project could adversely affect, either directly or through habitat modifications, one special-status animal species that occurs or may occur on or near the Project site. Construction activities such as excavating, trenching, or using other heavy equipment that disturbs or harms a special-status species or substantially modifies its habitat could constitute a significant impact. Mitigation Measure BIO1 (below) will be included in the conditions of approval to reduce the potential impacts to ***less than significant*** levels.

Mitigation Measures:

BIO-1: Protect nesting Swainson's hawks

1. To the extent practicable, construction shall be scheduled to avoid the Swainson's hawk nesting season, which extends from March through August.
2. If it is not possible to schedule construction between September and February, a qualified biologist shall conduct surveys for Swainson's hawk in accordance with the Swainson's Hawk Technical Advisory Committee's Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (SWTAC 2000, Appendix D). These methods require six surveys, three in each of the two survey periods, prior to project initiation. Surveys shall be conducted within a minimum 0.5-mile radius around the Project site.
3. If an active Swainson's hawk nest is found within 0.5 miles of the Project site, and the qualified biologist determines that Project activities would disrupt the nesting birds, a construction-free buffer or limited operating period shall be implemented in consultation with the CDFW.

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

Less Than Significant Impact. The City's General Plan does not identify riparian or other sensitive natural community within the Project area. Additionally, the Project site has been previously disturbed and is currently active with an irrigated and maintained almond orchard. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

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

Less Than Significant Impact There are no state or federally protected wetlands on or adjacent to the Project site. According to the BRE report, there are no vernal pools on the property to provide habitat for vernal pool associated species including vernal pool fairy shrimp or hairy Orcutt grass, or other naturally occurring aquatic habitats that could provide reproductive habitat for California tiger salamander or western spadefoot toad. The nearest wetland is a freshwater pond approximately 0.57 miles the west and intervening land uses, such as SR 99, would inhibit species migration to the proposed Project site. Wetland species are considered absent from the site due to isolation from occupied habitat and the quality of habitat on the project site. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

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

Less than Significant Impact with Mitigation. There are no waterways on the proposed site and the area consists of an irrigated and maintained almond orchard. Wildlife species observed directly on the Project site consisted mostly of common bird species, as well as desert cottontail rabbit and California ground squirrel. No additional vertebrate wildlife species or signs of current or prior nesting by raptor species were found within one quarter mile of the Project site. The presence of adjacent suburban developments and the presence of trees further reduces the sites suitability for burrowing owls.

The Project has the potential to impede the use of nursery sites for native birds protected under the MBTA and CFGC. Bird species that may nest on or near the property include, but are not limited to, California scrub-jay (*Aphelocoma californica*) and house finch (*Haemorhous mexicanus*). Large trees within 0.5 miles of the Project site could provide nesting substrates for raptors, including Swainson's hawk. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered a take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird in the Project site or immediately adjacent to the construction zone could constitute a significant effect. Mitigation measure BIO2 (below) will be included in the conditions of approval to reduce the potential effect to a ***less than significant*** level.

Mitigation Measure:

BIO-2: Protect nesting birds.

1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.
2. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

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

Less than Significant Impact. The City of Madera's General Plan includes various policies for the protection of biological resources. The proposed Project would not conflict with any of the adopted policies and any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

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

Less than Significant Impact. There are no local, regional, or state conservation plans that apply to the Project. As such, any impacts would be ***less than significant***.

Mitigation Measures: None are required.

4.5 Cultural Resources

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

4.5.1 Environmental Setting

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

The tribes which inhabited the Madera area generally lived a subsistence life-style that included hunting, fishing and collection of plant resources, particularly acorns. Some of these early inhabitants built a variety of structures including residential dwellings, ceremonial structures, and semi-subterranean sweat lodges. A common dwelling was a thatched house covered by brush, grass or tules.

A variety of flaked and ground stone tools (e.g., knives, arrow and spear points, and rough cobble and shaped pestles) were common among Native Americans in the area. Obsidian was a highly valued material for tool manufacture, and was generally imported. Some local tribes also engaged in trading relationships with surrounding groups for commodities such as salt, marine shells and basketry.

Euroamerican contact with Native American groups living in the Central Valley of California began during the last half of the 18th century. At this time, the attention of Spanish missionaries shifted away from the coast, and its dwindling Native American population, to the missionization of interior populations of Native Americans. The efforts of the Spanish to missionize the Native American population began a history of destructive Euroamerican interactions with Native Americans that eventually lead to the loss of traditional Native American culture.

The proposed Project site has been highly disturbed for many years with residential and/or agricultural uses in varying portions of the site. A Phase I Cultural Resource Study was performed on behalf of the Project by Hudlow Cultural Resource Associates in March 2024. The following impact analysis references this report, which can be found in it's entirety in Appendix C.

4.5.2 Impact Assessment

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

Less than Significant Impact with Mitigation. A record search of the Project area and the environs within one half-mile was conducted at the Southern San Joaquin Valley Information Center. Scott M. Hudlow conducted the record search, RS# 24-069, on February 12, 2024. The record search revealed that eleven cultural resource surveys have been conducted within one half-mile of the Project area. No surveys have previously addressed the parcel in question. One cultural resource, the Madera Canal, is located within one half-mile of the current Project area (Appendix C). No cultural resources have previously identified within the current Project area.

Subsurface construction activities associated with the proposed Project could potentially damage or destroy previously undiscovered historic resources. This is considered a potentially significant impact; however, implementation of Mitigation Measure CUL-1 will ensure that significant impacts remain ***less than significant with mitigation incorporation.***

Mitigation Measures:

CUL-1 The following measures shall be implemented:

- Before initiation of construction or ground-disturbing activities associated with the Project, the City shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources;
- The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and
- If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or other appropriate measure, as outlined in Public Resources Code section 21083.2. City of Madera shall implement said measures.

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

Less than Significant Impact with Mitigation. The possibility exists that subsurface construction activities may encounter undiscovered archaeological resources. This would be a potentially significant impact. Implementation of Mitigation Measure CUL-1 would require inadvertently discovery practices to be implemented should previously undiscovered archeological resources be located. As such, impacts to undiscovered archeological resources would 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. Although unlikely given the highly disturbed nature of the site and the records search did not indicate the presence of such resources, subsurface construction activities associated with the proposed Project could potentially disturb previously undiscovered human burial sites. Accordingly, this is a potentially significant impact. The California Health and Safety Code Section 7050.5 states that if human remains are discovered on-site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition. If the Coroner determines that the remains are not subject to his or her authority and if the 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 NAHC. The NAHC shall identify the person or persons it believes to be the "most likely descendant" (MLD) of the deceased Native American. The MLD may make recommendations 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 Resource Code Section 5097.98.

Although considered unlikely, subsurface construction activities could cause a potentially significant impact to previously undiscovered human burial sites; however, compliance with regulations would reduce this impact to ***less than significant***.

Mitigation Measures: None are required.

4.6 Energy

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

4.6.1 Environmental Setting

California's total energy consumption was the second-highest in the nation in 2020, but its per capita energy consumption was less than in all but three other states. In 2022, California was the fourth-largest electricity producer in the nation. The state was also the nation's third-largest electricity consumer. In 2022, renewable resources, including hydroelectric power and small-scale, customer-sited solar power, accounted for 49% of California's in-state electricity generation. Natural gas fueled another 42%. Nuclear power supplied almost all the rest.[4]

Energy usage is typically quantified using the British Thermal Unit (BTU). As a point of reference, the approximately amounts of energy contained in common energy sources are as follows[5]:

Energy Source/Fuel	BTUs
Motor Gasoline	120,214 per gallon
Natural Gas	1,036 per cubic foot
Electricity	3,412 per kilowatt-hour

California energy consumption in 2021 was approximately 6,784.8 trillion BTU, as provided in Table 4-2.[6] This represents an approximately 2.4% decrease from energy consumption in 2020.

[4] California Profile Overview, U.S. Energy Information Administration. https://www.eia.gov/state/?sid=CA. Accessed November 2024.

[5] U.S. Energy Information Administration. Energy Units and Calculators Explained. https://www.eia.gov/energyexplained/units-and-calculators/british-thermal-units.php. Accessed November 2024.

[6] California Profile Overview, U.S. Energy Information Administration. https://www.eia.gov/state/?sid=CA#tabs-2. Accessed November 2024.

Table 4-5
2021 California Energy Consumption

End User	BTU of energy consumed (in trillions)	Percentage of total consumption
Residential	1,228.5	18.2
Commercial	1,156.8	17.1
Industrial	1,597.5	23.6
Transportation	2,802	41.2
Total	6,784.8	--

Total electrical consumption by Madera County in 2022 was 1808.23 GWh[7], while total gas consumption was 48.54 million Therms.[8]

The California Department of Transportation (Caltrans) reports that approximately 35.66 million vehicles were registered in the state in 2022, while in 2021 a total estimated 310.9 billion annual vehicle miles were traveled (VMT).[9]

4.6.2 Impact Assessment

An Air Quality, Energy, and Greenhouse Gas Technical Memorandum (AQ Memo) was prepared for the proposed Project by LSA and is the basis for the impact analysis below. The AQ Memo is provided as Appendix A to this Initial Study.

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

Less Than Significant Impact. The following describes the potential impacts regarding energy resources that could result from implementation of the proposed project.

Construction Energy Use

Construction of the proposed Project is anticipated to begin in late 2025 and be completed in 27 months, ending in 2027. Construction-specific phases were assessed for their energy consumption under each construction sub-phase: grading, site preparation, building construction, paving, and architectural coating activities.

[7] California Energy Commission. Electricity Consumption by County. http://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed November 2024.
[8] California Energy Commission. Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed November 2024.
[9] Caltrans Fact Booklet. June 2023. California Department of Transportation. https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/caltrans-fact-booklets/caltransfacts2023a11y.pdf. Accessed November 2024.

Construction would require energy for the manufacture and transportation of construction materials, preparation of the site for grading and building activities, and construction of the building. All or most of this energy would be derived from nonrenewable resources. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy (i.e., fuel) usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources.

Operational Energy Use

Operational energy use is typically associated with electricity consumption and fuel used for vehicle trips associated with a Project. The proposed Project would not utilize natural gas, and no natural gas demand is anticipated during operation of the proposed project. In addition, the proposed Project would include solar energy that would offset electricity consumption by approximately 80 percent.

Furthermore, proposed Project would also result in energy usage associated with gasoline and diesel fuel consumed by Project-related vehicle and truck trips. Fuel use associated with vehicle and truck trips generated by the proposed Project was calculated based on the project's Traffic Impact Analysis, which identifies that the proposed project would generate approximately 1,585 average daily trips. The amount of operational fuel use was estimated using CARB's EMFAC2021 model, which provided projections for typical daily fuel usage in Madera County.

Table 4-6 shows the estimated potential increased electricity, gasoline, and diesel demand associated with the proposed Project. The electricity rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with USDOT fuel efficiency data, the USEPA's fuel economy estimates for 2020, and the California diesel fuel economy estimates for 2021.

Table 4-6 Estimated Annual Energy Use of Proposed Project

	Electricity Use (kWh per year)	Natural Gas Use (kBTU per year)	Gasoline (gallons per year)	Diesel (gallons per year)
Proposed Project	314,045[1]	0.0	101,089	82,133

Source: Compiled by LSA (October 2024).
1 – electricity estimates account for the 80 percent offset by solar kBTU = thousand British thermal units
kWh = kilowatt hours

As shown in Table 4-6, the estimated potential increase in electricity demand associated with the operation of the proposed Project is 314,045 kWh per year. Total electricity consumption in Madera County in 2022 was 1,808,229,048 kWh. Therefore, operation of the proposed Project would increase the annual electricity consumption in Madera County by approximately 0.02 percent. Electrical demand associated with project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The Project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the Title 24 standards. Title 24 building energy efficiency standards establish minimum efficiency standards related to various building features, including appliances, water

and space heating and cooling equipment, building insulation and roofing, and lighting, which would reduce energy usage. The expected energy consumption during construction and operation of the proposed Project would be consistent with typical usage rates for residential uses; however, energy consumption is largely a function of personal choice and the physical structure and layout of buildings. Additionally, the proposed Project will include solar panels that would offset approximately 80 percent of the electricity consumption. The proposed Project would also include an EV charging station for each home. As such, the proposed Project would include energy conservation features.

As shown in Table 4-6, fuel use associated with the vehicle trips generated by the proposed Project is estimated at 300,082.0 gallons of gasoline and 607,954.6 gallons of diesel fuel per year. This analysis conservatively assumes that all vehicle trips generated as a result of project operation would be new to Madera County. Based on fuel consumption obtained from EMFAC2021, approximately 70.2 million gallons of gasoline and approximately 35.5 million gallons of diesel will be consumed from vehicle trips in Madera County in 2027. Therefore, vehicle and truck trips associated with the proposed project would increase the annual fuel use in Madera County by approximately 0.1 percent for gasoline fuel usage and approximately 0.2 percent for diesel fuel usage. The proposed project would result in fuel usage that is a small fraction of current annual fuel use in Madera County. Fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Therefore, fuel consumption would not be inefficient, wasteful, or unnecessary.

PG&E is the private utility that would supply the proposed project's electricity. In 2021, a total of 50 percent of PG&E's delivered electricity came from renewable sources, including solar, wind, geothermal, small hydroelectric, and various forms of bioenergy.37 PG&E reached California's 2020 renewable energy goal in 2017 and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in SB 100. In addition, PG&E plans to continue to provide reliable service to its customers and upgrade its distribution systems as necessary to meet future demand. As such, the proposed Project would not result in a potential significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts are ***less than significant.***

Mitigation Measures: None are required.

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

Less Than Significant Impact. The CEC recently adopted the 2023 Integrated Energy Policy Report.38 The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The 2023 Integrated Energy Policy Report covers a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecasts, and the California Energy Demand Forecast.

As indicated above, energy usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the proposed Project would be relatively small in comparison to the overall use in Madera County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed

project's total impact on regional energy supplies would be minor, the proposed project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. As demonstrated above, the proposed Project would not result in the inefficient, wasteful, and unnecessary consumption of energy.

Additionally, as mentioned in the preceding section, the proposed Project will include solar panels that would offset approximately 80 percent of the electricity consumption. The proposed Project would also include an EV charging station for each home. As such, the proposed Project would include sustainable features that are aligned with the state goals for decarbonizing buildings and integrating renewable energy. Therefore, the proposed Project would not conflict with or obstruct California's energy conservation plans as described in the CEC's 2023 Integrated Energy Policy Report. Therefore, the proposed Project would not lead to new or substantially more severe energy impacts. As such, potential impacts related to conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be ***less than significant.***

Mitigation Measures: None are required.

4.7 Geology and Soils

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

4.7.1 Environmental Setting

The subject site is located in the central part of the San Joaquin Valley, which comprises the southern half of the Great Valley geomorphic province. The valley is a westward-titling trough which forms a broad alluvial fan, approximately 200 miles long and 50 to 70 miles wide, where the eastern flank is broad and gently inclined, as opposed to the western flank which is relatively narrow (Bartow, 1991; Page, 1968). The Central Valley consists of the Great Valley Sequence, overlain by Cenozoic alluvium. Underlying the Great Valley Sequence are the Franciscan Assemblage to the west and the Sierra Nevada batholith to the east (Bailey, Irwin, and Jones, 1964).

4.7.2 Impact Assessment

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

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

a-ii) Strong seismic ground shaking?

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

a-iv) Landslides?

Less than Significant Impact. The proposed Project site is not located within the boundaries of an Earthquake Fault Zone for fault rupture hazard as defined by the Alquist-Priolo Earthquake Fault Zoning Act and no faults are known to pass through or near the property. The nearest active earthquake fault zones (evidence of displacement within the past 11,700 years) are the San Andreas, San Joaquin, Ortigalita, Owens Valley, and Melones faults. Of these, the San Andreas and the Owens Valley faults are expected to be the sources of future major earthquakes. Of these five major fault zones, all are located over 50 miles from the City of Madera.

According to the Madera County Local Hazard Mitigation Plan, the Project site is 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. Seismic design parameters relative to the requirements of the 2022 California Building Code will be applicable to the proposed development.

The Seismic Hazard Zone Map (SCAG) does not indicate the Project site as being in a liquification or landslide zone.[10]

The proposed Project site is located on relatively flat topography and is not located adjacent to any steep slopes or areas that would otherwise be subject to landslides. There are no cut or fill slopes that currently exist or are planned at the proposed Project site. In addition, there are no natural or manmade slopes in the vicinity of the site; therefore, the potential for landslides is negligible. The impact is ***less than significant***.

Mitigation Measures: None are required.

[10] Seismic Hazard Zone Map, Southern California Association of Governments. https://hub.scag.ca.gov/datasets/a6a8e69a09534ec7be2328b42aa8fd3d_0/explore?location=35.485264%2C-120.242955%2C6.40. Accessed October 2024.

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

Less than Significant Impact. According to the Custom Soil Report for Madera Area, California, the Project site is composed of five different soil types; Borden loam (0 to 1 percent slopes), Greenfield fine sandy loam (0 to 3 percent slopes), Pachappa fine sandy loam (0 to 3 percent slopes), San Joaquin sandy loam (0 to 3 percent slopes, MLRA 17) and Tujunga loamy sand (0 to 3 percent slopes).[11] The primary soil type, Greenfield fine sandy loam, is characterized by being well-drained, with a low ability for water storage.

The Project site has a generally flat topography, is in a growing urban area surrounded by agricultural land, rural residences, and vacant/disturbed land. As with general construction and earth moving activities, soil erosion and topsoil loss could occur; however, runoff from the Project site during the construction period will be covered by the General Construction permit issued by the State of California Water Resources Control Board. The Contractor will be required to install and maintain all necessary Best Management Practices (BMPs) for stormwater runoff management and erosion control, which will reduce the likelihood of both soil erosion and topsoil loss. Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

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

Less Than Significant Impact. As mentioned above, the Seismic Hazard Zone Map (SCAG) does not indicate the Project site as being in a liquification or landslide zone. In addition, there are no liquefaction hazard zones near the site according to the Fresno County General Plan. Based on USDA Custom Soil Report for the Project site, the site does not indicate any unusual ground conditions that would entail special design considerations or construction procedures.

Lastly, the site is not identified in an area of large historic subsidence within the California Central Valley. The soil on site would not become unstable as a result of the Project or result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. See also responses a. and b. There is a ***less than significant impact.***

Mitigation Measures: None are required.

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

Less than Significant Impact. According to the Custom Soil Report for Madera Area, California, the Project site is composed of five different soil types; Borden loam (0 to 1 percent slopes), Greenfield fine sandy loam (0 to 3 percent slopes), Pachappa fine sandy loam (0 to 3 percent slopes), San Joaquin sandy loam (0 to 3 percent slopes, MLRA 17) and Tujunga loamy sand (0 to 3 percent slopes). The primary soil type, Greenfield fine sandy loam, is characterized by being well-drained, with a low ability for water storage, which would indicate it is unlikely to expand. The impact is ***less than significant***.

Mitigation Measures: None are required.

[11] USDA Natural Resources Conservation Service. Custom Soil Resource Report for Madera Area, California.

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. A detention basin is proposed for development within site. No industrial wastewater exists on the site and there are no wastewater treatment facilities located on or near the site. No features associated with a septic system were observed on the site as well. The proposed Project development will tie into the City's existing wastewater system and will not require installation of a septic tank or alternate wastewater disposal system. There is ***no impact.***

Mitigation Measures: None are required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Less than Significant Impact with Mitigation. There are no unique geological features or known fossil-bearing sediments in the vicinity of the proposed Project site. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of ***less than significant with mitigation incorporation***.

Mitigation Measures:

CUL-2 City of Madera will incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at City of Madera, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.

4.8 Greenhouse Gas Emissions

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

4.8.1 Environmental Setting

Various gases in the earth's atmosphere play an important role in moderating the earth's surface temperature. Solar radiation enters earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs are transparent to solar radiation, but are effective in absorbing infrared radiation. Consequently, radiation that would otherwise escape back into space is retained, resulting in a warming of the earth's atmosphere. This phenomenon is known as the greenhouse effect. Scientific research to date indicates that some of the observed climate change is a result of increased GHG emissions associated with human activity.

Among the GHGs contributing to the greenhouse effect are water vapor, carbon dioxide (CO2), methane (CH4), ozone, Nitrous Oxide (NOx), and chlorofluorocarbons. Human-caused emissions of these GHGs in excess of natural ambient concentrations are considered responsible for enhancing the greenhouse effect. GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors.

In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. Global climate change is, indeed, a global issue. GHGs are global pollutants, unlike criteria pollutants and TACs (which are pollutants of regional and/or local concern). Global climate change, if it occurs, could potentially affect water resources in California. Rising temperatures could be anticipated to result in sea-level rise (as polar ice caps melt) and possibly change the timing and amount of precipitation, which could alter water quality. According to some, climate change could result in more extreme weather patterns; both heavier precipitation that could lead to flooding, as well as more extended drought periods. There is uncertainty regarding the timing, magnitude, and nature of the potential changes to water resources as a result of climate change; however, several trends are evident.

Snowpack and snowmelt may also be affected by climate change. Much of California's precipitation falls as snow in the Sierra Nevada and southern Cascades, and snowpack represents approximately 35 percent of the state's useable annual water supply. The snowmelt typically occurs from April through July; it provides natural water flow to streams and reservoirs after the annual rainy season has ended. As air temperatures increase due to climate change, the water stored in California's snowpack could be affected by increasing temperatures resulting in: (1) decreased snowfall, and (2) earlier snowmelt.

City of Madera adopted a Climate Action Plan (CAP) in September 2015, which is a long-range plan to reduce greenhouse gas (GHG) emissions from City government (municipal) and community-wide activities within the City of Madera and prepare for the anticipated effects of climate change.[12]

4.8.2 Impact Assessment

An Air Quality, Energy, and Greenhouse Gas Technical Memorandum (AQ Memo) was prepared for the proposed Project by LSA and is the basis for the impact analysis below. The AQ Memo is provided as Appendix A to this Initial Study.

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. The following sections describe the proposed Project's construction- and operation-related GHG impacts and consistency with applicable GHG reduction plans.

Construction Greenhouse Gas Emissions

Construction activities associated with the proposed Project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossilbased fuels creates GHGs such as CO2, CH4, and N2O. Furthermore, CH4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SJVAPCD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction of the proposed Project would generate approximately 905.9 metric tons (MT) CO2e. Construction GHG emissions were amortized over the life of the project (assumed to be 30 years) and added to the operational emissions. When annualized over the life of the Project, amortized construction emissions would be approximately 30.2 MT CO2e per year.

Operational Greenhouse Gas Emissions

Long-term GHG emissions are typically generated from mobile sources (e.g., vehicle and truck trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include Project-generated vehicle trips to and from the Project. Area-source emissions would be associated with activities such as landscaping and maintenance on the Project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the Project. Waste source emissions generated by the proposed Project include energy generated by land filling and other methods of disposal related to transporting and managing Project

[12] City of Madera Climate action Plan. September 2015. https://www.cityofmadera.ca.gov/wp-content/uploads/2017/08/Final-Madera-CAP_September-2015.pdf. Accessed March 2024.

generated waste. In addition, water source emissions associated with the proposed Project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

Following guidance from the SJVAPCD, GHG emissions for operation of the Project were calculated using CalEEMod. Based on the analysis results, summarized in Table 4-7, the proposed Project would result in emissions of approximately 1,352.0 MT CO2e per year. These estimated emissions are provided for informational purposes, and the significance of proposed Project is further analyzed below.

Table 4-7 Greenhouse Gas Emissions

Emission Type	Operational Emissions (MT/yr)				
	CO_2	**CH_4**	**N_2O**	**CO_2e**	**Percentage of Total**
Mobile Source	1,167.0	0.1	0.1	1,191.4	90
Area Source	36.0	0.2	<0.1	40.0	3
Energy Source	29.1	<0.1	<0.1	29.3	2
Water Source	4.3	0.2	<0.1	11.5	1
Waste Source	14.2	1.4	0.0	49.6	4
Total Operational Emissions				**1,321.8**	**100.0**
Amortized Construction Emissions				30.2	—
Total Annual Emissions				**1,352.0**	**—**

Source: Compiled by LSA (October 2024). CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent GHG = greenhouse gas

MT/CO_2e = metric tons of carbon dioxide equivalent MT/yr = metric tons per year
N_2O = nitrous oxide

As discussed, the SJVAPCD has not established a numeric threshold for GHG emissions. The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds or consistency with a regional GHG reduction plan (e.g., a CAP). Therefore, consistent with the State CEQA Guidelines, Section 15183.5, if a project is consistent with an adopted qualified Greenhouse Gas Reduction Strategy, it can be presumed that the project would not have significant GHG emission impacts. However, the City's CAP does not address State goals related to achieving carbon neutrality by 2045 (as recently codified in AB 1279).

In the absence of any City or SJVAPCD specific guidelines or thresholds, this analysis evaluates the proposed Project for consistency with the BAAQMD Justification Report,39 which identifies project design elements as the applicable thresholds of significance. If a project is designed and built to incorporate design elements related to natural gas, energy, VMT, and EVs, then it would contribute its portion of what is necessary to achieve California's long-term climate goals—its "fair share"—and an agency reviewing the project under CEQA can conclude that the project would not make a cumulatively considerable contribution to global climate change.

Per the significance thresholds described above, a less than significant GHG impact would occur if the Project were consistent with the identified design standards. Natural Gas Usage. According to the Justification Report, a less than significant GHG impact would occur if the project does not include natural gas appliances or natural gas plumbing. The proposed Project would not include natural gas. Therefore, the proposed Project would be consistent with this design element.

Energy Usage

Under this design criterion, the project must not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines. Energy use consumed by the proposed Project would be associated with electricity consumption associated with the project. Energy consumption was estimated for the Project using default energy intensities by land use type in the CalEEMod output, which is included in Attachment B of Appendix A.

As shown in Table 4-7 above, the estimated potential increase in electricity demand associated with the operation of the proposed Project is 314,045 kilowatt-hours (kWh) per year. Total electricity consumption in Madera County in 2022 was 1,808,229,048 kWh. Therefore, operation of the proposed Project would increase the annual electricity consumption in Madera County by approximately 0.02 percent.

In addition, the proposed Project would be constructed to current Title 24 standards, which would require energy-saving building features. As such, based on this analysis, as required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines, the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy and energy efficiency measures into the building design, equipment use, and transportation. As such, the proposed Project would be consistent with this design element.

Vehicle Miles Traveled

In April 2018, the Governor's Office of Planning and Research (OPR) issued the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) (revised December 2018) to provide technical recommendations regarding VMT, thresholds of significance, and mitigation measures for a variety of land use project types. According to OPR's Technical Advisory, lead agencies may use "screening thresholds" to identify when a project should be expected to create a less-than-significant impact without conducting a detailed study. As discussed in Impact 14.7 b), one of the screening methods to screen out VMT impacts for residential projects is to use map-based screening. Residential projects that are in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. The proposed Project could generate up to 1,584 average daily vehicle trips (ADT), modeled using the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (see Appendix D). MCTC developed a VMT Screening Map which shows the proposed project is in the Traffic Analysis Zone (TAZ) 321, which is designated as having a VMT per capita by TAZ as 15% or more below average, as demonstrated in Figure 4-1. Therefore, it is not expected that the proposed Project would have a significant VMT impact. Further, the proposed Project would provide infill development in an underused area and would be located near established residential neighborhoods. In addition, the proposed Project would include complete streets and a 1.22-acre park that would encourage people to use non-motorized modes of transportation by providing appropriate amenities that are local serving while connecting to existing uses. Furthermore, the proposed Project is also located near transit stops (within a 1-mile radius), which would help reduce VMT and single vehicle use. The proposed project would be designed to support alternative modes of transportation by including an EV charging station for each home. As such, the proposed Project is not expected to significantly increase VMT in the Project area. Therefore, the proposed Project would be consistent with this Project design element.

Electric Vehicle Requirements

The final project design element that the proposed Project should include to ensure that it is achieving its "fair share" of GHG emission reductions is compliance with off-street EV requirements in the most recently adopted version of the CALGreen Code Tier 2 measures. The proposed Project would include an EV charging station for each

home, consistent with CALGreen Tier 2 standards. Therefore, the proposed Project would be consistent with this design element.

The proposed Project would be consistent with the project design elements related to natural gas, energy, VMT, and EVs. Therefore, the proposed project would be consistent with the GHG emission thresholds identified for this project. As such, the proposed Project would not result in the generation of GHG emissions that would have a significant impact on the environment. Impacts are ***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?

Less Than Significant Impact. The following discussion evaluates the proposed project consistency with the goals of the City's CAP, the 2022 Scoping Plan, and Madera's MCTC RTP/SCS.

City of Madera Climate Action Plan (CAP). As described above, the City of Madera adopted its CAP in December of 2015.40 The CAP provides a strategy for reducing GHG emissions. It includes objectives and policies from the proposed General Plan that addressed long-term emissions reduction efforts. The timeframe for the CAP extends from the date of adoption through the year 2030. The CAP reduction targets are based on AB 32, Executive Order S-3-05, and Executive Order B- 30-15. The State has since adopted updated emission targets for 2030 and additional 2045 (codified by AB 1279); therefore, additional reductions would be required. However, in order to evaluate the proposed project consistency with the CAP, the City has developed the CAP Consistency Worksheet (Appendix E of the CAP). The worksheet is designed to help the City determine if a project is consistent with the CAP but does not define which measures would need to be implemented for the consistency determination, as requirements may vary by project type. The project consistency with the CAP measures is shown in Table 4-8 below.

Table 4-8 Project Consistency with the City of Madera Climate Action Plan

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
E-2 Energy Efficient New Construction	Is the project consistent with applicable policies of the Conservation Element of the General Plan?	Yes	Applicable policies of the conservation Element of the General Plan state that projects should aim to reduce dust during construction/demolition activities to the extent feasible (Policy CON-30) and should increase tree coverage to reduce the heat island effect (Policy CON-31). Additionally, all development should be designed to be energy-efficient (Policy CON-40) and development should include green building practices in all projects (Policy CON-44). In addition, development should be The proposed project is consistent with the applicable polices of the Conservation

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
			Element of the General Plan. The proposed Project would be required to comply with SJVAPCD Regulation VIII to reduce fugitive dust emission and would include a 1.22- acre park and a 4.3-acre retention basin, thus increasing tree coverage for the project site. In addition, the proposed Project would comply with the 2022 CALGreen standards regarding energy conservation and green building standards. The proposed Project would also include solar panels and an EV charging station for each home. Therefore, the proposed Project would be consistent with the applicable general plan policies under the Conservation Element.
	Does the project exceed Title 24 Energy Efficiency Building Standards, meet the state's Green Building Standards voluntary tier levels, or is LEED Greenpoint, or ENERGY STAR rated?	Yes	The proposed project would comply with the 2022 CALGreen standards regarding energy conservation and green building standards. The proposed Project would also include solar panels and an EV charging station for each home. Therefore, the proposed Project would be consistent with this action.
E-3 On-Site Small-Scale Renewable Energy	Does the project include solar PV systems or solar hot water heaters?	Yes	The proposed Project would be designed to include solar panels that would offset approximately 80 percent of the electricity consumption. Therefore, the proposed Project would be consistent with the action.
T-1 Infill and Mixed-Use Development	Is the project consistent with the land use designation(s) shown on the General Plan Land Use Map and with the applicable polies of the Land Use Element of the General Plan policies?	Yes	Applicable policies of the Land Use Element of the General Plan state that new residential development should incorporate amenities which establish a sense of identity at the project or neighborhood level, create opportunities for community interaction, and enhance the visual

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
			appeal of the area (Policy LU-20) and single-family developments need to provide functional outdoor recreational space (Policy LU-22). The proposed project would include a 1.22 acre park that would provide recreational activities to residents, increasing community interaction and enhancing the neighborhood area. In addition, the General Plan Land Use Map designates the proposed project as Medium Density Residential (MD) area. As such, the proposed Project would be consistent with the general plan land use designation and relevant policies from the Land Use Element.
	Is the project consistent with the Madera County Blueprint?	Yes	As described above, the proposed Project would include a 1.22 acre park that would provide recreational activities to residents, increasing community interaction and enhancing the neighborhood area. In addition, the General Plan Land Use Map designates the proposed Project as Medium Density Residential (MD) area. As such, the proposed Project would be consistent with the general plan land use designation and relevant policies from the Land Use Element.
	Does the project include mixed- use, higher density (22.5 to 50 units per acre), or infill development?	N/A	The proposed project would not include mixed-use development nor high-density housing. However, the proposed project would provide infill development in an underused area and would be located near established residential neighborhoods.
	Is the project located within 1/4 mile of transit stops or in	No	The proposed Project would not be located close to an existing community center or downtown. The

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
	existing community centers/downtown?		proposed project would also not be located within a ¼ mile of a transit stop. However, existing transit stops are located within 1-mile radius. In addition, the proposed project would include recreational opportunities through the proposed 1.22-acre park which will minimize vehicle trips and promote multimodal transportation opportunities, including pedestrian pathways. The proposed Project would also include an EV charging stations per home, encouraging alternative modes of transportation.
T-2 Bicycle and Pedestrian Environment	Is the project consistent with applicable policies of the Community Design and Circulation Elements of the General Plan?	Yes	Applicable policies of the Community Design Element and the Circulation Element of the General Plan relate to designing new development to be walkable pedestrian- and bicycle-oriented development. The proposed Project would fulfill the policies of the Madera General Plan Circulation Element and the City's CAP by allowing residents to live within proximity to residential neighborhoods. The proposed Project would also include recreational opportunities through the proposed 1.22-acre park which will minimize vehicle trips and promote multimodal transportation opportunities, including pedestrian pathways. The proposed Project would also include an EV charging stations per home and would be located within 1-mile radius to bus transit stops, encouraging alternative modes of transportation.
	Is the project consistent with the Bicycle Master Plan?	Yes	The proposed Project would include off-site improvements that would provide complete streets and sidewalks that would facilitate the use of bicycles in the area. In addition, the proposed Project would

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
			provide recreational opportunities and would increase connectivity with the surrounding land uses and transit networks, including larger on-street bicycle networks.
	Does the project meet minimum design criteria for bicycle and pedestrian circulation?	Yes	As mentioned above, the proposed Project would include offsite improvements that would provide complete streets and sidewalks that would facilitate the use of bicycles in the area. In addition, the proposed Project would provide recreational opportunities and would increase connectivity with the surrounding land uses and transit networks, including larger onstreet bicycle networks
	Does the project provide adequate and secure bicycle parking?	N/A	The proposed Project involves the development of 168 family units and associated site improvements. As such, the proposed Project would not provide public parking or bicycle parking.
T-3 Transit Travel	Is the project consistent with applicable policies of the Circulation and Community Development Elements of the General Plan?	Yes	Applicable policies of the Community Design Element and the Circulation Element of the General Plan relate to planning and accommodating for transit travel (Policy CI-28, Policy CI-30, Policy CI-31, Policy CI-41, Policy CI-50, Policy H-5.3, and Policy CD-59). As mentioned above, the proposed Project would also include recreational opportunities through the proposed 1.22- acre park which will minimize vehicle trips and promote multimodal transportation opportunities, including pedestrian pathways. The proposed Project would also include an EV charging stations per home and would be located within 1-mile radius to bus transit stops, encouraging alternative

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
			modes of transportation.
	Does the project provide safe routes to adjacent transit stops, where applicable?	Yes	The proposed Project would include off-site improvements that would include complete streets and sidewalks allowing for connectivity with the surrounding land uses. In addition, the proposed Project would be located within 1-mile radius from bus transit stops and would therefore connect to road networks that provide transit use.
	Does the project finance and/or construct bus turnouts and shelters where transit demand warrants such improvements?	N/A	The proposed Project involves the development of 168 single family units and associated site improvements. Thus, it would not include the construction of bus turnouts and shelters.
	Does the project provide public transit vouchers to its employees?	N/A	The proposed Project involves the development of 168 single family units and associated site improvements. As such, the proposed Project would not include land uses that would provide employment.
T-4 Commute Trip Reduction	Is the project consistent with applicable policies of the Community Development Element of the General Plan?	Yes	Applicable policies of the Community Design Element and the Circulation Element of the General Plan aim to provide parking for alternative modes of transportation (Policy CD-59) and encourage the use of ridesharing (Policy CI-37). The proposed Project would include an EV charging stations per home and would be located within 1-mile radius to bus transit stops, encouraging alternative modes of transportation. In addition, the proposed Project would be located in close proximity to existing residential

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
			neighborhoods which would increase the potential for ridesharing.
	Does the project include and/or promote TDM programs?	N/A	The proposed project would not be including a transportation demand program (TDM). A VMT analysis was not required for the proposed project; therefore, it is not expected that the proposed project would have a significant VMT impact. Further, the proposed project would provide infill development in an underused area and would be located near established residential neighborhoods. In addition, the proposed project would include complete streets and a 1.22-acre park that would encourage people to use non-motorized modes of transportation by providing appropriate amenities that are local serving while connecting to existing uses. Furthermore, the proposed Project is also located near transit stops (within a 1- mile radius), which would help reduce VMT and single vehicle use. The proposed Project would also be designed to support alternative modes of transportation by including an EV charging station for each home.
T-5 Traffic Flow and Vehicle Idling	Does the project include measures to improve traffic flow?	Yes	It is not yet known the type of calming measures that the proposed Project would implement. However, appropriate traffic calming measures, such as narrower traffic lanes, traffic signs, etc., should be provided to help reduce traffic speeds, promote attentive driving and increase yield to pedestrians.

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
T-6 Low Carbon Fuel Vehicles and Infrastructure	Is the project consistent with applicable policies of the Community Development Element of the General Plan?	Yes	Applicable policies of the Community Design Element of the General Plan aim to provide parking for alternative modes of transportation (Policy CD-59). The proposed Project would not include public parking structures. However, the prosed Project would include an EV charging station per home.
	Is the project consistent with the San Joaquin Valley Plug-in Electric Vehicle (PEV) Readiness Plan?	Yes	The proposed project would include an EV charging station per home, consistent with CalGreen Tier 2 requirements for residential development.
	Does the project include alternative fueling stations or EV charging stations?	Yes	As mentioned above, the proposed project would include an EV charging station per home, consistent with CalGreen Tier 2 requirements for residential development.
T-7 Construction and Off-Road Equipment	Would construction of the project use alternatively fueled construction vehicles/equipment (i.e., repowered engines, electric drive trains, CARB-approved low carbon fuel, electrically-powered)?	No	The proposed Project would utilize a minimum of Tier 2 or better construction equipment engines as recommended by CARB. As described in the Energy Impacts Section, construction contractors would be encouraged to conserve the use of their supplies to minimize their costs on the project. In addition, energy (i.e., fuel) usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources.
	Would the project include low-maintenance native landscaping or xeriscaping?	Yes	The proposed Project would include a 1.22-acre park. The project would be required to comply with the California Model Water Efficient Landscape Ordinance which includes ordinances for low maintenance

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
			drought tolerant landscape and irrigation requirements.
W-1 Exceed SB X7-7 Water Conservation Target	Does the project incorporate water efficiency and water conservation measures?	Yes	The Project would be required to comply with the 2022 CALGreen standards, which include a variety of different measures, including reduction of wastewater and water use. In addition, the proposed Project would also be required to comply with the California Model Water Efficient Landscape Ordinance
W-2 Recycled Water	Is the project consistent with applicable policies of the Conservation Element of the General Plan?	Yes	Applicable policies of the Conservation Element of the General Plan support the use of reclaimed water (Policy CI-54, Policy CON-5, and Policy CON-6), implement strategies to ensure longterm sustainability of water supply (Policy CON-2), and encourage the use of gray water systems and other water reuse methods (Policy CON-7). The proposed project is consistent with these policies and would strive for water efficiency in accordance with the 2022 CALGreen standard measures for water efficiency.
	Does the project incorporate recycled/reclaimed water?	N/A	As mentioned above, the proposed Project would be required to comply with the 2022 CALGreen standards, which include a variety of different measures, including reduction of wastewater and water use. The proposed project would also be required to comply with the California Model Water Efficient Landscape Ordinance. In addition, the proposed Project would include a retention basin for reclaimed water.
U-1 Trees and Vegetation	Is the project consistent with applicable policies of	Yes	Applicable policies of the Community Design Element of the General Plan support the planning of street trees

Measure Name	Project Actions	Project Compliance (Yes/No/NA)	Description/Details*
	the Community Design Element of the General Plan?		(Policy CD-26, Policy CD-43), encourage landscaping to reduce the urban heat island effect (Policy CON-10, Policy Con-31, Policy CD-4), and establish landscape and façade maintenance programs (Policy CD-7). The proposed Project would include landscape area and a 1.22- acre park and would therefore be consistent with these policies
	Does the project include the planting of new trees or new acres of vegetated land?	Yes	As mentioned above, the proposed Project would include a 1.22-acre park and landscape area. Therefore, the proposed Project would be consistent with this measure.

As shown in Table 4-8, the proposed Project would generally be consistent with the applicable Project actions from the City's CAP Consistency Checklist. The proposed Project would also be supporting and implementing the General Plan objectives and policies. Therefore, the proposed Project is consistent with and would not conflict with or obstruct the implementation of the City's CAP.

2022 Scoping Plan

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reduction target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. CARB released the 2017 Scoping Plan to reflect the 2030 target set by EO B-30-15 and codified by SB 32.41 SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. AB 197, the companion bill to SB 32, provides additional direction to CARB that is related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 that is intended to provide easier public access to air emission data collected by CARB was posted in December 2016. AB 1279 codifies the State goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter.

In addition, the 2022 Scoping Plan42 assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away

from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California be zero-emission by 2035 and that all other fleets transition to zero-emission as fully as possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

- Energy-efficient measures are intended to maximize energy-efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As mentioned above, the proposed Project would not be powered by natural gas, and no natural gas demand is anticipated during construction or operation of the proposed project. The elimination of natural gas in new development would help projects implement their "fair share" of achieving long-term 2045 carbon neutrality consistent with State goals. As such, if a project does not utilize natural gas, a lead agency can conclude that it would be consistent with achieving the 2045 neutrality goal and will not have a cumulative considerable impact on climate change.43 In addition, the proposed Project would comply with the 2022 CALGreen standards regarding energy conservation and green building standards. The proposed Project would also include solar panels and an EV charging station for each home. As such, the proposed Project would include sustainable features that are aligned with the state goals for decarbonizing buildings and integrating renewable energy.
- Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would be required to comply with the 2022 CALGreen standards, which include a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed Project would not conflict with any of the water conservation and efficiency measures.
- The goal of transportation and motor vehicle measures is to develop regional GHG emission reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. However, vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Therefore, the proposed Project would not conflict with the identified transportation and motor vehicle measures.

Madera MCTC's 2022 RTP/SCS

The MCTC 2022 RTP/SCS44 reflects transportation planning for Madera County through 2046. The vision, goals, and policies in the 2022 RTP are intended to serve as the foundation for both short and long-term planning and guide implementation activities. The core vision in the 2022 RTP is to create a region of diverse, safe, resilient, and accessible transportation options that improve the quality of life for all residents by fostering sustainability, equity, a vibrant economy, clean air, and healthy communities. The 2022 RTP contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as forecast development that is generally consistent with regional-level general plan data. The actions in the 2022 RTP address all transportation modes (e.g., highways, local streets and roads, mass transportation, rail, bicycle, and aviation facilities and services) and consists of short and long-term activities that address regional transportation needs. While the actions are organized by the five key policy areas, many of them support multiple goals and policies. Some actions are intended to support the SCS and reduce GHG emissions directly, while others are focused on the RTP's broader goals. The

2022 RTP does not require that local General Plans, Specific Plans, or zoning be consistent with the 2022 RTP, but provides incentives for consistency for governments and developers.

The proposed Project would not interfere with the MCTC ability to achieve the region's GHG reductions. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206, and it would not conflict with the 2022 RTP targets because those targets were established and are applicable on a regional level. The proposed Project would include 168 single family housing units and associated site improvements. Based on the City's General Plan, the average household size within the City is approximately 3.6 persons per household. Therefore, the proposed Project has the potential to increase population by approximately 662 persons. The RTP is based on a projected population in the Madera region in 2046 of 1.35 million people and associated employment. Therefore, the proposed Project is within the forecasted population growth for the region. As such, the proposed Project land uses would be consistent with the growth assumptions used in the 2022 RTP. Therefore, it is anticipated that implementation of the proposed Project would not interfere with MCTC's ability to implement the regional strategies outlined in the 2022 RTP.

The proposed Project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in the 2022 RTP and would be consistent with applicable State plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Impacts are ***less than significant.***

Mitigation Measures: None are required.

4.9 Hazards and Hazardous Materials

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

4.9.1 Environmental Setting

The proposed Project site is located in the southeastern part of the City of Madera, in a mix of urban and rural area, surrounded by residential housing, vacant/disturbed land and agricultural land further south. Single-family residences exist to the east, north and further northwest of the site, with vacant land and roads located to the

south. Vacant/disturbed land also exists to the north, with roadways, vacant land, a railroad and a park to the west. The site can be characterized as agricultural land, active with almond orchards.

The site is approximately 0.5 miles northeast of Parkwood Elementary School, 0.9 miles northwest of Cesar Chavez School and 1.0 mile southeast of Sierra Vista Elementary. The Project site is approximately 4.9 miles southeast of the Madera Municipal Airport. Fresno-Yosemite International Airport is the closest regional airport to the proposed Project site, approximately 20 miles southeast.

4.9.2 Impact Assessment

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

Less than Significant Impact. This impact is associated with hazards caused by the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Proposed Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program through the submission and implementation of a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the Project site. Therefore, no significant impacts would occur during construction activities.

It is anticipated that the proposed Project would not be a large-quantity user of hazardous materials. Residential land uses do not routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Small quantities of hazardous materials would be used onsite, including cleaning solvents (e.g., degreasers, paint thinners, and aerosol propellants), paints (both latex- and oil-based), acids and bases (such as many cleaners), disinfectants, and fertilizers. The potential risks posed by the use and storage of these hazardous materials are primarily limited to the immediate vicinity of the materials. As such, these materials are not expected to expose human health or the environment to undue risks associated with their use.

Any accumulated hazardous construction or operational wastes will be collected and transported away from the site in compliance with all federal, state and local regulations. The proposed residences are not a typical source of hazardous materials, thus it wouldn't create a significant hazard to the public involving release of hazardous materials. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be ***less than significant***.

Mitigation Measures: None are required.

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. As discussed in impact a), above, the proposed Project would not create a significant impact resulting from routine transport, use, or disposal of hazardous materials. Similarly, compliance with federal

and state regulations during construction activities would minimize the risk of an accident releasing hazardous materials into the environment. Once the residential development is inhabited, it is unlikely that the residential development would generate, store, or dispose of hazardous materials in a way that would accidentally release hazardous materials into the environment.

Therefore, the proposed Project will not create a significant hazard to the public or the environment due to an accidental release of hazardous materials. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

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 site is approximately 0.5 miles northeast of Parkwood Elementary School, 0.9 miles northwest of Cesar Chavez School and 1.0 mile southeast of Sierra Vista Elementary. There are no schools located within one-quarter mile of the Project site. Additionally, as the proposed Project includes the development of single-family residences, it is not reasonably foreseeable that the proposed Project will cause a significant impact by emitting hazardous waste or bringing hazardous materials near a proposed or existing school. Residential land uses do not generate, store, or dispose of significant quantities of hazardous materials. Such uses also do not normally involve dangerous activities that could expose persons onsite or in the surrounding areas to large quantities of hazardous materials. See also Responses IX(a) and IX(b) regarding hazardous material handling. The impact is ***less than significant.***

Mitigation Measures: None are required.

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. The proposed project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Geotracker[13] and Envirostor[14] databases – accessed in October 2024). There are no hazardous materials sites in the vicinity that impact the project. As such, any impacts would remain ***less than significant.***

Mitigation Measures: None are required.

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

No Impact. The Project site is approximately 4.9 miles southeast of the Madera Municipal Airport. Fresno-Yosemite International Airport is the closest regional airport to the proposed Project site, approximately 20 miles southeast. The proposed Project is outside any safety zone or noise contour. There are no private airstrips in the Project vicinity and as such, there is ***no impact***.

[13] California State Water Resources Control Board, GeoTracker Database. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Madera. Accessed October 2024.
[14] Department of Toxic Substances Control, EnviroStor Database. https://www.envirostor.dtsc.ca.gov/public/map/. Accessed October 2024.

Mitigation Measures: None are required.

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

Less Than Significant Impact. The proposed Project involves construction of a residential subdivision. Construction activities will be temporary in nature and will not cause any road closures that could interfere with any adopted emergency response or evacuation plan. The construction contractor will be required to work with the City and County (public works, police/fire, etc.) if and when roadway diversions are required to ensure that adequate access is maintained for residents and emergency vehicles. As such, there will be ***less than significant impacts***.

Mitigation Measures: None are required.

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

No Impact. The proposed Project site is surrounded by rural residential development and active agriculture. There are no wildlands on or near the Project site. The site is substantially surrounded by urban development and vacant/disturbed land uses. There is ***no impact***.

Mitigation Measures: None are required.

4.10 Hydrology and Water Quality

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

4.10.1 Environmental Setting

The City of Madera provides domestic water to the Project site through a network of groundwater wells and pumps and water distribution system. The sole source of water supply for the City of Madera is the Madera sub-basin of the San Joaquin Valley Groundwater Basin. The quality of the water from the aquifer is considered to be of good quality and does not require additional treatment at this time.

4.10.2 Impact Assessment

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

Less than Significant Impact. The proposed Project includes development of 168 single-family residential units, including access streets, lighting, landscaping, and other site improvements, as well as a detention basin and park, on an approximately 29-acre site.

Construction

Although the proposed Project site is relatively small in scale, grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed Project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, “good housekeeping” procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These Best Management Practices (BMPs) would be required in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project construction. When properly designed and implemented, these “good-housekeeping” practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

Operation

The proposed Project will result in wastewater from residential units that will be discharged into the City’s existing wastewater treatment system. The wastewater will be typical of other urban/residential developments consisting

of bathrooms, kitchen drains, and other similar features. The Project will not discharge any unusual or atypical wastewater.

Additionally, there will be no discharge to any surface or groundwater source. As such, the proposed Project will not violate any water quality standards and will not impact waste discharge requirements or otherwise substantially degrade surface or ground water quality. The impact will be ***less than significant***.

Mitigation Measures: None are required.

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. The City of Madera provides domestic water to the Project site through a network of groundwater wells and pumps and water distribution system. The site has been planned for residential development in the General Plan and as such, has been accounted for in the City infrastructure planning documents. The Project does not include new physical disturbance beyond the proposed residential uses. Additionally, Project demands for groundwater resources would not substantially deplete groundwater supplies and/or otherwise interfere with groundwater recharge efforts being implemented by the City of Madera. Future demand can be met with continued groundwater pumping, surface water purchases and conservation measures. Impacts on groundwater supplies and groundwater recharge would be less than significant and would not impede sustainable groundwater management of the basin. As such, there is ***a less than significant impact*** to this impact area.

Mitigation Measures: None are required.

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

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

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

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

iv) impede or redirect flood flows?

Less Than Significant Impact. The Project site is currently comprised of an irrigated and maintained almond orchard.There is no stream or river in the immediate vicinity of the proposed Project and as such, Project implementation will not alter the course of a stream or river. The proposed Project will change drainage patterns of the site through the installation of impervious surfaces and structures (houses, driveways, streets, etc.) and will be required by the City to be graded to facilitate proper stormwater drainage into the City stormwater system. Storm runoff from this Project shall be directed to the detention basin included in the Project site design, in the upper northwest corner of the site. Runoff volume calculations will be provided and the developer shall be required to excavate the basin to an amount equivalent to this Project impact on the basin to ensure adequate basin capacity to accommodate on-site flooding and to minimize off-site flooding.

Any flood flows created by the increase of impervious surface will be directed into the stormwater basin and will not create significant impacts. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP will be retained on-site during construction.

According to FIRM map number is 06039C1160E, effective 9/26/2008, the entire proposed Project site is located within FEMA Flood Zone "AH" (EL 269).[15] Zone "AH" represents a Special Flood Hazard Area (SFHA) with a Base Flood Elevation of 269 feet. SFHA are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The residential units will be built in accordance with the current California Building Code and all City of Madera Standards. Accordingly, the chance of flooding (and therefore the release of pollutants due to flooding) at the site is remote and impacts are considered ***less than significant.***

Mitigation Measures: None are required.

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

Less than Significant Impact. As discussed in Impact X(c), The proposed Project site is located in an area of minimal flood hazard. The site will be designed for adequate storm drainage as per City of Madera building standards and California Building Code and will thus be required to prepare and submit a water quality control plan to be implemented during construction, as required by the National Pollutant Discharge Elimination System (NDPES). This plan must be reviewed and approved by the City Engineer prior to the start of construction.

There are no inland water bodies that could be potentially susceptible to a seiche in the Project vicinity. This precludes the possibility of a seiche inundating the Project site. The Project site is more than 100 miles from the Pacific Ocean, a condition that precludes the possibility of inundation by tsunami. There are no steep slopes that would be susceptible to a mudflow in the Project vicinity, nor are there any volcanically active features that could produce a mudflow in the City of Madera. This precludes the possibility of a mudflow inundating the Project site. Accordingly, the Project poses no risk of releasing pollutants due to Project inundations. Impacts are ***less than significant.***

Mitigation Measures: None are required.

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

Less than Significant Impact. The proposed Project would not compromise water quality control. Project implementation would require Statewide NPDES permits for construction runoff. Stormwater will be sent to the City stormdrain which is sent to retention basins, which serves to recharge groundwater and the City. This process would allow multi-generational use by returning water back in the aquifer which would ultimately help with the implementation of the sustainable groundwater management plan. Accordingly, the proposed Project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.Any impacts are ***less than significant***.

Mitigation Measures: None are required.

[15] National Flood Hazard Layer Viewer, Federal Emergency Management Agency. https://msc.fema.gov/portal/search?AddressQuery=road%2028%2C%20madera%20ca. Accessed October 2024.

4.11 Land Use and Planning

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

4.11.1 Environmental Setting

The proposed site is located in the northern part of the City of Madera. Surrounding land uses consist of:

Direction	Existing Use
North	Vacant/disturbed land, rural residences
East	Rural residences
South	Vacant/disturbed land, roadways
West	Park, vacant/disturbed land, railroad, roadways

4.11.2 Impact Assessment

a) Would the project physically divide an established community?

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

No Impact. The proposed Project site is located north and east of Road 28, and west of Robbins Lane in the near the eastern edge of the City limits of Madera, on APN 011-370-005. To accommodate the Project a Tentative Subdivision Map approval for the entire site will be needed. A majority of the site is currently occupied with irrigated and maintained almond orchards. The Project site is currently zoned and designated in the General Plan for residential uses by the City of Madera, such as the proposed Project. Therefore, construction and operation of the

Project would be in compliance with the land use plan, policy or regulation and it would not cause any land use changes in the surrounding vicinity nor would it divide an established community. There is ***no impact***.

Mitigation Measures: None are required.

4.12 Mineral Resources

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

4.12.1 Environmental Setting

The California Geological Survey (CGS) is responsible for the classification and designation of areas within California containing or potentially containing significant mineral resources. The CGS classifies lands into Aggregate and Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geologic Board, as mandated by the Surface Mining and Reclamation Act of 1975. These MRZs identify whether known or inferred significant mineral resources are presented in areas. Lead agencies are required to incorporate identified MRZs resource areas delineated by the State into their general plans resource. According to the findings of the City General Plan Update EIR and the Department of Conservation Division of Mine Reclamation, the City does not contain any State or locally designated mineral resources

4.12.2 Impact Assessment

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

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

No Impact. According to the City of Madera General Plan, the proposed Project area is not included in a State classified mineral resource zones. Additionally, it is not delineated on a local general plan, specific plan, or other land use plan. Soil disturbance for the proposed Project would be limited site groundwork such as grading, foundations, and installation of infrastructure. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

4.13 Noise

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

4.13.1 Environmental Setting

The proposed Project site is located north and east of Road 28, and west of Robbins Lane in the near the eastern edge of the City limits of Madera. Road 28, as well as Avenue 13, which runs east-west just south of the Project site, are considered arterial roadways. SR 99, located less than 500 feet from the Project site on the southwestern boundary, is a state highway. The Project site is exposed to traffic noise associated with vehicles along SR 99, Road 28, Avenue 28, and to a lesser extent Robbins Lane and S. Knox Road. The City's Circulation Element states that the 2030 projected noise contour for the section of Avenue 13 between SR 99 and Road 29 is 63.51 dBA CNEL. The Circulation Element further states that levels of 60-70 dBA are tentatively compatible for residential uses. Noise exposure may be of concern, but common building practices will make the indoor living environment acceptable. Noise levels associated with traffic on the aforementioned roadways are not considered to be a significant source of Project site noise exposure.

Table 4-9 provides the City of Madera noise level standards for transportation noise sources.

Table 4-9
Exterior Noise Compatibility Guidelines For Noise From All Sources, Including Transportation Noise (24-Hour Day-Night Average [Cnel/Ldn])

Land Use Designations	Completely Compatible	Tentatively Compatible	Normally Incompatible	Completely Incompatible
All Residential (Single- and Multi-Family)	Less than 60 dBA	60-70 dBA	70-75 dBA	Greater than 75 dBA
All Commercial	Less than 70 dBA	70-75 dBA	Greater than 75 dBA	(1)
Public Parks (Lands designated as Open Space on which public parks are located or planned)	Less than 65 dBA	65-70 dBA	70-75 dBA	Greater than 75 dBA

4.13.2 Impact Assessment

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

Less than Significant Impacts.

Short-term (Construction) Noise Impacts

Proposed Project construction related activities will involve temporary noise sources. Typical construction related equipment includes graders, trenchers, small tractors and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Table 4-10 indicates the anticipated noise levels of the typical construction-related equipment (i.e., graders, trenchers, tractors) based on a distance of 50-feet between the equipment and the sensitive noise receptor.[16]

Table 4-10 Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) 50 ft from Source
Air Compressor	80
Backhoe	80
Compactor	82
Concrete Mixer	85
Dozer	85
Generator	82

[16] The Noise and Vibration Impact Assessment Manual, Federal Transit Administration, U.S. Department of Transportation. September 2018. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Table 7-1. Accessed October 2024.

Equipment	Typical Noise Level (dBA) 50 ft from Source
Grader	85
Jack Hammer	88
Loader	85
Paver	85
Truck	84

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time in urban environments. Most residents of urban areas recognize this reality and expect to hear construction activities on occasion.

The proposed Project will comply with the General Plan and Chapter 11 of the Madera Municipal Code requirements with applicable standards. Additionally, the City of Madera's Noise Control Ordinance prohibits noise generated from construction, drilling, repair, alteration, remodeling, paving, or grading of any real property between the hours of 8:00p.m. and 6:00a.m. of the following day.

Long-term (Operational) Noise Impacts

The primary source of on-going noise from the Project will be from vehicles traveling on internal access roads and from traffic traveling along Road 28. The Project will result in an increase in traffic on some roadways in the Project area. However, the relatively low number of new trips associated with the Project is not likely to increase the ambient noise levels by a significant amount. Given the amount of existing vehicular activity in the Project area, the moderate increase in traffic associated with the new residential development (1,584 average daily trips, Appendix D), is not expected to increase ambient noise levels significantly. The area is active with vehicles, residential housing, and agricultural land uses, so the proposed Project will not introduce a new significant source of noise that isn't already occurring in the area. Impacts are ***less than significant.***

Mitigation Measures: None are required.

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

Less than Significant Impact.

Vibration Levels

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project includes development of 168 single-family residences across a 29-acre site, along with associated internal access roads, street lighting, site landscaping and additional related improvements, including a detention basin and a park.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day. Table 4-11 describes the typical construction equipment vibration levels.[17]

Table 4-11 Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Administration (FTA) threshold for the nearest residences which are located to the west and south of the Project site. Operations will be typical of a residential development and will not involve equipment that would generate substantial ground borne vibration or ground borne noise levels. Additionally, the City of Madera 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 proposed Project construction would not use this type of equipment, the Project would not generate excessive ground-borne vibration or ground-borne noise levels.

Therefore, the impact is considered ***less than significant.***

Mitigation Measures: None are required.

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

No Impact. The Project site is approximately 4.9 miles southeast of the Madera Municipal Airport. The Project is not located within an airport land use plan. Therefore, there is no impact.

[17] Ibid.

4.14 Population and Housing

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

4.14.1 Environmental Setting

According to the most recent Department of Finance data, the City of Madera's population as of 1/1/2024 was 66,560. There were approximately 18,765 total housing units in the City, with approximately 3.60 persons per household.[18]

4.14.2 Impact Assessment

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

Less Than Significant Impact. According to the City's EIR, both the City of Madera and the Planning Area have experienced substantial population growth from 1990-2008[19]. City of Madera's population during the adoption of the General Plan in 2008 was 56,710[20], and the current population is 66,560. This represents an approximate increase of 17.37%. Estimates for 2024 shows that the City has 18,765 housing units with an average of 3.60 people per household.[21] There are 168 new single-family homes associated with the proposed Project. The site would provide additional housing for approximately 662 people. This is a relatively small population gain and is not expected to affect any regional population, housing or employment projections anticipated by City documents.

Additionally, the site is designated as Residential by the City's General Plan and as such, the increase in population has been planned for. The proposed Project will alleviate some overcrowding in the regional population by

[18] Population and Housing Estimates for Cities, Counties, and the State, 2020-2023. California Department of Finance, May 2023. https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2024/. Accessed October 2024.

[19] City of Madera General Plan Environmental Impact Report, May 2009. Page 7.0-2.

[20] Ibid.

[21] Ibid.

contributing reliable housing, and will additionally provide temporary construction jobs to the local workforce. In conclusion, the Project implementation will not displace substantial numbers of people and instead provide needed housing. Any impacts are considered ***less than significant***.

Mitigation Measures: None are required.

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

Less Than Significant Impact. The proposed site is currently comprised of an irrigated and maintained almond orchard. As noted earlier, the Project consists of development of 168 single-family residences along with associated site improvements. The Project is not anticipated to displace existing people or housing. Any impacts are considered ***less than significant***.

Mitigation Measures: None are required.

4.15 Public Services

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

4.15.1 Environmental Setting

The proposed Project is the construction and operation of 168 single-family residences on an approximately 29-acre site in the southeastern part of the City of Madera. The proposed Project site is located in a mix of urban and rural area, surrounded by residential housing, vacant/disturbed land and agricultural land further south. Single-family residences exist to the east, north and further northwest of the site, with vacant land, a railroad and roads located to the south. Vacant/disturbed land also exists to the north, with roadways, vacant land and a park to the west. The site can be characterized as agricultural land, active with almond orchards.

4.15.2 Impact Assessment

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

Fire Protection:

Less than Significant Impact. The Madera City Fire Department is administered by the California Department of Forestry and Fire Protection (CDF) pursuant to a cooperative fire protection agreement. Services include fire prevention and suppression, emergency medical assistance, rescue, public assistance, fire menace standby, safety inspections, and review of building plans for compliance with applicable codes and ordinances. According to the City's GP, there are two City fire stations, located at 317 North Lake and 200 South Schnoor, are staffed 24 hours a day. The Fire Department staffs two fire engines and one mini-pumper. One of the engines features a 50' tele-squirt aerial ladder. In addition to these stations, two County of Madera stations serve portions of the Planning Area. [22]

Upon approval, the Project site will be serviced by the Fire Department. The Project would be required to comply with all applicable fire and building safety codes (California Building Code and Uniform Fire Code) to ensure fire safety elements are incorporated into final Project design, including the providing designated fire lanes marked as such. Proposed interior streets will be required to provide appropriate widths and turning radii to safely accommodate emergency response and the transport of emergency/public safety vehicles. The Project will also be designed to meet Fire Department requirements regarding water flow, water storage requirements, hydrant spacing, infrastructure sizing, and emergency access. As a result, appropriate fire safety considerations will be included as part of the final design of the Project. The proposed Project at full buildout will add to the number of "customers" served, however, the Fire Department has capacity for the additional service need. No additional fire equipment, personnel, or services are anticipated to be required by Project implementation. In addition, the Project applicant will be required to pay all associated impact fees related to public services, including fire. As such, any impacts are ***less than significant***.

Police Protection

Less than Significant Impact. Police services are provided by the Madera Police Department. The Police Department has two divisions—Administrative Services and Operations—that provide a wide variety of law enforcement services, ranging from investigations to traffic patrols to school liaison. According to the 2019 Annual Report, the Department had 70 sworn personnel and 34 nonsworn personnel.[23] Implementation of the proposed Project would result in an increase in demand for police services; however, this increase would be minimal compared to the number of officers currently employed by the Madera Police Department and would not trigger the need for new or physically altered police facilities. No additional police personnel or equipment is anticipated. In addition, each home will be assessed a public safety impact fee by the City that is used to make capital improvements for the Police Department. The proposed site has been designated by the General Plan and zoned for residential purposes. The impact is **less than significant.**

Schools

Less than Significant Impact. The proposed Project site is located within the Madera Unified School District. The site is approximately 0.5 miles northeast of Parkwood Elementary School, 0.9 miles northwest of Cesar Chavez School and 1.0 mile southeast of Sierra Vista Elementary. Pursuant to California Education Code Section 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The Project applicant would be required to pay such fees to reduce any impacts of new residential development of school services. Payment of the developer fees will offset the addition of school-age children within the district.

[22] Ch. 6 Health and Safety Element, City of Madera General Plan. October 2009. Pg 6-15.

[23] Annual Report 2019, City of Madera Police Department. https://www.madera.gov/wp-content/uploads/2020/10/PD-Annual-Report-Final.pdf. Accessed October 2024.

While development of the 168 residential units alone is not expected to require the alteration of existing or construction of new school facilities, the development will contribute to the cumulative need for increased school facilities. The timing of when new school 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 the future new school facilities are further planned and developed, they would be subject to their own separate CEQA review in order to identify and mitigate any potential environmental impacts. As such, any impacts would be ***less than significant.***

Parks

Less than Significant Impact. The City of Madera provides its residents several types of parks and recreational facilities. The Parks and Community Services Department team supervises and maintains area parks, the municipal golf course, and other local landscape. The City also coordinates a wide variety of recreation and leisure services for both youth and adults. According to the City's General Plan, there are more than 320 acres of parks and recreation areas within the City limits. Technically, the closest park to the proposed site is the Road 28 Park, located approximately 0.2 miles to the west, which is a walking park/greenway. However, the closest park with recreational areas such as playgrounds and basketball courts, would be Parkwood Park located approximately 1.1 miles southwest. The Tentative Subdivision Map for the proposed Project will contain an approximately 4-acre park for tenant use. Additionally, the Project will also be required to pay City Park facility impact fees to compensate for any service demand increase on existing parks within the Madera area. The Project applicant would be required to comply with the Municipal Code and Ordinances. As such, any impacts would remain ***less than significant.***

Other public facilities

Less than Significant Impact. The proposed Project is within growth projections identified in the City's General Plan and other infrastructure studies. As such, the Project would not result in increased demand on other public facilities such as library services that has not already been planned for. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

4.16 Recreation

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

4.16.1 Environmental Setting

The City of Madera provides its residents several types of parks and recreational facilities. According to the City's General Plan, there are more than 320 acres of parks and recreation areas within the City limits. The City's neighborhood parks are predominately located in the eastern half of the City.[24]

4.16.2 Impact Assessment

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

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 City of Madera provides its residents several types of parks and recreational facilities. The Parks and Community Services Department team supervises and maintains area parks, the municipal golf course, and other local landscape. The Department also coordinates a wide variety of recreation and leisure services for both youth and adults. According to the City's General Plan, there are more than 320 acres of parks and recreation areas within the City limits. The closest park to the proposed site is the Pan-American Park, located approximately 0.2 miles to the southeast.

The proposed Project consists of development of 168 single-family residences and other associated improvements. However, the increase of approximately 662 persons resulting from the Project would have a relatively small impact on existing recreational facilities. The Tentative Subdivision Map for the proposed Project will contain a four-acre park for tenant use. However, in order to implement the goals and objectives of the City's General Plan, and to mitigate the impacts caused by future development in the City, park facilities must be constructed. The City Council

[24] Ch. 11 Parks and Recreation Element, City of Madera General Plan. October 2009. Pg 11-2.

has determined that a Park Facilities Fee is needed in order to finance these public facilities and to pay for each development's fair share of the construction and acquisition costs. The Project Applicant will be required to pay development impact fees as determined by the City of Park Facilities Fees. The Project will still be required to pay City park facility impact fees, as required. Therefore, impacts are considered ***less than significant.***

Mitigation Measures: None are required.

4.17 Transportation

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

4.17.1 Environmental Setting

The proposed Project site is located in the southern part of the City of Madera, in a mix of agricultural and rural area, surrounded by rural residential housing, vacant/disturbed land and active agriculture. The site is bound by Tozer Street (Road 28) which is an existing north-south two-lane undivided arterial adjacent to the proposed Project site. In this area, Tozer Street exists as a four-lane divided arterial between Yosemite Avenue and Clinton Street, a two-lane undivided arterial between Clinton Street and Fig Street, a three-lane divided arterial between Fig Street and Knox Street and a two-lane undivided arterial between Knox Street and Avenue 13. The City of Madera *General Plan* Circulation Element designates Tozer Street as an arterial between Yosemite Avenue and Road 29.

4.17.2 Impact Assessment

Under Senate Bill 743 (SB743), traffic impacts are related to Vehicle Miles Traveled (VMT). The VMT metric became mandatory on July 1, 2020. 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 automobile travel (additional miles driven) a proposed Project would create on California roads. If the Project adds excessive automobile travel onto roads, then the Project may cause a significant transportation impact. Therefore, LOS measures of impacts on traffic facilities are no longer a relevant CEQA criteria for transportation impacts. A Vehicle Miles Travelled (VMT) Analysis was prepared for the proposed Project by JLB Traffic Engineering, Inc., and is the basis for the impact analysis below. The VMT Analysis is provided as Appendix D to this Initial Study.

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

Less than Significant Impact. The proposed Project includes the construction of 168 single-family residential units. The trip generation rates for the proposed Project were obtained from the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table III presents the trip generation for the proposed Project with trip generation rates for Single-Family Detached Housing (210). At buildout, the proposed Project is estimated to generate approximately 1,584 daily trips, 118 AM peak hour trips and 158 PM peak hour trips.

Bikeways

The MCTC Madera Active Transportation Plan (ATP) classifies bicycle facilities into the following types:

- Class I Bikeway (Bike Path) – Provides a completely separated right-of-way for exclusive use of bicycles and pedestrians with crossflow minimized.
- Class II Bikeway (Bike Lane) – Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bikeway (Bike Route) – Provides a shared use with pedestrians or motor vehicle traffic, typically on lower volume roadways.
- Class IV Bikeways (Separated Bikeways) – Provides a protected lane for one-way bike travel (one-way cycle track) and protected lanes for two-way bike travel (two-way cycle track) on a street or highway.

Class II (Bike Lane) Bikeways exist in the vicinity of the Project site. In the vicinity of the Project site, Class II Bikeways exist along portions of Tozer Street and Avenue 12. The MCTC Madera ATP recommends that Class II Bikeways be implemented in the vicinity of the Project Site (MCTC, 2018). In the vicinity of the Project site, Class II Bikeways are planned on Tozer Street, Almond Avenue and Avenue 13.

Walkways

The MCTC *ATP* recommends that more sidewalks be constructed to improve pedestrian safety and promote alternative modes of transportation. It is stated that the needs of pedestrians shall be considered and accommodated in all roadway construction and renovation projects. The proposed Project will comply with the MCTC ATP, City standards, and the California Building Code and construct ADA compliant pedestrian sidewalks along internal streets connecting to all external sidewalks and along its frontage to Tozer Street.

Transit

Madera Metro is the transit operator in the City of Madera. At present, there are two Madera Metro transit routes that operate in the vicinity of the proposed Project site. Route 2 operates at 1-hour intervals on weekdays and weekends. It's nearest stop to the Project site is located on the east side of Tozer Street approximately 400 feet south of Sunrise Avenue. Route 3 operates at 1-hour intervals on weekdays and weekends. It's nearest stop to the Project site is located on the east side of Tozer Street approximately 400 feet south of Sunrise Avenue. The County of Madera also stated that the Project is located within the County's Dial-A-Ride service area as well as one of several preliminary proposed Microtransit Zones identified in the Microtransit Strategy Analysis which was currently under review at the time of the preparation of this report. Retention of the existing and expansion of future transit routes is dependent on transit ridership demand and available funding.

Roadway

The City of Madera General Plan contains several policies and self-mitigating action items to regulate the development of new roadways. Action Item CI-1.1 requires the dedication of right-of-way and the installation of roadway improvements as part of the review and approval of development projects. Policy CI-7 requires that turning movements and driveway approaches to adjoining properties and onto local streets shall be limited so through traffic speeds are not reduced by more than 10 miles per hour based on the street design speed. Policy CI-11 requires development projects to provide funding or to construct roadway/intersection improvements to implement the City's Circulation Master Plan. The proposed Project will be in compliance with the policies and action items of the City of Madera Circulation Element.

As discussed in the above analysis, the proposed Project would be consistent with the General Plan and ATP and thereby would not conflict with a program, plan, ordinance, or policy addressing bicycle, transit, roadway or pedestrian facilities. Impacts are considered **less than significant.**

Mitigation Measures: None are required.

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

Less than Significant Impact. To implement SB 743, the CEQA Guidelines were amended by adding Section 15064.3. According to Section 15064.3, VMT measures the automobile travel generated from a proposed Project (i.e., the additional miles driven). Here, automobiles refer to on-road passenger vehicles such as cars and light-duty trucks. If a proposed Project adds excessive automobile travel on California roads thereby exceeding an applicable threshold of significance, then the Project may cause a significant transportation impact. In the case that quantitative models or methods are not available to the lead agency to estimate the VMT for the Project being considered, provisions of CEQA Guidelines Section 15064.3(b)(3) permits the lead agency to conduct a qualitative analysis. The qualitative analysis may evaluate factors including but not limited to the availability of transit, proximity to other destinations, and construction traffic.

Lastly, Section 15064.3(b)(4) of the CEQA Guidelines states that "[a] lead agency has discretion to evaluate a Project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a Project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the Project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section." Below is a discussion of the threshold and analysis used to analyze VMT impacts from the proposed Project.

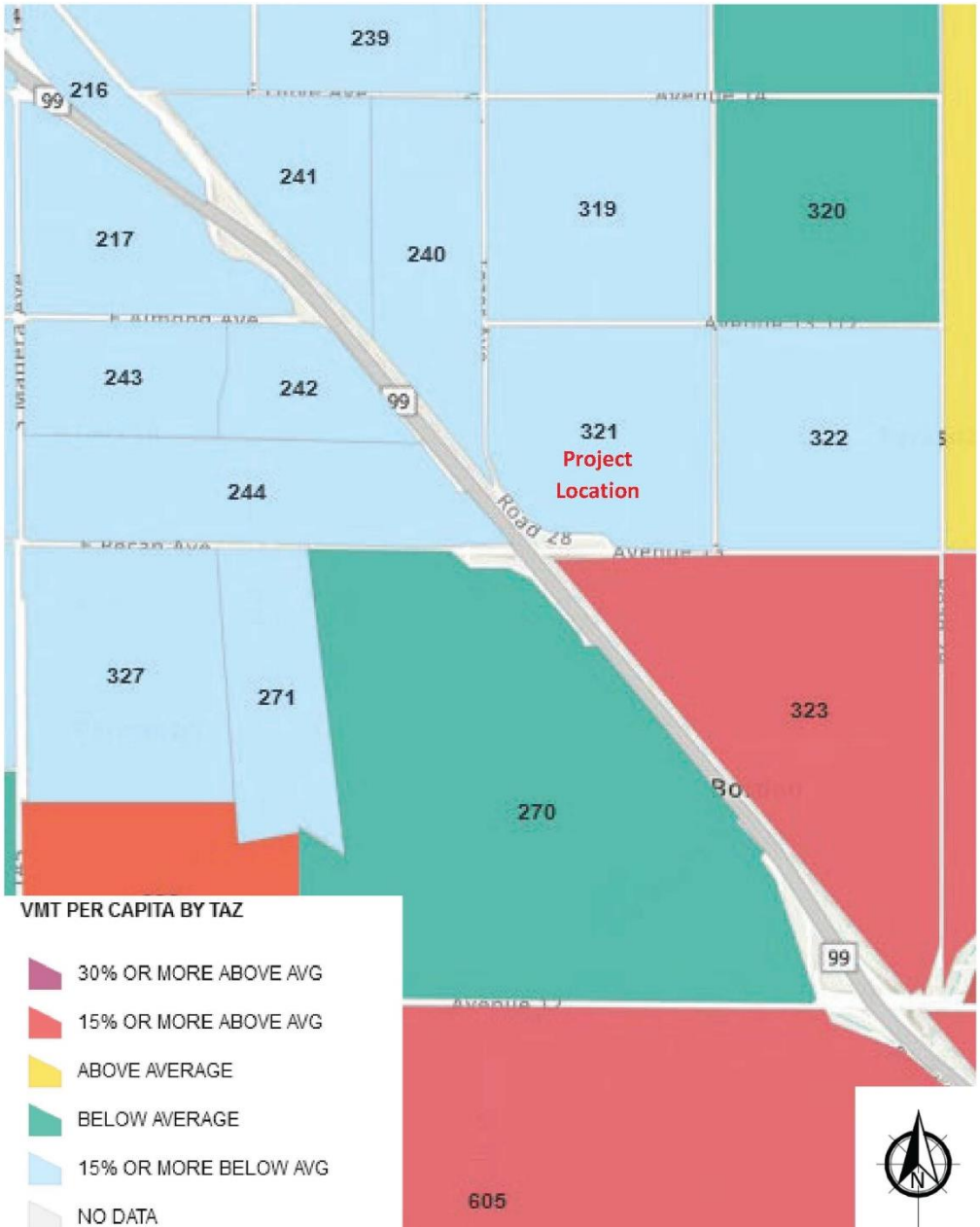
According to page 19 of the Technical Advisory on Evaluating Transportation Impacts in CEQA published by the Governor's Office of Planning and Research (OPR), "of land use Projects, residential, office, and retail Projects tend to have the greatest influence on VMT. For that reason, OPR recommends the quantified thresholds described above for purposes of analysis and mitigation. Lead agencies, using more location specific information, may develop their own more specific thresholds, which may include other land use types." Neither the City of Madera nor the County's Regional Transportation Planning Agency (Madera County Transportation Commission (MCTC)), have established VMT thresholds or guidelines. Since the MCTC and the City of Madera do not have established thresholds or guidelines, the state guidelines, including the Technical Advisory document mentioned above, have been utilized as the default methodology used to analyze VMT impacts. In April 2018, the Governor's Office of Planning and Research (OPR) issued the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) (revised December 2018) to provide technical recommendations regarding VMT, thresholds of

significance, and mitigation measures for a variety of land use project types. According to OPR's Technical Advisory, lead agencies may use "screening thresholds" to identify when a project should be expected to create a less-than-significant impact without conducting a detailed study. One of the screening methods to screen out VMT impacts for residential project is to use map-based screening. Residential projects that are in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Generally, a travel survey or travel demand model can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential projects from needing to prepare a detailed VMT analysis.

The proposed Project could generate up to 1,584 average daily vehicle trips (ADT), modeled using the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (see Appendix D). MCTC developed a VMT Screening Map which shows the proposed project is in the Traffic Analysis Zone (TAZ) 321, which is designated as having a VMT per capita by TAZ as 15% or more below average, as demonstrated in Figure 4-1. As such, the VMT generated by the proposed Project would be below significance thresholds. Impacts are ***less than significant***.

Mitigation Measures: None are required.

Figure 4-1 Madera County – VMT Screening Map[25]



[25] Vehicle Miles dix D.

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

Less Than Significant Impact. The proposed Project has been designed for ease of access, adequate circulation/movement, and is typical of residential developments in the City of Madera. The proposed residences will be accessed through three points on Road 28. On-site circulation patterns do not involve high speeds, sharp curves or dangerous intersections. Although there will be an increase in the volume of vehicles accessing the site and surrounding areas, the proposed Project will not present a substantial increase in hazards. Impacts would be *less than significant*.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact. State and City Fire Codes establish standards by which emergency access may be determined. The proposed Project would have to provide adequate unobstructed space for fire trucks to turn around. The proposed Project site would have adequate internal circulation capacity including entrance and exit routes to provide adequate unobstructed space for fire trucks and other emergency vehicles to gain access and to turn around. The proposed Project does not involve a change to any emergency response plan and the site will remain accessible to emergency vehicles of all sizes. Any impacts are considered *less than significant*.

Mitigation Measures: None are required.

4.18 Tribal Cultural Resources

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

4.18.1 Environmental Setting

The NAHC provides protection to Native American burials from vandalism and inadvertent destruction, provides a procedure for the notification of most likely descendants regarding the discovery of Native American human remains and associated grave goods, brings legal action to prevent severe and irreparable damage to sacred shrines, ceremonial sites, sanctified cemeteries and place of worship on public property, and maintains an inventory of sacred places.[26]

The NAHC performs a Sacred Lands File search for sites located on or near the Project site upon request. The NAHC also provides local governments with a consultation list of tribal governments with traditional lands or cultural

[26] Native American Heritage Commission, About the Native American Heritage Commission. http://nahc.ca.gov/about/. Accessed October 2024.

places located within the Project Area of Potential Effect. The City sent letters to the tribal governments listed by the NAHC on February 14, 2024 as required by AB 52. The tribes had 30 days from the receipt of the letter to request consultation in writing.

4.18.2 Impact Assessment

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

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

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

Less than Significant Impact. A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the MUSD, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed in the Phase I Cultural Resource Survey (Appendix C) and under Section V, Cultural Resources, criteria (b) and (d), no known archeological resources, ethnographic sites or Native American remains are located on the proposed Project site.

As discussed under criterion (b) implementation of standard protection measures outlined in the City's General Plan EIR would ensure that impacts to unknown archaeological deposits, including TCRs, remains at a less than significant level. As discussed under criterion (d), compliance with California Health and Safety Code Section 7050.5 would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans. In addition, the City provided consultation letters to the Tribes on the NAHC list that was provided to the City. As of March 2025, no response has been received from any of the Tribes. Any impacts to TCR would be considered ***less than significant***.

Mitigation Measures: No additional measures are required.

4.19 Utilities and Service Systems

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

4.19.1 Environmental Setting

The City of Madera provides domestic water to the Project site through a network of groundwater wells and pumps and water distribution system. The sole source of water supply for the City of Madera is the Madera sub-basin of the San Joaquin Valley Groundwater Basin.

The Madera County Integrated Water Management Plan (Madera IRWM) encourages all of the groundwater users in Madera County to cooperate in reducing the overdraft. The City has developed specific plans to reduce their use of groundwater through implementation of water meters to encourage conservation by users and the percolation of treated wastewater for extraction by the Madera Irrigation District for farm irrigation uses. They have the potential to further reduce groundwater depletion through the implementation of a groundwater recharge program that uses surface water supplies from the San Joaquin River and the Fresno River.

The City of Madera provides wastewater collection, treatment and disposal for the wastewater generated by the Project site. Wastewater collection is provided through a series of existing sanitary sewer mains and trunk sewers

that convey wastewater from the Project and areas surrounding the Project to the existing wastewater treatment plant. Treatment and disposal are provided at the City's Wastewater Treatment Plant (WWTP) located at 13048 Road 21½, west of the City of Madera. This section discusses the capacity of the existing sanitary sewer collection system, the capacity of the WWTP, the expected demand from the Project, and the evaluation of the impacts and comparison of those impacts to thresholds of significance.

4.19.2 Impact Assessment

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

Less than Significant Impact. The proposed Project will require connections to water, wastewater, stormwater drainage, electric and telecommunications. The City of Madera receives electricity from Pacific Gas and Electric Company (PG&E) via underground and above-ground service lines. PG&E owns and maintains all service and transmission lines and electrical substations throughout the City. Several providers provide telecommunication services to the City; however, AT&T is the largest provider of cellular and fixed telephone services. The proposed Project will not utilize natural gas.

The Project site is located within the service territory of the Wastewater Treatment Facility (WTF). Since the WTF is considered a publicly owned treatment works, operational discharge flows treated at the WTF would be required to comply with applicable water discharge requirements issued by the Central Valley Regional Water Quality Control Board (RWQCB). Compliance with conditions or permit requirements established by the City as well as water discharge requirements outlined by the Central Valley RWQCB would ensure that wastewater discharges coming from the proposed Project site and treated by the WTF system would not exceed applicable Central Valley RWQCB wastewater treatment requirements.

As discussed in Section X, Hydrology and Water Quality, with an increase in the area of impervious surfaces on the Project site, an increase in the amount of storm water runoff is anticipated. The site will be designed so that storm water is collected and deposited in the on-site basin. The storm water collection system design will be subject to review and approval by the City Public Works Department. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP is retained on-site during construction. Thus, the proposed Project would have a ***less than significant impact.***

Mitigation Measures: None are required.

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. See Section X – Hydrology for a full discussion pertaining to available water supply. The site land use designation and zoning is currently Residential and as such, residential development has been accounted for in the General Plan and other infrastructure planning documents. The City will have sufficient supply to serve the proposed Project and as such, the proposed Project will have a ***less than significant impact.***

Mitigation Measures: None are required.

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 discussed in Section XVIII(a), implementation of the proposed Project would result in the need for additional wastewater treatment service; however, the proposed development was accounted for in the General Plan and has been planned for in the City's adopted infrastructure planning documents. Additionally, the proposed Project applicant would be required to comply with any applicable City and WTF regulations and would be subject to applicable development impact fees and wastewater connection charges. Therefore, with compliance to applicable standards and payment of required fees and connection charges, the Project would not result in a significant impact related to construction or expansions of existing wastewater treatment facilities.

Mitigation Measures: None are required.

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. According to the City's GP, the City of Madera Solid Waste Division provides all residential customers with solid waste and greenwaste services. There are several recycling companies in Madera that accept beverage containers and other recyclables. Disposal services in the City are provided by a contractor, Mid Valley Disposal. The Fairmead Landfill is approximately 12 miles northwest of the proposed Project site.

The Project would comply with federal, state and local statutes and regulations related to solid waste. The proposed Project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during Project construction and operation. The proposed Project would result in ***less than significant*** impacts to solid waste and landfill facilities.

Mitigation Measures: None are required.

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

Less than Significant Impact. See Response d, above. The proposed Project will comply with all federal, state and local statutes and regulations related to solid waste. As such, any impacts would be ***less than significant.***

Mitigation Measures: None are required.

4.20 Wildfire

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

4.20.1 Environmental Setting

4.20.2 Impact Assessment

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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?

Less Than Significant Impact. The proposed Project is not located in or near a state responsibility area and it is not in an area classified as a Fire Hazard Severity Zone. The site is located in an area developed with residential and agricultural uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread.

To receive building permits, the proposed Project would be required to be in compliance with the adopted emergency response plan and latest Building Codes. As such, any wildfire risk to the Project structures or people would be ***less than significant.***

Mitigation Measures: None are required.

4.21 CEQA Mandatory Findings of Significance

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

4.21.1 Environmental Setting

4.21.2 Impact Assessment

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

Less Than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have a substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to less than significant.

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 increase need for housing, increase in traffic, air pollutants, etc.). The impact is **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 With Mitigation. 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 to reduce all potentially significant impacts to **less than significant**.

Chapter 5 Mitigation Monitoring and Reporting Program

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

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

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

Table 5-1 Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
Air Quality					
Mitigation Measure AIR-1 Consistent with San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive PM10 Prohibitions), the following controls are required to be included as specifications for the proposed Project and implemented at the construction site: • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant or covered with a tarp or other suitable cover or vegetative ground cover. • All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or	Prior to and during construction activities.	Continuous during construction activities	Applicant / Project Contractor	City Planning and Building Departments shall verify that specifications are being met.	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. • When materials are transported off site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust					

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
emissions. Use of blower devices is expressly forbidden.) • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/ suppressant.					
Mitigation Measure AIR-2 All construction equipment over 50 horsepower (hp) used during construction of the project shall be equipped with at least Tier 2 engines with Level 3 Diesel Particulate Filters (DPF) or the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. Prior to issuance of building permits, the project Applicant shall submit	During construction permitting process.	Once	Applicant / Project Contractor	City Planning and Building Departments shall verify that specifications are on plans during plan check.	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
construction plans to the City of Madera denoting the projected equipment Tier rating that will be used during the construction period.					
Biological Resources					
Mitigation Measure BIO-1: To the extent practicable, construction shall be scheduled to avoid the Swainson's hawk nesting season, which extends from March through August. If it is not possible to schedule construction between September and February, a qualified biologist shall conduct surveys for Swainson's hawk in accordance with the Swainson's Hawk Technical Advisory Committee's Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (SWTAC 2000, Appendix D). These methods require six surveys, three in each of the two survey periods, prior to project initiation. Surveys shall be	Prior to construction activities.	Once	Applicant / Project Contractor	Applicant / project contractor shall submit preconstruction survey documentation of compliance to the City prior to issuance of grading or building permits if construction is scheduled during the nesting season. City Planning and Building Departments shall verify preconstruction survey documentation is complete prior to issuance of grading or building permit. City Planning Department to field verify prior to commencement of any	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
conducted within a minimum 0.5-mile radius around the Project site. If an active Swainson's hawk nest is found within 0.5 miles of the Project site, and the qualified biologist determines that Project activities would disrupt the nesting birds, a construction-free buffer or limited operating period shall be implemented in consultation with the CDFW.				project related grading or construction activities as applicable survey specifications are implemented.	
Mitigation Measure BIO-2: To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall	Prior to construction activities.	Once	Applicant / Project Contractor	Applicant / project contractor shall submit preconstruction survey documentation of compliance to the City prior to issuance of grading or building permits if construction is scheduled during the nesting season. City Planning and Building Departments shall verify preconstruction survey documentation is complete prior to issuance of grading or building permit.	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.				City Planning Department to field verify prior to commencement of any project related grading or construction activities as applicable survey specifications are implemented.	
Cultural Resources/Geology and Soils					
Mitigation Measure CUL-1:	Prior to and during construction.	Ongoing.	Applicant / Project Contractor	Applicant / project contractor shall submit documentation of compliance to the City	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
The following shall be implemented: Before initiation of construction or ground-disturbing activities associated with the Project, the City shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources; The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash				prior to issuance of grading or building permits. City Planning and Building Departments shall verify preconstruction survey documentation is complete prior to issuance of grading or building permit. City Planning Department to field verify prior to commencement of any project related grading or construction activities as applicable survey specifications are implemented.	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or other appropriate measure, as outlined in Public Resources Code section 21083.2. City of					

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	**When Monitoring is to Occur**	**Frequency of Monitoring**	**Agency Responsible for Monitoring**	**Method to Verify Compliance**	**Verification of Compliance**
Madera shall implement said measures.					
Mitigation Measure CUL-2: City of Madera will incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at City of Madera, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to	Prior to and during construction.	Ongoing.	Applicant / Project Contractor	City will incorporate into construction contract.	

Mitigation Monitoring and Reporting Program					
Mitigation Measure/Condition of Approval	When Monitoring is to Occur	Frequency of Monitoring	Agency Responsible for Monitoring	Method to Verify Compliance	Verification of Compliance
be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.					

Appendix A

Air Quality, Greenhouse Gas and Energy Assessment

Appendix B

Biological Resource Evaluation Report

Appendix C

Phase I Cultural Resource Survey

Appendix D

Vehicle Miles Travelled Assessment