Public Review Draft
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Bergamot Specific Plan

May 2021

Lead Agency:

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SECTION A. INTRODUCTION AND PURPOSE OF THE IS/MND

I. Format and Content of the IS/MND

The content and format of this Initial Study/Mitigated Negative Declaration (IS/MND) is designed to meet the requirements of the California Environmental Quality Act (CEQA). This report is organized as follows:

Section A, *Introduction and Purpose of the IS/MND*, identifies the purpose and scope of the IS/MND.

Section B, *Project Description*, describes the location, general environmental setting, project background, project components, and the characteristics of the proposed project's construction and operational phases.

Section C, *Environmental Checklist Form*, provides a checklist of environmental factors that would be potentially affected by this project and a description of the possible threshold responses.

Section D, *Evaluation of Environmental Impacts*, presents the environmental setting and impact analysis for each resource topic.

Section E, *References*, identifies all printed references and individuals cited in this IS/MND.

Section F, *List of Preparers*, identifies all individuals involved in preparing this IS/MND.

II. Purpose of the IS/MND

The purpose of the Initial Study is to: (1) identify environmental impacts; (2) provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or a negative declaration; (3) enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is required to be prepared; (4) facilitate environmental assessment early in the design of the project; (5) document the factual basis of the finding in a negative declaration that a project would not have a significant environmental effect; (6) eliminate needless EIRs; (7) determine whether a previously prepared EIR could be used for the project; and (8) assist in the preparation of an EIR, if required, by focusing the EIR on the effects determined to be significant, identifying the effects determined not to be significant, and explaining the reasons for determining that potentially significant effects would not be significant.

CEQA Objectives

CEQA seeks to accomplish the following five (5) major objectives using the procedures indicated below:

- Disclose Environmental Impacts: The CEQA process is primarily designed to identify and disclose to decision makers and the public the significant environmental impacts of a proposed project prior to its consideration and approval. This is accomplished by the preparation of the following types of CEQA documents:
    - Initial Studies
    - Negative Declarations
    - Environmental Impact Reports
- Prevent or Reduce Environmental Damage: If potential adverse environmental impacts are identified, the CEQA process next attempts to identify ways to prevent or reduce these impacts

by requiring consideration of feasible project alternatives or the adoption of mitigation measures for project impacts that cannot be avoided along with appropriate mitigation monitoring.

- Disclose Agency Decisions: The CEQA process provides for the full disclosure to the public of the reasons for agency (lead, responsible, trustee) approval of projects with significant environmental impacts using the following methods:
  - Findings
  - Statement of Overriding Consideration
- Promote Interagency Coordination: Lead, responsible, and trustee agencies assist each other in more thoroughly understanding the potential environmental impacts associated with a proposed project by incorporating one (1) or more of the following into their CEQA processes:
  - Early consultation
  - Scoping meetings
  - Notice of Preparation (NOP)
  - State Clearinghouse review
- Encourage Public Participation: The CEQA process encourages and provides opportunities for public participation in the overall project planning process in one (1) or more of the following CEQA processes:
  - Scoping meetings
  - Receipt of public notice
  - Response to comments
  - Legal enforcement procedures
  - Citizen access to the courts

CEQA Requirements for MNDs

Section 15063(d) of the CEQA Guidelines (Sections 15000–15387 of the California Code of Regulations [CCR]) identifies the following specific disclosure requirements for inclusion in an Initial Study:

- A description of the project including the location of the project.
- An identification of the environmental setting.
- An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries.
- A discussion of ways to mitigate significant effects identified, if any;
- An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls; and,
- The name of the person or persons who prepared or participated in the Initial Study.

III. Initial Study Findings

Section C of this document contains the Environmental Checklist/Initial Study that was prepared for the proposed project pursuant to CEQA requirements. The Environmental Checklist/Initial Study determined

that implementation of the proposed project would result in no impacts or less than significant environmental effects under the issue areas of Aesthetics, Agriculture and Forestry, Air Quality, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Utilities and Service Systems, and Wildfire.

The Environmental Checklist/Initial Study determined that the proposed project would result in less than significant effects with mitigation incorporated for the following issue areas: Biological Resources, Hazards and Hazardous Materials, Noise, Transportation, and Tribal Cultural Resources.

The Environmental Checklist/Initial Study determined that there is no substantial evidence, in light of the whole record before the Lead Agency (City of Redlands), that the project may have a significant effect on the environment.

IV. Public Review and Processing of the IS/MND

The environmental documentation and supporting analysis are subject to a public review period. During this review, comments on the document relative to environmental issues should be addressed to the City of Redlands (City). Following review of any comments received, the City will consider these comments as a part of the project's environmental review and include them with the IS/MND documentation for consideration by the City.

V. Planning Context

Governing Body

The City is the lead agency under CEQA for the proposed project. The City has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures identified in this Initial Study, will have a significant effect on the environment. This IS/MND reflects the lead agency's independent judgement and analysis.

General Plan

The City of Redlands General Plan 2035 (General Plan) is the current general plan in place, adopted on December 5, 2017. The General Plan includes six (6) of the seven (7) elements required by California state law: land use, circulation, conservation, open space, safety, and noise. Because the seventh element, housing, is required by state law to be updated more frequently than the General Plan, it is published as a separate document (most recently published in 2014 and scheduled to be updated in 2022.)

General Plan Land Use Designation

The current general plan land use designation of the project site is Low Density Residential, which is described as follows, according to the General Plan Land Use Element:

- Low Density Residential: This land use category designates areas intended to be developed at densities of up to 6 du/ac. This category is not intended to be applied in areas where slopes exceed 15 percent. The intent of this land use category is to provide for areas of single-family residential

developments. Consistent lots sizes include 7,200 square feet (6.0 units per gross acre) and 10,000 square feet (4.3 units per gross acre).

Zoning

The current zoning designation of the project site is Specific Plan; specifically, the project site is located within the East Valley Corridor Specific Plan area. A zoning amendment is proposed as part of the project to change the zoning designation from East Valley Corridor Specific Plan - Science Research Park to the Bergamot Specific Plan, which would be a new Specific Plan, included as a component of the project.

SECTION B. PROJECT DESCRIPTION

a. Project Summary

The project consists of both land use changes and physical improvements that would result in the establishment of 317 single-family dwellings across three (3) neighborhood concepts, communal open space, a new public park, and public improvements to the adjacent right-of-way.

Land use changes proposed by the project would remove the project area from the East Valley Corridor Specific Plan (EVCSP). The General Plan identifies the project site as Low Density Residential, which accommodates residential uses at a density of up to 6 dwelling units per acre. Presently, the project site is zoned Science Research Park in the EVCSP, which is inconsistent with the General Plan. The project proposes removing the site from the EVCSP and establishing a new specific plan consistent with the existing general plan land use of Low Density Residential.

b. Project Location

The project is located in the northwest portion of the City of Redlands in San Bernardino County; refer to **Exhibit 1: Regional Vicinity.** The project site encompasses approximately 58.64 acres generally bounded by Domestic Avenue to the south, the SR-210 freeway to the west, and Texas Street to the east but not immediately adjacent; refer to **Exhibit 2: Site Vicinity**. Land uses around the project are Citrus Valley High School to the south, SR-210 to the west, single-family residential neighborhoods to the east, and vacant land and the Santa Ana River Wash to the north.

The project site is composed of the following Assessor's Parcels:

APN 0167-031-02	7.9 acres
APN 0167-031-03	12.0 acres
APN 0167-031-04	9.85 acres
APN 0167-031-05	4.92 acres
APN 0167-031-06	4.92 acres
APN 0167-031-07	9.85 acres
APN 0167-031-16	8.63 acres[1]

[1] Slight differences in total acreage compared to those calculated from the San Bernardino Assessor's is due to differences in rounding. The calculated site acreage is as listed 58.64 acres.

c. Existing Site Conditions

The project site is vacant and consists of a combination of partially fallowed citrus groves and cleared fields. Conditions have been photographed and documented in **Exhibit 3: Site Photographs**. The project site has been historically used for citrus cultivation and production prior to portions being fallowed. The relatively flat site slopes to the west at a slope of approximately 2 percent and sits at an elevation of approximately 1,306 feet above mean sea level (amsl) at its highest point and 1,260 feet amsl at its lowest point.

d. Proposed Improvements

The project proposes the development of a master planned community consisting of three (3) neighborhoods, a new public park private pedestrian paseo, nature park, and interior common areas. Each of these components are described in detail below and illustrated in **Exhibit 4: Conceptual Site Plan**.

Neighborhood One

- Total of 53 traditional single-family homes on 12.19 acres
- 7,200 square foot (sf) minimum lot size
- Located in the northeast portion of the project site
- Access taken from a new public street, and Street N, as identified on the project tentative tract map
- Four floor plans are provided ranging in size from 2,106 sf to 3,247 sf consisting of one (1) - and two (2)-story homes
- Architectural styles include Santa Barbara, Coastal, and Farmhouse

Neighborhood Two

- Total of 144 traditional single-family homes on 19.25 acres
- 3,500 minimum lot size
- Located in the southeast portion of the project site
- Access taken from Domestic Avenue
- Four floor plans are provided ranging in size from 1,926 sf to 2,300 sf consisting of one (1)- and two (2)-story homes
- Architectural styles include Santa Barbara, Coastal, and Farmhouse

Neighborhood Three

- Total of 120 single-family motor court homes on 11.71 acres
- Homes take garage access from a common driveway or “motor court”
- Located on the west side of the project site
- Access taken from both Domestic Avenue and the future proposed Street N
- Four floor plans are provided ranging in size from 1,465 sf to 2,125 sf consisting of one (1)- and two (2)-story homes
- Architectural styles include Santa Barbara, Coastal, and Farmhouse

Public Park

- Public sports park to be dedicated to the City of Redlands
- Facility may contain:
  - Up to one (1) softball field and six (6) mini-soccer fields
  - parking, restrooms, and/or concessions
  - trail connections to the Central Paseo
  - lighting for fields
- Located on the west end of the project site as a buffer between dwellings and SR-210

Central Paseo

- Paseo is approximately 60 feet in width running east/west between Neighborhood One and Neighborhood Two
- Connects to common areas on the east and west termini that may include picnic/play areas and similar amenities.

Trail Connection

- Landscaped trails connect throughout the project site to neighborhoods, sports park, and Central Paseo
- Provides connections to properties north of the project site
- Future connection to the Santa Ana River Regional Trail

Nature Park

- Landscaped area on the west end of the project that serves as a passive recreation park, buffer, and infiltration area for stormwater.

Interior Streets

- The proposed project's interior streets servicing the various neighborhoods are planned as local public streets having a 60-foot right-of-way and would be dedicated and fully improved with curb and gutters, sidewalks and pavement. A newly proposed Collector Street, Street N, borders the site's northerly boundary and consist of a 64-foot wide right-of-way.

Utilities

- Water
  - There is an existing City-owned 12-inch water main within Texas Street at the intersection of Texas Street and Domestic Avenue. A series of 12-inch and 8-inch water mains would be constructed within Domestic Avenue, the extension of Texas Street and the future public streets (including Street N) to provide domestic water service to the project site. The project would also install and upgrade fire hydrants around the perimeter of the property pursuant to the City of Redlands Fire Department requirements.
  - There are currently two (2) private wells within the study area. The first well is located off-site near the future intersection of Texas Street and Street N. The second well is located on

Domestic Avenue, at the southeast corner of Neighborhood 2. Both wells will be protected in place.

- An irrigation appurtenance located at the current intersection of Texas Street and Domestic will be relocated.

- Recycled Water
  - A future recycled water main will be installed in Domestic Avenue and extended north along Street L to allow for future connections at Texas Street and future development to the north.

- Wastewater
  - There is an existing City-owned 18-inch trunk sewer line within Domestic Avenue adjacent to the project site, which conveys wastewater westerly under SR-210 to the City of Redlands' Wastewater Treatment Facility. A portion of this trunk sewer line would be replaced with a deeper line in order to convey all wastewater along the northerly portion of the project site. Within the project site, a series of 8-inch and 10-inch sewer lines would be constructed within the public streets looping through the various neighborhoods.

- Stormwater Drainage
  - The project site's existing runoff flows northerly and westerly via sheet flow, eventually flowing into the existing drainage channel to the west within the SR-210 Caltrans right-of-way. Existing drainage patterns would be modified to conduct stormwater appropriately. All lots within the project site would be graded to allow runoff to drain toward a designated street or area drain, leading to the proposed storm drain infrastructure. Grate inlets, curb and gutters, and storm drainpipes appropriately sized would be utilized to collect the runoff and direct it to the main infiltration basin located within the public park. In addition, runoff from the park would be conveyed to the main basin.

Off-site Improvements

- Roadways
  - Texas Street is currently fully dedicated (66-foot right of way) north of Domestic Avenue. A portion, approximately 445 feet north of Domestic Avenue, has been constructed as a half street along the easterly roadway frontage. The remaining half street will be improved along the westerly edge of the roadway to its existing terminus. Beyond its current terminus, Texas Street would be extended and improved with a minimum of 32 feet of pavement northerly to the intersection of the future proposed Street N.
  - A newly proposed Collector Street, Street N, borders the site's northerly boundary and consist of a 64-foot wide right-of-way.
  - Domestic Avenue currently consist of an unimproved 40-foot right-of way. The project would fully dedicate and improve the full 62-foot right-of-way from Texas Street to the public park with curb and gutters, sidewalks and pavement.

- Utilities
  - Electrical and Natural Gas: The project would connect to existing off-site 12 kilovolt (KV) Southern California Edison (SCE) power lines and existing off-site Southern California Gas natural gas lines, both located along Texas Street.
  - Water: A proposed 12-inch domestic water main would be constructed along the future proposed Street N, Domestic Avenue, and portions of Texas Avenue, connecting to the existing off-site 12-inch water main within Texas Avenue.
  - Wastewater: A proposed 18-inch sewer main would be constructed within Domestic Avenue, connecting to the existing off-site 18-inch sewer main to both the east and west of the project site.
  - Storm drain connections from on-site to off-site discharge?

e. Project Construction and Phasing

The Bergamot project will provide three distinct neighborhoods all of which will be developed during the initial phase of development. Therefore, all grading, infrastructure, and home construction will be provided during one phase of construction. Individual home construction will proceed as project sales and absorption continues through to project completion.

BERGAMOT SPECIFIC PLAN
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Regional Vicinity

Michael Baker INTERNATIONAL

0 125 250 500 Feet

Source: ESRI

Exhibit 1

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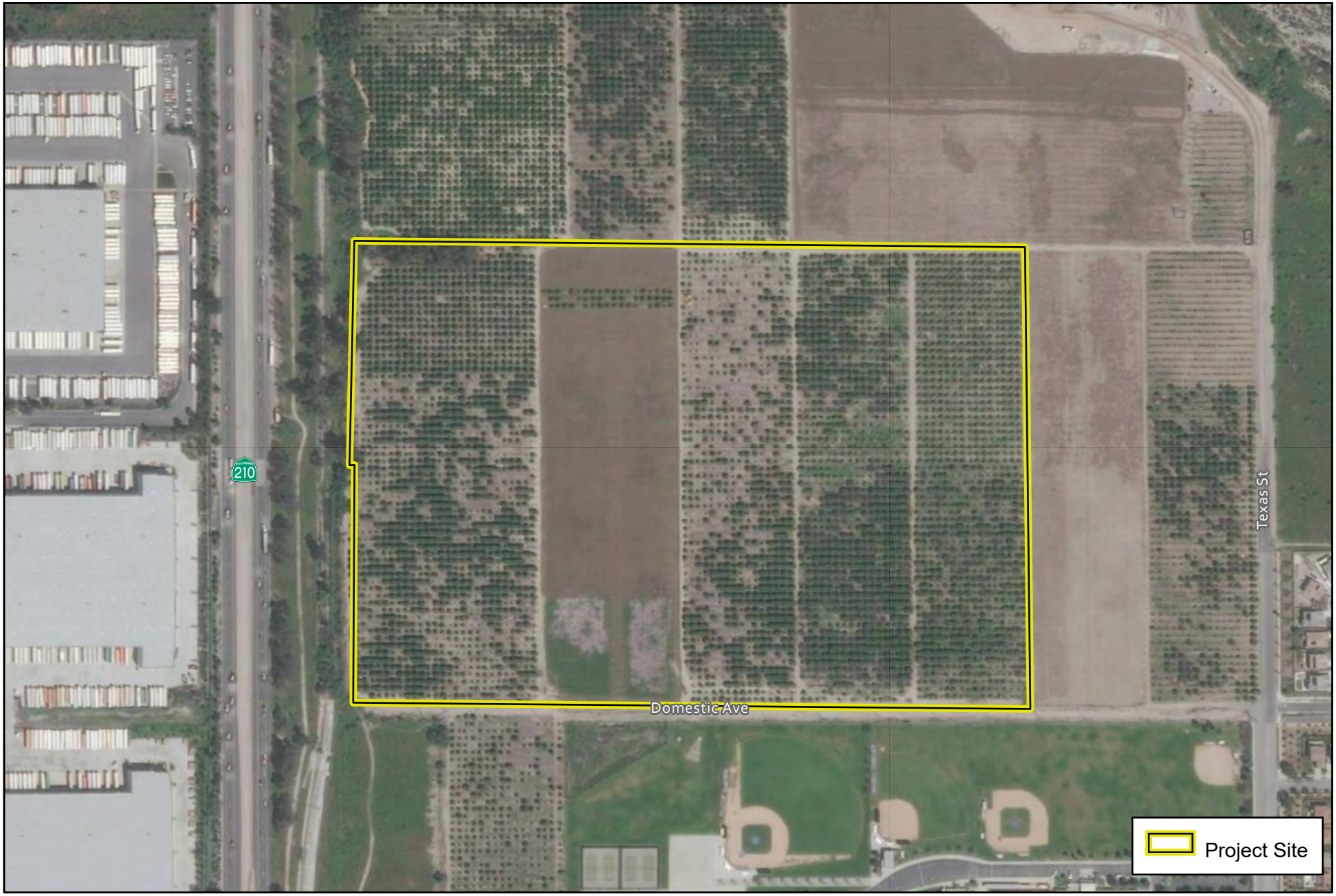

BERGAMOT SPECIFIC PLAN
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Site Vicinity

Michael Baker INTERNATIONAL

0 250 500 Feet

Source: ESRI

Exhibit 2

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Looking NW along Domestic Avenue

Looking SE across project site

Looking south across project

Western end of project looking west toward SR 210

BERGAMOT SPECIFIC PLAN
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Site Photographs

Michael Baker INTERNATIONAL

Source: Michael Baker International

Exhibit 3

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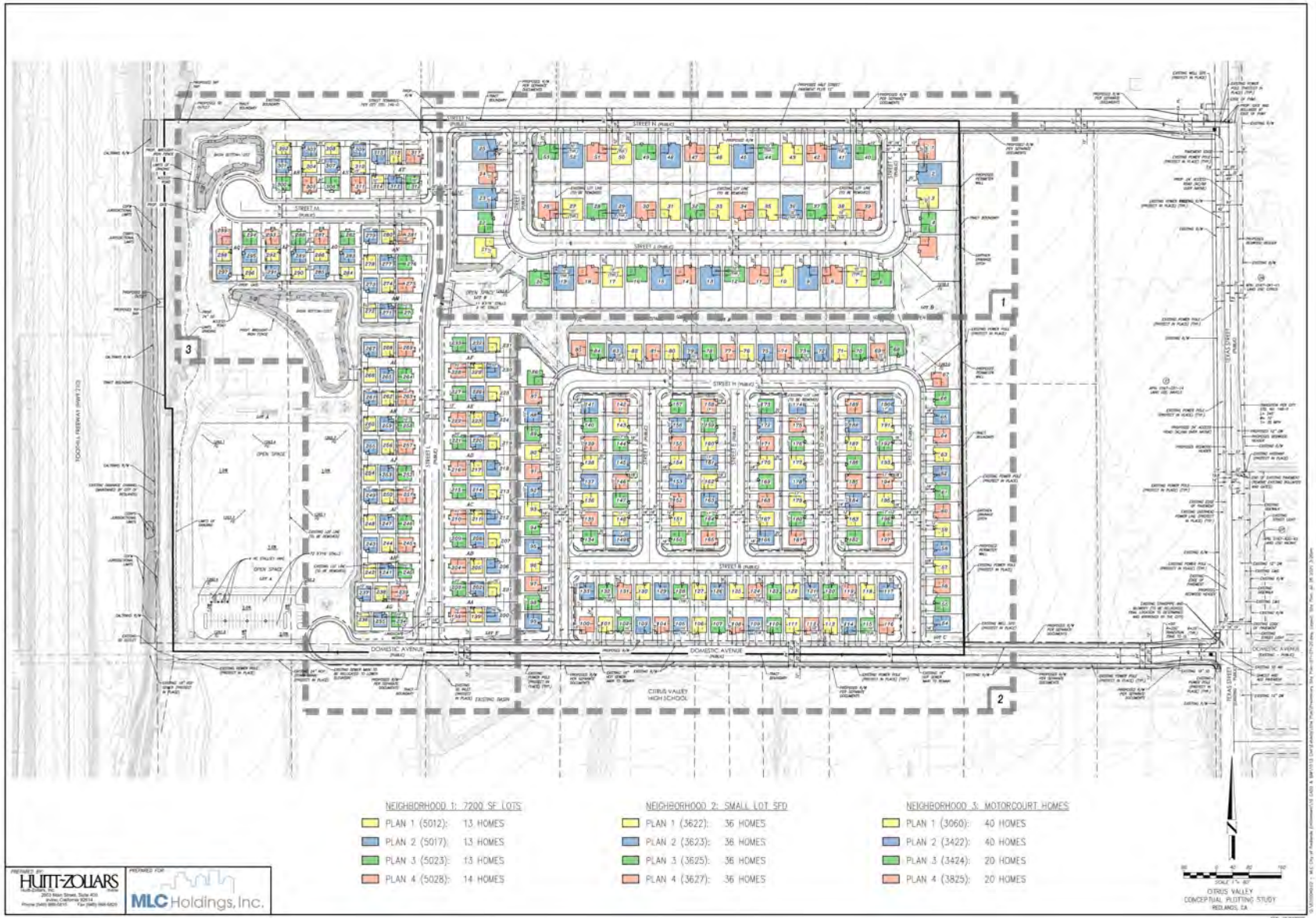

BERGAMOT SPECIFIC PLAN
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Site Plan

Michael Baker INTERNATIONAL

NOT TO SCALE

Source: Huitt Zollars

Exhibit 4

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SECTION C. ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Bergamot Specific Plan Project

2. Lead Agency Name and Address:
City of Redlands
Development Services Department
35 Cajon Street, Suite 20
P.O. Box 3005
Redlands, CA 92373

3. Contact Person and Phone Number:
Sean Reilly
Senior Planner
Development Services Department
(909) 798-7555 x 2

4. Project Location: North of Domestic Avenue, between SR-210 and Texas Street.

5. Project Sponsor's Name and Address:
MLC Holdings
5 Peters Canyon, Suite 310
Irvine, CA 92606

6. General Plan Designation: Low Density Residential

7. Zoning: East Valley Corridor Specific Plan/Science Research Park (EV/SRP)

8. Description of Project:

Development of 317 single-family residences with associated utilities, infrastructure, open space and recreational areas on approximately 58.64 acres; Specific Plan Amendment (remove the site from the East Valley Corridor Specific Plan); new Specific Plan (residential development, with applicable development standards); and Tentative Tract Map (subdivision for a new residential tract).

9. Surrounding Land Uses and Setting:

The project site is bounded by vacant and agricultural uses to the north, residential uses to the east, Citrus Valley High School and agricultural uses to the south, and a channelized drainage and SR-210 to the west.

10. Other Public Agencies Whose Approval is Required:

N/A

11. Have California Native American tribes traditionally and culturally affiliated with the project are requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?[2]

    In accordance with the requirements of Public Resources Code Section 21080.3.1, from a list provided by the Native American Heritage Commission, the City of Redlands notified seven (7) tribes with traditional lands or cultural places located within the boundaries of San Bernardino County, for the purposes of Senate Bill 18, on May 20, 2020, and five (5) tribes, for the purposes of Assembly Bill 52, on May 12, 2020, including the Gabrieleño Band of Mission Indians – Kizh Nation, Morongo Band of Mission Indians, Soboba Band of Luiseño Indians, San Manuel Band of Mission Indians, and the Torres Martinez Desert Cahuilla Indians. The lead agency consulted with tribes that requested consultation on the project and integrated appropriate mitigation measures for the project.

I. Evaluation Format

II. Environmental Factors Potentially Affected

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

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

[2] NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the project. To each question, there are four possible responses:

No Impact. The project would not have any measurable environmental impact on the environment.

Less Than Significant Impact. The project would have the potential for impacting the environment, although this impact would be below established thresholds that are considered to be significant.

Less Than Significant Impact With Mitigation Incorporated. The project would have the potential to generate impacts which may be considered a significant effect on the environment, although measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

Potentially Significant Impact. The project would have impacts which are considered significant, and additional analysis is required to identify measures that could reduce these impacts to less than significant levels.

III. Environmental Determination

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

Signature Date

SECTION D. EVALUATION OF ENVIRONMENTAL IMPACTS

I. Aesthetics

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS: *Except as provided in Public Resources Code Section 21099, would the project:*				
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?	☐	☐	☒	☐

Discussion

a) Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The project site is located in an area that consists of a channelized drainage and State Route 210 (SR-210) to the west, existing single-family residences to the east, vacant land and former or current orchards to the north, and Citrus Valley High School to the south. The proposed single-family residences would be consistent with these uses.

Scenic vistas in the City are defined as scenic corridors and views to and from open spaces, hillsides, groves, Canyonlands, and the San Bernardino Mountains.[3] Views of the San Bernardino Mountains to the north are available from the project site and surrounding area. The San Bernardino Mountains and foothills are visually prominent topographic features that provide a scenic vista from mobile and

[3] City of Redlands General Plan Update and Climate Action Plan Environmental Impact Report. July 21, 2017. Accessed September 1, 2020. https://www.cityofredlands.org/sites/main/files/file-attachments/redlands_deir_compiled_lo_071917_0.pdf

stationary viewing locations throughout the City. The San Bernardino Mountains and foothills are located approximately 4.5 miles northeast of the project site.

Based on these distances, as well as the presence of existing intervening natural features and man-made structures, the project site is not located within the general viewshed of this scenic vista, nor is the project likely to block views of or from these scenic resources. The inclusion of the project within the existing viewshed would be consistent with views presently found in the project area, which are characterized by urban development on the west, south, and east. In addition, the proposed project would be subject to the City's Design Guidelines and Zoning Code (Title 18), which regulates the height and bulk of the buildings. Therefore, impacts associated with scenic vistas would be less than significant.

b) Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no officially designated scenic highways in the project vicinity. According to the California Department of Transportation (Caltrans), the closest eligible state scenic highway to the project site is State Route 38 (SR-38), which is approximately 1 mile to the south of the project site. However, this highway is not officially designated according to the California Scenic Highway Mapping System[4] and the project site is not located within the viewshed of this eligible state scenic highway. Therefore, no impact would occur relative to scenic resources within a state scenic highway.

c) Except as provided in Public Resources Code Section 21099, would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact.

Construction Impacts

During project construction, equipment, vehicles, and materials would be stored within a designated staging area or areas on the project site. Although storage of these items could potentially be viewed from adjacent properties, storage would be temporary and would cease upon completion of construction. The project would not conflict with applicable zoning or other regulations governing scenic quality since the project would be required to comply with provisions in the City's Municipal Code Chapter 15.56 (Fencing and Screening for Building and Construction Sites). As such, short-term construction impacts relative to visual character would be reduced to a less than significant level.

[4] California Department of Transportation. California State Scenic Highway System Map. Accessed September 4, 2020. https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983

Operational Impacts

A project is generally considered to have a significant visual/aesthetic impact if it substantially changes the character of a project site such that it becomes visually incompatible or visually unexpected when viewed in the context of its surroundings. Such changes would degrade the existing visual character or quality of the site and its surroundings.

The project site is currently vacant with the exception of existing citrus groves. While citrus groves are not specifically identified as a scenic resource in the General Plan, the preservation of City owned citrus groves is a priority for the City, as discussed in Chapter 2.4, "Citrus Groves/Farms" in the General Plan Distinctive City Element. The General Plan Principles regarding citrus groves that are applicable to the project are provided below.

The sound walls would be limited in their horizontal extent (two separate walls) and not readily visible to motorists on I-210 because of their location within the project site (i.e., not adjacent to the roadway).

Due to the project site's current General Plan land use designation of Low Density Residential (LDR), agricultural preservation is not intended for the site. The site would be developed with residential and recreational uses such as parks, in accordance with the existing and proposed land use and zoning designations. The project site consists of a citrus orchard that would be replaced with one- and two-story residential homes along with a public recreational park and would be visible from SR 210 to the west and northwest, Texas Street to the east and from Citrus Valley High School to the south. The project also includes the construction of sound walls that would be limited in their horizontal extent (two separate walls) and not readily visible to motorists on I-210 because of their location within the project site (i.e., not adjacent to the roadway). . Therefore, removal of the existing groves and development of the site with residential uses would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The project's current land use is Low Density Residential (LDR). While the existing zoning designation is East Valley Corridor Specific Plan/Science Research Park (EV/SRP), the project proposes a zoning change to the Bergamot Specific Plan upon project approval. In addition, surrounding land uses include existing residential, agricultural (citrus orchards) and a public institutional (Citrus Valley High School). As such, the project would be located in a semi- urbanized area Overall, roughly 51 percent (42.4 acres) of the total area of active citrus groves (82.4 acres) situated at the northwest corner of Domestic Avenue and Texas Street would be lost to the development of the project.

Development associated with the project would be required to adhere to design guidelines that would be provided in the Bergamot Specific Plan, which would ensure visual compatibility with the project area in accordance with the City's General Plan Action 6-A.26 described below. Therefore, project impacts in regard to substantially degrading the existing visual character or quality of public views and its surroundings would be less than significant.

d) Except as provided in Public Resources Code Section 21099, 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. In its undeveloped condition, the proposed project site does not generate light or glare. However, within the immediate vicinity of the project site, nighttime illumination is currently generated by residential development to the southeast, Citrus Valley High School to the south, associated vehicle traffic on SR 210 and followed by existing warehouse buildings to the west. Building materials used in the immediate vicinity of the project site are nonreflective and are not sources of daytime glare.

The proposed project would increase the amount of light in the area by directly adding new sources of illumination, including security and decorative lighting for houses and streetlights. However, although the project area would increase lighting within the area, compliance with City standards for exterior lighting for new developments, as established by the City's General Plan Action 2-A.35 , would reduce this impact to a less than significant level.

In addition, streetlights are required to comply with design standards contained within *City of Redlands Public Works Department Standard Specifications and Detail Drawings for Design and Construction of Public Improvements* (January 2006), as adopted by the City, which establishes minimum design standards for streetlights to ensure public safety and minimize public nuisance. Sports park lighting could be an additional source of nighttime lighting that may be visible to existing off-site residences and future on-site residences. The *City of Redlands Architectural Guidelines* (December 2009), as adopted by the City, requires nonresidential sites, such as the proposed public park, to meet standards that reduce light pollution, ensure public safety, and avoid overlighting. Finally, the project applicant would be required to prepare a lighting plan for approval by the City, prior to receiving a building permit. Therefore, adverse effects associated with light trespass and/or glare would be less than significant.

II. Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE AND FORESTRY RESOURCES: *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*				
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?	☐	☐	☒	☐

Discussion

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

Less Than Significant Impact. According to the California Department of Conservation's Farmland Mapping and Monitoring Program,[5] the project site is designated as Prime Farmland. The designated farmland on-site is considered to be an important state and local agricultural resource. Development of the site to a residential use would therefore result in the conversion of Prime Farmland to a nonagricultural use.

However, according to the City's General Plan 2035 EIR, the farmland within the City is "mainly located where non-contiguous agricultural uses are interspersed with more intensive uses, such as in the East Valley Corridor Specific Plan area." [6] The General Plan 2035 EIR further concludes that, although policies in the proposed General Plan seek to promote agricultural uses and preserve agricultural character throughout the Planning Area, the loss of Prime Farmland, Farmland of Statewide Importance, or Unique farmland due to conversion would be considered a significant impact as part of General Plan implementation. No feasible mitigation measures were identified regarding the loss of the City's Prime Farmland. [7]

According to the East Valley Corridor Specific Plan, the project site is located in the EV/SRP, which permits uses from the General Commercial, Commercial Industrial, Administrative Professional, Public Institutional, and Open Space Districts subject to approval of a Planned Development application, including agricultural uses. The purpose of the EV/SD is, "to provide an alternative, more flexible site planning process which encourages creative and imaginative planning of administrative professional, commercial or industrial developments, or a mixture of such uses."

Although the project site is designated as Prime Farmland and Farmland of Statewide Importance, impacts would be less than significant because the project is consistent with the General Plan 2035 and East Valley Corridor Specific Plan that have both incorporated potential impacts to agriculture resources into their respective analysis. A zone change is proposed as part of the project to remove the project site from the EV/SRP zoning designation and create the Bergamot Specific Plan, which would allow for the proposed new residential uses on the project site. The project site has an existing land use designation of LDR and the change of zone would bring the land use designation and zoning into conformance with each other. Although the project site is designated as Prime Farmland, the General Plan identifies the project site as

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[5] California Department of Conservation. Farmland Mapping and Monitoring Program website. Accessed September 1, 2020. https://maps.conservation.ca.gov/DLRP/CIFF/

[6] City of Redlands General Plan Update and Climate Action Plan Environmental Impact Report. July 21, 2017. Page 3.2-11. Accessed December 17, 2020. https://www.cityofredlands.org/sites/main/files/file-attachments/redlands_deir_compiled_lo_071917_0.pdf

[7] City of Redlands General Plan Update and Climate Action Plan Environmental Impact Report. July 21, 2017. Page 5-9. Accessed December 17, 2020. https://www.cityofredlands.org/sites/main/files/file-attachments/redlands_deir_compiled_lo_071917_0.pdf

LDR and the project site is not contemplated by the General Plan to return the site to agricultural use. The proposed zoning would be consistent with the current LDR land use. As a result, there are no changes in the General Plan land use that would create new impacts to farmland when considered against the present land use of the project site. Therefore, impacts to protected farmlands are considered less than significant.

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

No Impact. The project site is currently designated Low Density Residential, per the City's General Plan. Agriculture is not a permitted use in the Low Density Residential land use designation.

As discussed in **Impact II.a)** above, the proposed project is located within the East Valley Corridor Specific Plan area with a zoning designation of EV/SRP. However, the zoning designation would be changed as part of the project to the Bergamot Specific Plan. None of the lands affected by the proposed project are currently subject to a Williamson Act contract. Therefore, no conflict would occur in this regard and no impact would occur.

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 are no lands zoned for forest or timber production on any lands affected by the proposed project. Therefore, the project would not conflict with existing zoning for or cause the rezoning of forestland. No impact would occur.

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

No Impact. No forestlands are located on the project site; therefore, no such lands would be affected by the proposed improvements. The project would not result in the loss of forestland or the conversion of forestland to non-forest use. No impact would occur.

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 project site is designated as Prime Farmland and currently supports citrus grove cultivation operations. Typically, conversion of farmland to non-agricultural use would result in a significant impact. However, as described in **Impact II.a)** above, the project would not result in a significant loss of farmland because development of the project site has already been evaluated in the General Plan 2035 and is consistent with the existing Low Density Residential land use designation.

Additionally, no designated forestlands are present on the project site and no impact due to the conversion of forestland to non-forest use would occur.

The project site is bounded by vacant and agricultural uses to the north, residential uses to the east, Citrus Valley High School and agricultural uses to the south, and a channelized drainage and SR-210 and warehousing to the west. The project is not anticipated to affect existing agriculture uses to the north and south because the proposed project would not require additional restrictions and limitations on pesticides, fungicides, and herbicides used on crops grown on surrounding farmlands. The existing zoning adjacent to the project site consists of the East Valley Corridor Specific Plan Science Research Park (EV/SRP) to the north, south, and east of the site, with SR 210 and a channelized drainage to the west. Land zoned as EV/SRP only permits for agriculture as a continuation of existing land use, so no new agricultural uses would be developed adjacent to the project site. (EV3.1410). In addition, restrictions would not be placed on noise, burning, and dust generation associated with these nearby uses.

Based upon the above, impacts relative to the conversion of farmland would be less than significant.

III. Air Quality

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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:*				
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?	☐	☐	☒	☐

The analysis and findings throughout this section are based on the *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis, Citrus Valley Residential Project* (referred to herein as AQ/Energy/GHG Report) prepared by Vista Environmental dated July 13, 2020 and revised date October 19, 2020, and the *Diesel Emission Health Risk Assessment Citrus Valley Residential Project* (referred to herein as Health Risk Assessment) prepared by Vista Environmental dated October 15, 2020, revised date November 10, 2020. These reports are included as **Appendix A1** and **A2** in this IS/MND, respectively.

The City is located within the South Coast Air Basin (Basin), which is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east and by the Pacific Ocean to the south and west. The South Coast Air Quality Management District (SCAQMD) has jurisdiction in the Basin, which has a history of recorded air quality violations and is an area where both state and federal ambient air quality standards are exceeded. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The air quality in the San Bernardino County portion of the Basin does not meet the ambient air quality standards for ozone (O_3), particulate matter PM_{10}, and particulate matter $PM_{2.5}$ and is therefore classified as a nonattainment area for these pollutants. SCAQMD is required, pursuant to the federal Clean Air Act (FCAA), to reduce emissions of the air pollutants for which the Basin is in nonattainment.

Discussion

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

Less Than Significant Impact. The proposed project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP). The following section discusses the proposed project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

CEQA requires a discussion of any inconsistencies between a proposed project and applicable general plans and regional plans (CEQA Guidelines Section 15125[d]). The regional plans that apply to the proposed project include the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with federal and state air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states: "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP."[8] Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one (1) or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two (2) key indicators of consistency:

> (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
>
> (2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis conducted for the project using CalEEMod Version 2016.3.2, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance or local thresholds of significance. The ongoing operation of the proposed project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to

8 South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*. p. 12-2.

exceed the air quality standards. Therefore, the proposed project would be consistent with the first criterion and a less than significant long-term impact would occur. No mitigation would be required.

Criterion 2 - Exceed Assumptions in the AQMP

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and federal Transportation Improvement Program (FTIP), prepared by the Southern California Association of Governments (SCAG). The RTP/SCS is a major planning document for the regional transportation and land use network within Southern California. The RTP/SCS is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The FTIP provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this project, the General Plan's Land Use Plan defines the assumptions that are represented in AQMP.

The current General Plan land use designation of the project site is Low Density Residential (up to 6 dwelling units per acre). The proposed project consists of the development of 317 single-family homes on a 58.64-acre project site, which would result in a density of 5.4 homes per acre, which is consistent with the current land use designation. As such, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project would not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact would occur in relation to implementation of the AQMP.

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

Less Than Significant Impact. The proposed project would not 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. The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the SCAQMD standards.

Construction Impacts

The construction activities for the proposed project are anticipated to include site preparation and grading of the 58.64-acre project site, building construction of the 317 single-family homes and park, paving of on-site roads and parking areas, and application of architectural coatings. The construction emissions have been analyzed for both regional and local air quality impacts.

Construction-Related Regional Impacts

The CalEEMod model was utilized to calculate the construction-related regional emissions from the proposed project. The worst-case summer or winter daily construction-related criteria pollutant emissions including volatile organic compounds (VOC), nitrogen oxide (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), and particulate matter (PM_{10} and $PM_{2.5}$) from the proposed project for each phase of construction activities are shown below in **Table 1: Construction Regional Criteria Pollutant Emissions** and the CalEEMod daily printouts are shown in **Appendix A1 - Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis**. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently toward the end of the building construction phase, **Table 1** also shows the combined regional criteria pollutant emissions from the last year (year 2025) of building construction, paving and architectural coating phases of construction.

Table 1 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds during either site preparation, grading, or the combined building construction, paving and architectural coatings phases. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

Table 1: Construction Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation[1] (Year 2021)						
On-site[2]	3.89	40.50	21.15	0.04	10.17	6.35
Off-site[3]	0.10	0.60	0.76	0.00	0.24	0.07
Total	3.99	41.10	21.92	0.04	10.42	6.42
Grading[1] (Year 2021)						
On-site[2]	6.05	67.81	44.89	0.09	6.73	4.21
Off-site[3]	0.23	5.73	1.51	0.02	0.70	0.20
Total	6.28	73.54	46.40	0.11	7.42	4.41
Building Construction (Year 2021)						
On-site	1.90	17.43	16.58	0.03	0.96	0.90
Off-site	3.64	24.24	28.01	0.13	8.90	2.45
Total	5.54	41.67	44.58	0.16	9.85	3.35
Combined Year 2025 Building Construction, Paving, and Architectural Coatings						
On-site	60.02	22.20	32.47	0.05	1.00	0.93
Off-site	3.33	16.96	21.79	0.12	10.49	2.86
Total	63.35	39.16	54.26	0.17	11.49	3.79
Maximum Daily Construction Emissions	63.35	73.54	54.26	0.17	11.49	6.42
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:
1 = Site preparation and grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
2 = On-site emissions from equipment not operated on public roads.
3 = Off-site emissions from vehicles operating on public roads.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the state and federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Basin.

The local air quality emissions from construction were analyzed through utilizing the methodology described in *Localized Significance Threshold Methodology* (LST Methodology), prepared by SCAQMD, revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are

CO, NO_x, PM_{10}, and $PM_{2.5}$. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily on-site emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$ from the proposed project could result in a significant impact to the local air quality.

Table 2: Construction Local Criteria Pollutant Emissions shows the on-site emissions from the CalEEMod model for the different construction phases and the calculated localized emissions thresholds. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently toward the end of the building construction phase, **Table 2** also shows the combined local criteria pollutant emissions from year 2025 building construction, paving and architectural coating phases of construction.

Table 2: Construction Local Criteria Pollutant Emissions

Construction Phase	Pollutant Emissions (pounds/day)[1]			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Site Preparation[2]	40.57	21.25	10.20	6.36
Grading[2]	68.53	45.08	6.82	4.24
Building Construction (Year 2021)	20.46	20.08	2.07	1.21
Combined Building Construction (Year 2025), Paving and Architectural Coatings	24.32	35.19	2.31	1.29
Maximum Daily Construction Emissions	68.53	45.08	10.20	6.36
SCAQMD Local Construction Screening Thresholds[3]	270	1,746	14	8
Exceeds Threshold?	No	No	No	No

Notes:

1 = The Pollutant Emissions include 100% of the On-Site emissions (off-road equipment and fugitive dust) and 1/8 of the Off-Site emissions (on road trucks and worker vehicles), in order to account for the on-road emissions that occur within a ¼ mile of the project site.

2 = Site Preparation and Grading phases based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.

3 = The nearest off-site sensitive receptors are students and staff at Citrus Valley High School that are located as near as 50 feet (15 meters) south of the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25-meter threshold. Source: Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 34, Central San Bernardino Valley.

The data provided in **Table 2** shows that none of the analyzed criteria pollutants would exceed the local emissions screening thresholds during either site preparation, grading, or the combined building construction, paving, and architectural coatings phases. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

Operational Impacts

The ongoing operation of the proposed project would result in a long-term increase in emissions. This increase would be due to emissions from the project-generated vehicle trips, emissions from energy usage, and on-site area source emissions created from the ongoing use of the proposed project. The following section analyzes the potential long-term air quality impacts due to regional air quality and local air quality impacts with the ongoing operations of the proposed project.

Operational Regional Criteria Pollutant Analysis

The operational regional criteria air quality impacts created by the proposed project have been analyzed through use of the CalEEMod model. The worst-case summer or winter VOC, NOx, CO, SO_2, PM_{10}, and $PM_{2.5}$ daily emissions created from the proposed project's long-term operations have been calculated and are summarized below in **Table 3: Operational Regional Criteria Pollutant Emissions** and the CalEEMod daily emissions printouts are shown in **Appendix A1**.

The data provided in **Table 3** shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from operation of the proposed project.

Table 3: Operational Regional Criteria Pollutant Emissions

Emissions Source	Pollutant Emissions (pounds/day)					
	VOC	NO_x	CO	SO_2	PM10	PM2.5
Area Sources[1]	15.19	0.30	26.13	0.00	0.15	0.15
Energy Usage[2]	0.27	2.31	0.98	0.01	0.19	0.19
Mobile Sources[3]	5.07	8.24	62.97	0.22	24.22	6.52
Total Emissions	20.53	10.85	90.09	0.23	24.55	6.85
SCAQMD Operational Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:
1 = Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
2 = Energy usage consist of emissions from natural gas usage.
3 = Mobile sources consist of emissions from vehicles and road dust.

In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as "Friant Ranch"), the California Supreme Court held that when an EIR concluded that when a project would have significant impacts to air quality impacts, an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." In order to determine compliance with this case, the court developed a multi-part test that includes the following:

1) The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

2) The analysis shall identify the magnitude of the health risks created from the project. The ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states, "The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the project's impact on the days of nonattainment per year."

The Friant Ranch Case found that an EIR's air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (Brief), the SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any air district in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. The SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk, and it does not necessarily mean anyone will contract cancer as a result of the project. The Brief also cites the author of the California Air Resources Board (CARB) methodology, which reported that a PM2.5 methodology is not suited for small projects and may yield unreliable results. Similarly, SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NOX or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

On the other hand, for extremely large regional projects (unlike the proposed project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of its rulemaking activity, specifically 6,620 pounds per day of NOx and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. As shown in **Table 1**, project-related construction activities would generate a maximum of 63.35 pounds per day of VOC and 73.54 pounds per day of NOx and as shown above in **Table 3**, operation of the proposed project would generate 20.53 pounds per day of VOC and 10.85 pounds per day NOx. The proposed project would not generate anywhere near these levels of 6,620 pounds per day of NOx or 89,190 pounds per day of VOC emissions. Therefore, the proposed project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

Notwithstanding, this analysis does evaluate the proposed project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the proposed project's on-site emissions to the SCAQMD's applicable LST thresholds. As evaluated in this analysis, the proposed project would not result in emissions that exceed the SCAQMD's LSTs. Therefore, the proposed project would not be expected to

exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

Operational-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the state and federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Basin. The proposed project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analyzes the vehicular CO emissions and local impacts from on-site operations.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the state and federal CO standards of 20 parts per million (ppm) over 1 hour or 9 ppm over 8 hours.

At the time of the 1993 Handbook, the Basin was designated nonattainment under the California Ambient Air Quality Standards and National Ambient Air Quality Standards for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Basin and the state have steadily declined. According to the SCAQMD Air Quality Data Tables, in 2007 Central San Bernardino Valley had maximum CO concentrations of 4.0 ppm for 1 hour and 2.3 ppm for 8 hours and in 2019 Central San Bernardino Valley had maximum CO concentrations of 1.3 ppm for 1 hour and 1.1 ppm for 8 hours, which represent decreases in CO concentrations of 68 percent and 52 percent, respectively, from 2007 to 2019. In 2007, the Basin was designated in attainment for CO under both the California and national air standards. SCAQMD conducted a CO hot spot analysis for attainment at the busiest intersections in Los Angeles during the peak morning and afternoon periods and did not predict a violation of CO standards.[9] Since the nearby intersections to the proposed project are much smaller with less traffic than what was analyzed by the SCAQMD and since the CO concentrations are now at least 52 percent lower than when CO was designated “attainment” in 2007, no local CO hotspots are anticipated to be created from the proposed project and no CO hotspot modeling was performed. Therefore, a less than significant long-term air quality impact is anticipated to local air quality with the ongoing use of the proposed project.

[9] The four (4) intersections analyzed by the SCAQMD were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning and LOS F in the evening peak hour.

Local Criteria Pollutant Impacts from On-site Operations

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, and on-site usage of natural gas appliances may have the potential to create emissions areas that exceed the state and federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Basin.

The local air quality emissions from on-site operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the methodology described in **Appendix A1**. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO^x, PM^{10}, and $PM^{2.5}$ from the proposed project could result in a significant impact to the local air quality. **Table 4: Operational Local Criteria Pollutant Emissions** shows the on-site emissions from the CalEEMod model that includes area sources, energy usage, and vehicles operating in the immediate vicinity of the project site and the calculated emissions thresholds.

Table 4: Operational Local Criteria Pollutant Emissions

On-site Emission Source	Pollutant Emissions (pounds/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Area Sources[1]	0.30	26.13	0.15	0.15
Energy Usage[2]	2.31	0.98	0.19	0.19
Mobile Sources[3]	1.03	7.87	3.03	0.81
Total Emissions	3.64	34.99	3.36	1.15
SCAQMD Local Operational Screening Thresholds[4]	270	1,746	4	2
Exceeds Threshold?	No	No	No	No

Notes:

1 = Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

2 = Energy usage consist of emissions from natural gas usage.

3 = Mobile sources based on 1/8 of the gross vehicular emissions, which is the estimated portion of vehicle emissions occurring within a quarter-mile of the project site.

4 = The nearest offsite sensitive receptors are students and staff at Citrus Valley High School that are located as near as 50 feet (15 meters) south of the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25-meter threshold.

The data provided in **Table 4** shows that the ongoing operations of the proposed project would not exceed the local NO_x, CO, PM^{10} and $PM^{2.5}$ screening thresholds. The ongoing operations of the proposed project would create a less than significant operational impact to local air quality due to on-site emissions and no mitigation would be required. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant.

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

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools,

hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest sensitive receptors to the project site are students and staff at Citrus Valley High School that are located as near as 50 feet south of the project site.

Toxic air contaminants (TACs) is a term that is defined under the California Clean Air Act and consists of the same substances that are defined as hazardous air pollutants (HAPs) in the federal Clean Air Act. There are over 700 hundred different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different TACs. The majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM). DPM is typically considered a subset of $PM^{2.5}$ because the size of diesel particles are typically 2.5 microns and smaller; however, this analysis considers DPM to be equal to PM^{10}, in order to provide a conservative analysis.

To further provide a conservative analysis, the SCAQMD CEQA level thresholds for TAC emissions created by a project have been utilized to analyze the TAC impacts from existing sources to the proposed residential uses. According to the SCAQMD CEQA Handbook, any project that has the potential to expose the public to TACs in excess of the following thresholds would be considered to have a significant air quality impact:

- If the Maximum Incremental Cancer Risk is 10 in one million or greater; or
- TACs from the proposed project would result in a Hazard Index increase of 1.0 or greater.

To determine if the proposed project may have a significant impact related to TAC, the *Health Risk Assessment Guidance for analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (Diesel Analysis) prepared by SCAQMD in August 2003, recommends that if the proposed project is anticipated to create TACs through stationary sources or regular operations of diesel trucks on the project site, then the proximity of the nearest receptors to the source of the TACs and the toxicity of the TACs should be analyzed through a comprehensive facility-wide health risk assessment. As mentioned above, a Health Risk Assessment was prepared for the project, which analyzed all known sources of TAC emissions that are located within a quarter-mile of the proposed homes.

Public exposure to TACs can result from emissions from normal operations as well as from accidental releases. Health effects of TACs include cancer, birth defects, neurological damage, and death. Health risks from TACs are twofold. First, TACs are carcinogens according to the State of California. Second, short-term acute and long-term chronic exposure to TACs can cause health effects to the respiratory system. Each of these health risks is discussed below, based on the project's Health Risk Assessment.

Cancer Risks

Cancer risks for the nearby residential uses were calculated using parameters detailed in **Appendix A2**. Based on the calculated operational diesel emission concentrations at the nearest sensitive receptors, as well as the calculated cancer risk at both the exterior and interior of the proposed homes, the cancer risk

at the interior of the proposed homes would be as high as 2.5 per million persons and the cancer risk at the proposed City Park would be as high as 1.1 per million persons. As such, the calculated cancer risk from TAC emissions at the proposed homes would be within the SCAQMD thresholds and impacts would be less than significant.

Non-Cancer Risks

In addition to the cancer risk from exposure to TAC emissions, TAC exposure may potentially result in adverse health impacts from chronic and acute illnesses.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed project and is calculated from the annual average concentrations of PM_{10}.

The concentration of an air pollutant is given in micrograms (one-millionth of a gram) per cubic meter air or µg/m3. The Reference Exposure Level for DPM (expressed as REL_{DPM}) is 5 µg/m3. Based on the highest annual DPM concentration of 0.0197 µg/m3 for DPM chronic non-cancer risk emissions, the resulting Hazard Index is 0.0197/5 = 0.00394. Since the criterion for significance is a Chronic Hazard Index increase of 1.0 or greater as stated above, the non-cancer chronic health risks to residents at the proposed homes would be within the SCAQMD standards and impacts would be less than significant.

Acute Health Impacts

Acute health effects are characterized by sudden and severe exposure and rapid absorption of a TAC. Normally, a single large exposure is involved. Acute health effects are often treatable and reversible. The acute hazard index is calculated from the maximum 24-hour concentrations of PM_{10} at the point of maximum impact (PMI). No acute risk has been found to be directly created from DPM, so there is no Acute Reference Exposure Level (AREL) assigned to DPM; however, in order to provide an DPM equivalent AREL, the ARELs from all of the other TACs that are emitted in diesel exhaust were added together based on their diesel weighting. This resulted in a diesel emission weighted equivalent AREL of 137 µg/m3. The highest 24-hour concentration at the PMI is 0.033 µg/m3 for DPM equivalent acute non-cancer risk emissions. The resulting Hazard Index is 0.033/137 = 0.00066. Since the criterion for significance is an Acute Hazard Index increase of 1.0 or greater as stated above, the non-cancer acute health risks to residents at the proposed homes would be within the SCAQMD standards and impacts would be less than significant.

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

Less Than Significant Impact.

Construction Impacts

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. Standard construction requirements that limit the time of day when construction may occur, as well as SCAQMD Rule 1108 that limits VOC content in asphalt and Rule 1113 that limits the VOC content in paints and solvents, would minimize odor impacts from construction. As such, the objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Through compliance with applicable regulations that reduce odors and due to the transitory nature of construction odors, a less than significant odor impact would occur.

Operational Impacts

Potential sources that may emit odors during the ongoing operation of the proposed project could primarily occur from the trash storage areas. Trash storage for the residential structures is located in individual bins at each residence. For the public park, a trash enclosure is located in the southwest corner of the project adjacent to the parking lot. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain, as well as limit air circulation, would be required for the trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 and City trash storage regulations, no significant impact related to odors would occur during the ongoing operation of the proposed project. Therefore, a less than significant odor impact would occur.

IV. Biological Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES: *Would the project:*				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through 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?	☐	☐	☐	☒

This section relies on information contained in the following technical studies: *Biological Resources Assessment and San Bernardino Merriam's Kangaroo Rat Habitat Assessment Citrus Valley Project* (Biological Resources Report) prepared by First Carbon Solutions in October 2020; and *Results of a San Bernardino Kangaroo Rat Habitat Assessment conducted at the Approximately 58-acre Citrus Valley Specific Plan Project Site, Redlands, California* (SBKR Habitat Assessment) prepared by ECORP Consulting,

Inc. in November 2020. These technical studies are included as **Appendix B1,** and **B2,** in this IS/MND, respectively.

The project site includes current and former citrus orchards and is characterized by highly modified surfaces and soils, stands of orange trees, dirt roadways, and evidence of dumping and homeless encampments. The project site is bounded on the north by other former or current orchards, on the east by residential development, on the south by Citrus Valley High School, and on the west by a channelized drainage and SR-210. No undisturbed habitat or natural lands exist on the project site or within its 500-foot buffer area. In addition to the orange orchards, the project site contains areas of ruderal vegetation and bare ground.

The entire project area and 500-foot buffer area have a long history of agricultural land use, with historical imagery of the area showing use of the site for citrus orchards extending back as far as 1964. Redlands has a history of citrus agriculture since the late 1800s, and the project site and immediate vicinity may have supported citrus orchards for more than 100 years. Thus, the project site has not supported natural vegetation communities and has been subjected to soil disturbances associated with agricultural use for many decades.

Discussion

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

Less Than Significant Impact With Mitigation Incorporated.

Sensitive Natural Vegetation Communities

Based on a review of the California Natural Diversity Databases (CNDDB) and the results of the biological field survey conducted on the project site, no sensitive natural vegetation communities occur on the project site or within its 500-foot buffer area. Seven (7) land cover types were observed in the project site and 500-foot buffer area, including evergreen orchard, urban, ruderal, eucalyptus, barren, channelized drainage, and drainage basin. Project development would cause direct impacts to 43.71 acres of evergreen orchard, 13.16 acres of barren land, 0.47 acre of ruderal (annual grassland) habitat, and 0.71 acre of eucalyptus stands. However, since no sensitive natural vegetation communities would be directly affected by the proposed project, no impact would occur.

Special-Status Plant Species

A review of the CNDDB identified a total of 73 special-status plant species within a nine (9) quadrangle search area that includes and surrounds the project site. All of the special-status plant species compiled from the query were determined to have no potential to occur on-site, based primarily on the absence of suitable habitat (natural vegetation communities) and long history of soil disturbance in the area. For many of the species, the project site is outside of their elevational ranges, and there were no recorded

occurrences within 3 miles of the project site. Based on this analysis, special-status plant species are not expected to occur on the project site and no impact would occur.

Special-Status Wildlife Species

A review of the CNDDB identified a total of 65 special-status wildlife species within the nine (9) quadrangle search area surrounding the project site. Most (58) special-status wildlife species compiled in the query were determined to have no potential to occur on-site, based primarily on the absence of suitable habitat (natural vegetation communities) and long history of soil disturbance in the area. For many of the species, the project site is outside of their elevational ranges, and there were no recorded occurrences within 3 miles of the project site.

The following species were determined to have a low potential to occur on the project site and/or its 500-foot buffer area:

- Burrowing owl (*Athene cunicularia*)
    - Burrowing owl is designated as a California Species of Special Concern. The recently cleared orchards that support barren habitat on and adjacent to the project site have a low potential to support burrowing owl. California ground squirrels were observed within and adjacent to the drainage channel located to the west of the project site, and in the evergreen orchards on the western extent of the project site; however, none were observed on the barren lands located on the project site, nor were any California ground squirrel or other mammalian burrows observed on the barren lands on the project site. Due to the lack of mammalian burrows on the project site at the time of the survey, burrowing owl was assessed as having low potential to occur on-site.
- Loggerhead shrike (*Lanius ludovicianus*)
    - Loggerhead shrike is designated as a California Species of Special Concern. The barren and ruderal habitats on and adjacent to the project site may provide suitable foraging areas for loggerhead shrike, and the evergreen orchards and eucalyptus stands may provide suitable perching and nesting habitats.

The following species were determined to have a moderate potential to occur on the project site and/or within its 500-foot buffer area:

- Western spadefoot (*Spea hammondii*)
    - Western spadefoot is designated as a California Species of Special Concern. The channelized drainage and drainage basin immediately adjacent to the project site may support suitable breeding habitat for western spadefoot, and all of the habitats on the project site may support subterranean habitat for this species.
- Southern California legless lizard (*Anniella stebbinsi*)
    - Southern California legless lizard is designated as a California Species of Special Concern. The evergreen orchards and ruderal habitats on the project site may support the occurrence of this species, particularly if debris such as boards, rocks, and logs are present to provide cover. The regular and recent disking of the former orchards on the project site likely make the area less suitable for occurrence of this species.

- Cooper's hawk (*Accipiter cooperii*)
    - Cooper's hawk is designated as a California Species of Special Concern. The eucalyptus stands and evergreen orchard habitats on and adjacent to the project site supports suitable foraging habitat for Cooper's hawk, and the eucalyptus stands may provide appropriate nesting habitat.
- California horned lark (*Eremophila alpestris actia*)
    - California horned lark is designated as a California Species of Special Concern. The barren areas on and adjacent to the project site may provide suitable foraging and nesting habitat for this species.

The following species were determined to be present on the project site and within its 500-foot buffer area:

- San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*)
    - The San Diegan tiger whiptail (also called coastal whiptail) is designated as a California Species of Special Concern. A population of San Diegan tiger whiptail was observed on and adjacent to the project site. Most individuals were observed in the southwestern corner of the project site in ruderal habitat, but were also present in the channelized drainage, in open areas along the western border of the project site adjacent to the channelized drainage, and in the large area of ruderal habitat on the parcel to the southwest of the project site. Individuals retreated to cover in and adjacent to the channelized drainage along the western border of the project site. The channelized drainage, which connects to the Santa Ana River Wash, provides a likely dispersal corridor for San Diegan tiger whiptails, linking the population occupying the large parcel supporting ruderal habitat southwest of the project site to the population in the Santa Ana River Wash.

Ground-disturbing and habitat-altering project construction activities could directly kill, injure, or harass wildlife, including special-status species. Project construction activities and use of heavy equipment in wildlife habitats could cause direct impacts to wildlife, particularly less mobile, fossorial (burrowing) animals (e.g., small mammals or lizards) or those with a life stage in the soil or on plants (e.g., amphibians, nesting birds, insects). All of the special-status wildlife species that are present or have a potential to occur on the project site exhibit these characteristics. Therefore, Mitigation Measures BIO-1 and BIO-2 below are required to be implemented during project construction to reduce potential impacts to special-status wildlife species to a less than significant level.

<u>San Bernardino Merriam's Kangaroo Rat</u>

The San Bernardino kangaroo rat (*Dipodomys merriami parvus*; SBKR) is a federally listed endangered species, a California candidate species for listing as endangered, and a California Species of Special Concern. The SBKR is known to be abundant within the Santa Ana River wash system to the north, and undoubtedly occurred more broadly in the general area of the project site historically. However, over time, various types of development north and south of the property have restricted the populations of this species to small, isolated, and less disturbed parcels of land. Most of these parcels are located away

from the Santa Ana River wash system and now likely lack the animal. Nonetheless, the species can occur in abandoned agricultural fields and orchards, but usually only when such habitats are adjacent to suitable natural habitats. Additionally, SBKR have been identified approximately 1,050 feet to the north, and approximately 700 feet to the east of the project site.[10] Thus, it was necessary to evaluate the project site and the habitats present to determine if there is potential for SBKR to occur on the project site. A habitat assessment for SBKR was conducted by ECORP for the proposed project between September 25 and October 5, 2020. Habitat conditions on the site are generally not suitable for SBKR and the site is disconnected from areas of high-quality suitable habitat. Although soils on the property are somewhat acceptable for SBKR, areas of deep, sandy soil are mostly not present. The property has been separated from the effects of periodic alluvial flooding from the Santa Ana River for many decades, and no natural vegetation communities were identified on the project site. Additionally, the habitat conditions on the project site, including the presence of citrus orchards with dense canopies and overgrown unmaintained and/or heavily disturbed understories, have likely prevented SBRK from occupying the site for as long as the site has been used for citrus orchards. Suitable burrows, likely created by gophers, were observed along the periphery and within the project site but no definitive kangaroo rat sign (tail drags and/or scat) was identified during the survey.

The lack of suitable habitat and the absence of definitive kangaroo rat sign indicates that the potential for SBKR to occur on the property is extremely low and the species is very likely absent from the project site. Furthermore, the project site has been completely disconnected from areas of suitable high-quality habitat and the effects of periodic alluvial flooding from the Santa Ana River for many decades. Therefore, the lack of adjacent suitable habitat, coupled with the lack of suitable SBKR habitat on the project site, make the likelihood of future colonization of the project site by SBKR extremely low as well. Based on these findings, it was determined by the Biologist that a protocol-level trapping survey was not recommended and no impacts to SBKR are expected with the development of the project.

Nesting Birds

Several avian species observed during the biological survey of the project site and its 500-foot buffer area exhibited breeding behaviors, though no nests were located during the survey. Species that displayed breeding behaviors included a red-shouldered hawk and a song sparrow, each of which were observed calling from the eucalyptus stands on the western portion of the project area. Other species observed on the project site, including mourning dove, Anna's hummingbird, ash-throated flycatcher, western kingbird, western scrub jay, common raven, bushtit, California towhee, house finch, and lesser goldfinch, may potentially nest on or directly adjacent to the project site. Special-status bird species, including burrowing owl, Cooper's hawk, loggerhead shrike, and California horned lark, may also nest on or directly adjacent to the project site. The nesting period for passerine species generally occurs between March through July, and for raptors and burrowing owls between February through August.

10 *Results of a San Bernardino Kangaroo Rat Habitat Assessment conducted at the Approximately 58-acre Citrus Valley Specific Plan Project Site, Redlands, California* ECORP Consulting, 2020

Trees in the citrus orchards and eucalyptus stands, vegetation in ruderal (nonnative grassland) habitat, and barren areas may provide potential nesting habitat for birds. Several species of raptors may nest in suitable habitat on and adjacent to the project.

Project activities could directly or indirectly cause impacts to nesting birds, including special-status species, on and adjacent to the project site. Project construction activities could cause direct impacts through destruction of nests, eggs, or chicks, or indirect impacts through hazing or harassment of actively nesting birds to a degree that causes them to abandon the nest temporarily or permanently. These impacts would be considered violations of the Migratory Bird Treaty Act (MBTA) and Sections 3800, 3513, and 3503.5 of the Fish and Game Code. If project construction occurs during the non-nesting season (typically September 1 through February 14), no impacts are expected; however, if construction activities are scheduled to occur during the nesting season (typically February 1 through August 31), mitigation would be necessary to avoid potential impacts to migratory birds and their nests. Therefore, Mitigation Measure BIO-3 below is required to be implemented during project construction to reduce potential impacts to nesting birds to a less than significant level.

Mitigation Measures

BIO-1 The project applicant shall implement the following measures to minimize impacts to special-status wildlife species:

Construction Monitoring and Preconstruction Surveys. Prior to the issuance of a grading permit, the project applicant shall provide evidence that a qualified Biologist has been retained. The qualified Biologist shall conduct a clearance survey of the entire project impact area, including any staging/laydown areas, no more than seven (7) days prior to initiating project activities to search for western spadefoot, California legless lizard, and San Diegan tiger whiptail. In addition, the qualified Biologist will be present on-site prior to the initiation of construction each day to monitor ground-disturbing or habitat-altering activities, verify that temporary fencing around sensitive areas is intact and in good condition (no gaps or holes), and search for special-status wildlife species that may have taken shelter under construction materials in staging/laydown areas.

If special-status wildlife species are observed during construction activities, all work within 50 feet of the animal(s) shall be stopped. At no time shall work occur within 50 feet of the animal without the Biological Monitor present. Any special-status wildlife species detected within the project impact area, including any staging/laydown areas, shall be allowed to move away on their own and shall not be captured or handled without authorization from the CDFW or USFWS.

Avoidance of Entrapment. To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1 foot deep shall be covered at the close of each working day with plywood or other suitable material, or provided with one (1) or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. All pipes, culverts, or similar structures stored overnight shall be inspected

before they are subsequently moved, capped, and/or buried. If at any time wildlife is discovered, the Biologist shall be contacted to determine the next steps.

Environmentally Sensitive Area Fencing. Sensitive areas, including the channelized drainage and wildlife corridor near the western project boundary or active avian nests, shall be identified by a qualified Biologist and shown on the project design plans. The installation of the fencing around these sensitive areas shall be monitored by the Biologist.

Erosion Control Materials. Project construction activities on the western side of the project site could cause sediment to enter the channelized drainage. Appropriate sediment and erosion control best management practices (BMPs) shall be employed during project construction to minimize sediment from entering the channelized drainage to protect water quality. To prevent wildlife from becoming entangled or trapped in erosion control materials, plastic monofilament netting (such as erosion control matting) or similar material shall not be used. Several commercially available products that are marketed as photodegradable and biodegradable contain synthetic netting, which can take several months to decompose. These products shall not be used in habitat areas. Acceptable erosion control materials are those that use natural fibers such as jute, coconut, twine, or other similar biodegradable fibers.

Worker Environmental Awareness Program. A Worker Environmental Awareness Program (WEAP) training will be implemented to educate construction workers about the presence of special-status plant and wildlife species on and near the project site. The WEAP training will be administered to construction personnel prior to the initiation of ground-disturbing or vegetation/habitat altering activities. All construction personnel on the project site shall be required to attend the WEAP training. During the WEAP training, construction personnel shall be informed of the importance of avoiding ground-disturbing activities outside of designated work areas; the potential for special-status species to be present; the associated habitat for special-status species; and that is unlawful to take, harm, or harass special-status species.

BIO-2 The project applicant shall implement the following measures to minimize impacts to burrowing owl:

Preconstruction Survey. Prior to issuance of a grading permit, a qualified Biologist shall perform a preconstruction burrowing owl survey to determine burrow locations within 30 days prior to construction activities using CDFW (2012) guidelines and shall provide a report to the City documenting the results of the survey. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. Surveys for occupied burrows shall be completed within all construction areas and within 300 feet from the proposed project work area (where possible and appropriate based on locations of barren or ruderal habitats). At least 15 days prior to the expected start of any project-related ground disturbance activities, or restart of activities, the City of Redlands shall

provide a burrowing owl survey report and mapping to the CDFW. If no burrowing owls are detected during the preconstruction survey, no further action is necessary.

If burrowing owls are detected during the preconstruction survey, the City shall consult with the CDFW and USFWS to develop and implement a Burrowing Owl Mitigation Plan that includes mitigation measures outlined in CDFW (2012) guidelines.

BIO-3 The project applicant shall implement the following measures to minimize impacts to nesting birds:

Preconstruction Nesting Bird Surveys. If construction or tree removal is proposed during the breeding/nesting season for migratory birds (typically February 1 through August 31), a qualified Biologist shall conduct preconstruction surveys for migratory birds on the project site, including a 300-foot survey buffer, no more than three days prior to the start of ground-disturbing activities. If construction is delayed or suspended for more than three (3) days after the survey, the area shall be resurveyed to reconfirm the presence/absence of any active nests.

Monitoring of Active Nests. If an active nest is located during preconstruction surveys, the USFWS and/or the CDFW (as appropriate) shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or the Biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 50-foot radius around an active non-raptor passerine bird nest) or alteration of the construction schedule.

A qualified Biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

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 US Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated.

A County flood control channel runs parallel to SR-210 just west of the project boundary. This drainage features empties into the Santa Ana River and is a designated jurisdictional water feature regulated by the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW).[11] The following jurisdictional habitats apply:

[11] For more detailed information, see Appendix B1 Biological Resources Report. Within this Report is Appendix C.3 – GLA (2020) Jurisdictional Delineation.

- USACE jurisdiction: The channelized drainage includes 0.44 acres of waters of the United States, none of which is wetland. A total of 1,288 linear feet of streambed is present.
- RWQCB jurisdiction: The channelized drainage has been determined to be waters of the United States subject to regulation pursuant to Section 401 and 404 of the CWA.
- CDFW jurisdiction: CDFW jurisdiction associated with the channelized drainage totals approximately 1.04 acres, of which 0.14 acres consists of riparian stream and 0.90 acres consists of non-riparian stream. A total of 1,288 linear feet of streambed is present.

The jurisdictional features (USACE/RWQCB waters of the United States and CDFW streambed/riparian) identified in previous reports are located outside of the proposed project boundaries and development area and would not be directly affected by development of the project. However, as the jurisdictional features are immediately adjacent to the project site, a formal delineation is required to document the full extent of jurisdictional waters within the project site. Therefore, Mitigation Measure BIO-4 below is required to be implemented during project construction to reduce potential impacts to riparian habitats and potential jurisdictional features.

Mitigation Measures

BIO-4 Impacts to waters of the United States (i.e., USACE jurisdiction) requires a Section 404 Clean Water Act permit from the USACE and a Section 401 Water Quality Certification from the RWQCB. Impacts to riparian habitat under CDFW jurisdiction would require a Section 1602 Streambed Alteration Agreement from the CDFW. These permits shall be obtained prior to issuance of grading permits and implementation of the proposed project.

The project applicant shall ensure that the project will result in no net loss of waters of the United States by providing mitigation through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined in the CWA Section 404/401 permit requirements.

Compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in-lieu fee program that will conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The project/permit applicant retains responsibility for the implementation and success of the mitigation project. Evidence of compliance with this mitigation measure shall be provided prior to initiating construction and grading activities for the proposed project.

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 with Mitigation Incorporated. While the channelized drainage along the western border of the project site is a jurisdictional water under USACE, RWQCB and CDFW regulations, this channelized drainage is not a state or federally protected wetland. Instead, it is classified as riparian stream and non-riparian stream under CDFW, and non-wetland waters of the United States under USACE. Therefore, there would be a less than significant impact to state or federally protected wetland with implementation of Measure BIO-4 to reduce potential impacts to riparian habitats and potential jurisdictional features.

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 Incorporated. As discussed in the Biological Resources Report, the channelized drainage along the western border of the project site likely provides a movement corridor for a number of terrestrial wildlife species, including Virginia opossum, coyote, raccoon, striped skunk, several rodent species, and several lizard species, including San Diegan tiger whiptail. Figure 1, *Channelized Drainage Location*, below, excerpted from the Biological Resources Report, identifies the location and dimension of the channelized drainage.[12] The channelized drainage provides a connection and movement corridor between the Santa Ana River Wash to the north and the parcel supporting ruderal vegetation located directly southwest of the project site. The channelized drainage supports native riparian woodland species and eucalyptus trees that provide cover for dispersing wildlife species. The bank of the channelized drainage and portions of the terrace area adjacent to and up to approximately 30 feet of the edge of the bank likely also function as a part of the wildlife movement corridor. The channelized drainage bank and the adjoining terrace may be particularly useful for wildlife movements in areas where homeless encampments within the channelized drainage may limit the movement of some wildlife species.

[12] First Carbon Solutions. October 2020. *Biological Resources Assessment and San Bernardino Merriam's Kangaroo Rat Habitat Assessment Citrus Valley Project.* Exhibit 5, Land Cover and Vegetation Types.

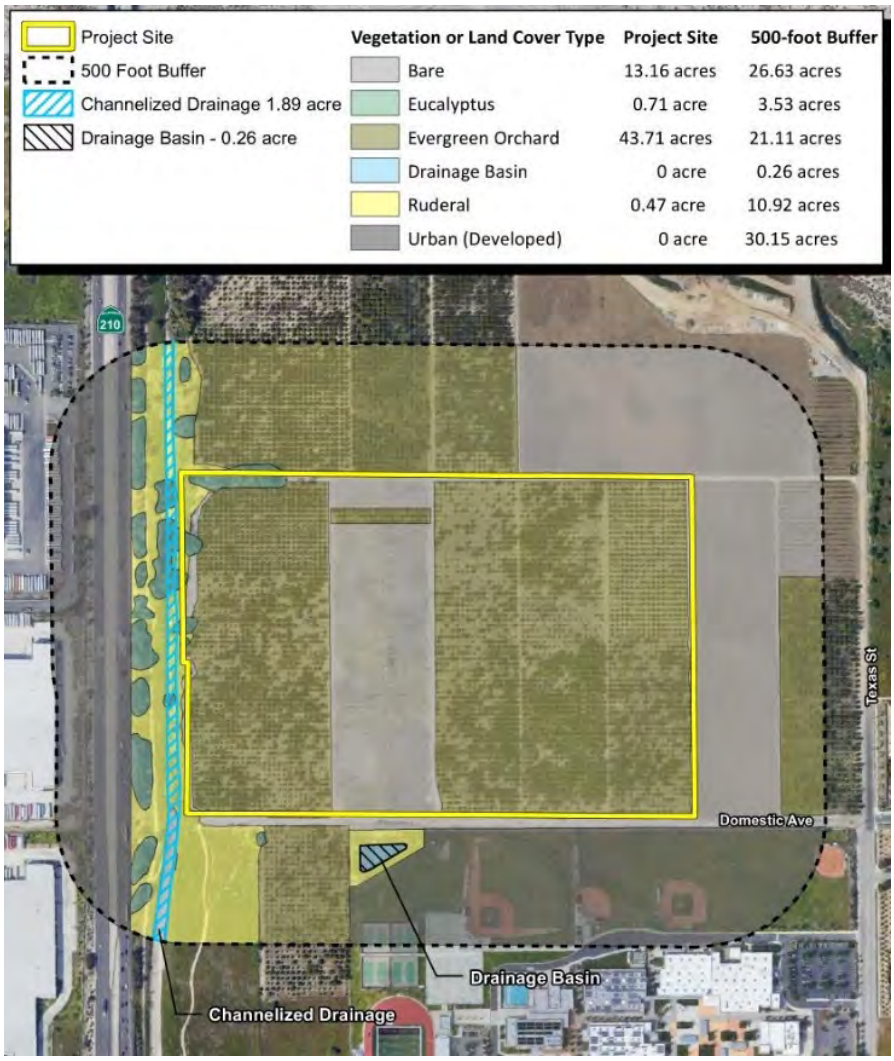


Figure 1: Channelized Drainage Location

Development of the proposed project could cause direct impacts to the wildlife movement corridor. The western extent of the project site is designed to include an open space area that would preserve the portion of the wildlife corridor within the project boundaries, including the eastern slope of the channelized drainage and the western extent of the adjacent terrace. However, development of the proposed project could cause indirect impacts to the wildlife movement corridor, including but not limited to construction-related noise, lighting, dust, and traffic. Exterior lighting within the developed project may have long-term indirect impacts on wildlife movement. Artificial light shining on the channelized drainage could deter wildlife species that are sensitive to human activities from utilizing it as a corridor or foraging area. Therefore, Mitigation Measure BIO-5 consisting of project design features is provided below to reduce potential impacts to a wildlife corridor to a less than significant level. Additionally, Mitigation Measure BIO-4 would reduce potential impacts to the riparian portion of a wildlife corridor.

Mitigation Measures

BIO-5 The project applicant shall implement the following project design features to minimize impacts to the project site's existing wildlife corridor and surrounding open space:

Lighting. All lighting along the west side of the project site shall be downcast luminaries with light directed away from the channelized drainage that provides the wildlife movement corridor. All lighting installed within 100 feet of the western border of the project site shall be designed to be directed away from the channelized drainage using shielded lights, low-sodium vapor lights, downcast lights, bollard lights, or other available light and glare minimization methods.

Landscaping. The project site design shall include an open space area of between approximately 15 feet (in the southwest corner of the project) and 200 feet (in the northwest corner) of the eastern slope of the channelized drainage and portions of the adjacent terrace, which shall be planted with drought-tolerant native shrub species. The soil surface in this zone may be covered with decomposed granite, but it shall not be irrigated. Shrub species in this corridor shall include those found in Riversidian alluvial fan sage scrub, including California buckwheat, California sagebrush, brittlebush (*Encelia farinosa*), deerweed (*Acmispon glaber*), and chaparral yucca (*Hesperoyucca whipplei*). A qualified Botanist who specializes in California native species shall direct plant selection and monitor their installation.

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

No Impact. The project site supports agricultural uses (citrus orchards). The remaining trees present on-site would be removed with implementation of the proposed project. The City of Redlands has policies and guidelines related to street trees on public City property but does not have City policies or ordinances related to trees on private property.[13] The project would not conflict with any other policies or ordinances protecting biological resources. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impacts would occur as a result of project implementation.

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?

No Impact. The project site is not located within a habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impacts would occur as a result of project implementation.

[13] Chapter 12.52 of the Redlands Municipal Code.

V. Cultural Resources

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

The analysis in this section is based on the *Cultural/Paleontological Resources Assessment for the Bergamot Specific Plan, City of Redlands, County of San Bernardino, California* performed by DUKE Cultural Resources Management, LLC, (DUKE CRM) to evaluate the proposed project for impacts to cultural and paleontological resources according to CEQA. This analysis is provided as **Appendix C** of this Draft IS/MND. The project has no previously recorded cultural resources or fossil localities within its boundaries and the field survey yielded negative results.

Records Search

On September 3, 2020, DUKE CRM requested a records search through the South Central Coastal Information Center (SCCIC). The SCCIC provided the records search results on October 12, 2020. The SCCIC is part of the California Historical Resources Information System (CHRIS) and is located at California State University, Fullerton. The records search included a review of all recorded cultural resources and reports within a quarter-mile radius of the project. In addition, DUKE CRM examined the California Built Environment Resources Directory (BERD), which includes the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest.

Pedestrian Survey

An archaeological field survey was conducted as part of the cultural resources assessment on September 25, 2020. All exposed areas were studied for surface artifacts and features and rodent burrows for evidence of archaeological sites. The purpose of this survey is to identify and document any cultural resources or any area(s) that might be sensitive for buried cultural resources prior to the beginning of ground-disturbing activities.

Cultural Setting and History

After AD 500, there was an influx of Native American groups from the eastern deserts into southern California. The project is located near the intersection of the traditional cultural territories of the Cahuilla and the Serrano. Tribal territories were somewhat fluid and changed over time. These groups were semi-nomadic hunter-gathers who subsisted on seasonably available plant and animal resources.[14]

Cahuilla

The territory of the Cahuilla ranged from the San Bernardino Mountains south to Borrego Springs and the chocolate Mountains, from Orocopia Mountains to the east, to the San Jacinto Plain and Palomar Mountain to the West. Cahuilla territory lies within the geographic center of Southern California and encompassed diverse environments ranging from inland river valleys and foothills to mountains and desert.[15] [16]

Serrano

The Serrano lived in the area generally north of Cahuilla territory (western Riverside County), occupying much of present-day San Bernardino county and northeastern Los Angeles county, but there is some overlap in the perceived ancestral areas. The term Serrano is Spanish for "mountaineer" or "highlander" and was given to people who inhabited the areas of the San Bernardino Mountains that had no associated mission. [17]

With the Spanish intrusion came a drastic change in lifestyle for the natives of Southern California. Incorporation of the indigenous populations into the mission system led to the disruption of native cultures and changes in subsistence and land use practices. Mission San Gabriel, established in 1771, probably had a limited effect on the Serrano population until the San Bernardino Asistencia was established in what would become Redlands around 1820.[18]

San Bernardino County

[14] Kroeber, Alfred L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin No. 78, Washington D.C.: Smithsonian Institute. Reprinted in 1976, New York: Dover Publications.

[15] Bean, Lowell John. 1978. Cahuilla. In *Handbook of North American Indians*, vol. 8. Edited by R.F. Heizer and W.C. Sturtevant. pp. 575-587. Washington D.C.: Smithsonian Institution.

[16] Bean, Lowell John and Florence C. Shipek. 1978. Luiseño. In *Handbook of North American Indians*, vol. 8. Edited by R.F. Heizer and W.C. Sturtevant. pp. 550-563. Washington D.C.: Smithsonian Institution.

[17] Bean, Lowell John and Charles R. Smith. 1978. Serrano. In *Handbook of North American Indians*, vol. 8. Edited by R.F. Heizer and W.C. Sturtevant. pp. 570-574. Washington D.C.: Smithsonian Institution.

[18] Harley, R. Bruce. 1988. Rev. Juan Caballeria: Historian or Storyteller? Rethinking the 1810 Dumetz Expedition. *San Bernardino County Museum Quarterly* vol. 35(2), 42p.

In 1820, a sub section of the Mission San Gabriel was established at the Native American village of Kaawchama in the area that would become the western portion of Redlands.[19] In 1842, Antonio Maria Lugo was granted 35,500 acres of land known as Rancho San Bernardino which included the land for the proposed project.[20] San Bernardino County was created in 1853 from portions of Los Angeles and San Diego counties. The City of San Bernardino was incorporated as the County Seat the following year. Agriculture ultimately replaced mining as the country's economic base, with thousands of acres under cultivation by the beginning of World War I.[21]

Redlands

After the Mormons left the San Bernardino Valley in the late 1850s, prominent individuals such as Ben Barton and Anson Van Leuven established ranches along what would become Barton Road. By the end of the decade, the area around the mouth of the Santa Ana Canyon was acquired by the Crafts family and would later become known as Crafton. The community that subsequently developed in the area between Crafton and the Old San Bernardino Mission district became known as Lugonia after Antonio Maria Lugo's family. By the early 1880s, two (2) Lugonia entrepreneurs, E.G. Judson and F.E. Brown, formed the Redlands Water Company and began buying land and constructing reservoirs and canals to provide water to their acquisitions. Judson and Brown platted the town of Redlands in 1887.[22] The town was incorporated the following year, fourth in the County of San Bernardino. Redlands prospered during the regional citrus boom, but from its founding it also developed with substantial contributions of "gentlemen ranchers," prosperous industrialists from the East Coast and the Midwest who established winter homes in the community.

Discussion

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

Less than Significant Impact. Historical resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or have a historically significant style, design, or achievement. Damage or demolition of historical resources is typically considered to be a significant impact. Impacts to historical resources can occur through direct impacts, such as destruction or removal, and indirect impacts, such as a change in the setting of a historical resource.

According to the SCCIC, a total of 12 cultural resource reports have been completed within a 0.25-mile radius of the proposed project, none of which included the project boundaries. Two (2) cultural resources

[19] McCawley, William. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning and Novato: Malki Museum Press and Ballena Press.

[20] Richards, Elizabeth W. 1966. Guideposts to History: Concerning Origins of Place and Street Names in San Bernardino County. Santa Fe Federal Savings.

[21] John Steve, McGroarty. 1914. Southern California. Southern California Panama Exposition Commission.

[22] Gudde, Erwin G. 1998. *California Place Names: The Origin and Etymology of Current Geographical Names*. Fourth edition, revised and enlarged by William Bright. Berkeley and Los Angeles: University of California Press.

(historic single-family residences) were also recorded within 0.25 miles of the project. Both resources were demolished during construction of the Citrus Valley High School in 2003. No cultural resources were recorded within the boundaries of the project. Additionally, no cultural resources were observed during the field survey.

There are no known resources on the site, and there is low potential previously unidentified resources could be discovered during ground disturbance. The project is regulated by the California Code of Regulations (CCR), Title 14, Chapter 3, Section 15064.5(f), which provides that, should archaeological materials be encountered during construction, all construction work should be halted and a qualified archaeologist consulted to determine the appropriate treatment of the discovery. Through compliance with state regulations, impacts would be less than significant.

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

Less than Significant Impact. Archaeological sites are locations that contain resources associated with former human activities, and may contain such resources as human skeletal remains, waste from tool manufacture, tool concentrations, and/or discoloration or accumulation of soil or food remains.

A field survey of the project site revealed that vegetation within the project site included citrus trees, thistle, and invasive weeds. Disturbances within the project site derive from citriculture, encampments in the northwest corner, and an abundance of modern refuse throughout. No cultural resources were observed during the field survey.

The project site has no previously recorded cultural resources localities within its boundaries and the field survey yielded negative results. Therefore, the project is considered to have low sensitivity for prehistoric and historic cultural resources, and it is not likely that any cultural resources will be impacted by the project.

If archaeological resources are discovered during construction, impacts would be less than significant through compliance with state regulations.

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

Less than Significant Impact. If human remains were found during ground-disturbing activities associated with the project, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by state law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County coroner, notification of the Native American Heritage Commission (NAHC), and consultation with the individual identified by the NAHC to be the most likely descendant (MLD). If human remains are found during excavation, excavation must stop in the

vicinity of the find and any area that is reasonably suspected to overlie adjacent remains until the County coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with state regulations, impacts would be less than significant.

VI. Energy

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
ENERGY: *Would the project:*				
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?	☐	☐	☒	☐

The analysis and findings throughout this section are based on the *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis, Citrus Valley Residential Project* prepared by Vista Environmental dated July 13, 2020, revised date October 19, 2020. This report, referred to herein as *AQ/Energy/GHG Report*, is provided as **Appendix A1** of this IS/MND.

Discussion

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

Less Than Significant Impact. The main forms of available energy resources are electricity, natural gas, and oil. The project is a residential development containing 317 single-family detached homes. A description of the 2019 California Green Building Standards Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operation, are provided below.

California Building Energy Efficiency Standards (Title 24, Part 6)

The 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as Title 24, became effective on January 1, 2020. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated every three (3) years to allow consideration and possible incorporation of new energy efficiency technologies and methods. These standards have been designed so that the average new home built in California, such as those in the proposed project, will now use zero-net-energy. The 2019 Building Energy Efficiency Standards require photovoltaic (PV) systems in newly constructed low-rise residential buildings such as the one (1)- and two (2)-story homes proposed by the project. These systems are required to generate at least the dwelling's annual electrical usage, unless there is substantial existing shading that would obstruct solar panels or if battery storage is also provided. With PV systems, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016

standards. Additionally, the 2019 standards encourage battery storage and heat pump water heaters and require more widespread use of LED lighting and high-performance attics, walls, and windows.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the California Building Standards Code (CBSC). CALGreen is updated every three (3) years, with the newest update having come into effect with the rest of the CBSC on January 1, 2020. The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of electric vehicle charging infrastructure in residential and non-residential structures;
- For some single-family and low-rise residential development developed after January 1, 2020, mandatory on-site solar energy systems capable of producing 100 percent of the electricity demand created by the residence(s). Certain residential developments, including those developments that are subject to substantial shading, rendering the use of on-site solar PV systems infeasible, are exempted from the foregoing requirement.

Construction Energy Use

The proposed project would consume energy resources during construction in three (3) general forms:

- Petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities);
- Electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,
- Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction, the proposed project would consume electricity to construct the new structures and infrastructure. Electricity would be supplied to the project site by Southern California Edison (SCE) and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel- or gasoline-powered generators would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Since power lines run along the south side of Domestic Avenue, which is on the south side of the project site, it is anticipated that only nominal improvements would be required to SCE distribution lines and equipment with development of the proposed project. Compliance with the City's guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Natural Gas

Construction of the proposed project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities; thus there would be no demand generated by construction. Since there is currently natural gas service along Texas Street, which is as near as 650 feet east of the project site, construction of the proposed project would be limited to installation of new natural gas connections within the project site and along the proposed Domestic Avenue road improvements to Texas Street. Development of the proposed project would likely not require extensive infrastructure improvements to serve the project site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, the proposed project would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service. Therefore, construction-related impacts to natural gas supply and infrastructure would be less than significant.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would utilized by both off-road equipment operating on the project

site and on-road automobiles transporting workers to and from the project site and on-road trucks transporting equipment and supplies to the project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions provided in the *AQ/Energy/GHG Report*, which found that the off-road equipment utilized during construction of the proposed project would consume 217,447 gallons of fuel. The on-road construction trips' fuel usage was calculated through use of the construction vehicle trip assumptions and fuel use assumptions provided in the *AQ/Energy/GHG Report*, which found that the on-road trips generated from construction of the proposed project would consume 672,947 gallons of fuel. As such, the combined fuel used from off-road construction equipment and on-road construction trips would result in the consumption of 890,394 gallons of petroleum fuel. This equates to 0.054 percent of the gasoline and diesel consumed in the County of San Bernardino annually. As such, the construction-related petroleum use would be nominal, when compared to current petroleum usage rates.

Construction activities associated with the proposed project would be required to adhere to all State and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. Development of the project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the proposed project. It is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete, but it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant.

Operational Energy Use

The ongoing operation of the proposed project would require the use of energy resources for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment and vehicle trips.

Operations-Related Electricity

Operation of the proposed project would result in consumption of electricity at the project site. The proposed project would consume an estimated 658,616 kilowatt-hours per year of electricity. This equates to 0.004 percent of the electricity consumed annually in the County of San Bernardino. As such, the operations-related electricity use would be nominal, when compared to current electricity usage rates in the County.

The proposed project would be required to meet the 2019 Title 24, Part 6 building energy efficiency standards that have been developed to meet the State's goal of zero net energy use for new homes. The zero net energy use will be achieved through a variety of measures to make new homes more energy efficient and by also requiring installation of PV systems of adequate size to generate enough electricity to meet the zero net energy use standard. The size of the PV system required for the project pursuant to the 2019 Title 24 standards was calculated in the *AQ/Energy/GHG Report*, which found that the proposed project would need to install at least 856.2 kilowatts of PV panels within the proposed project. Although

the CalEEMod model found that with implementation of the 2019 Title 24 Part 6 standards the proposed project would continue to utilize a nominal amount of power, it should be noted that the electricity usage and emission rates utilized by CalEEMod are based on regional average usage rates for existing homes, which were not all built to the most current Title 24 Part 6 standards; thus, the CalEEMod model provides a conservative or worst-case analysis of electricity use from the proposed project. Therefore, because the proposed project will be designed and built to minimize electricity use, existing and planned electricity capacity and electricity supplies would be sufficient to support the proposed project's electricity demand. Thus, impacts with regard to electrical supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Natural Gas

Operation of the proposed project would result in increased consumption of natural gas at the project site. The proposed project would consume 9,154 MBTU per year of natural gas. This equates to 0.0183 percent of the natural gas consumed annually in San Bernardino County. As such, the operations-related natural gas use would be nominal, when compared to current natural gas usage rates in the County.

The proposed project would be required to comply with all federal, State, and City requirements related to the consumption of natural gas, which includes CCR Title 24, Part 6: Building Energy Efficiency Standards and CCR Title 24, Part 11: California Green Building Standards. The Part 6 and Part 11 Standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation and efficient natural gas appliances and HVAC units. Therefore, because the proposed project will be designed and built to minimize natural gas use, existing and planned natural gas capacity and natural gas supplies would be sufficient to support the proposed project's natural gas demand. Thus, impacts with regard to natural gas supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Vehicular Petroleum Fuel Usage

Operation of the proposed project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the project site. The proposed project would consume 379,136 gallons of petroleum fuel per year from vehicle travel. This equates to 0.0023 percent of the gasoline and diesel consumed in the County annually. As such, the operational petroleum use would be nominal, when compared to current petroleum usage rates in the County. Therefore, the proposed project would be designed per California Building Code standards and built to minimize transportation energy through the promotion of the use of clean air vehicles, including mandatory installation of electrical vehicle supply equipment (EVSE) for electric-powered vehicles[23], and it is anticipated that existing and planned capacity and supplies of transportation fuels would be sufficient to support the proposed project's demand. Thus, impacts with regard transportation energy supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

[23] California Green Building Code 2019, 4 Residential Mandatory Measures, Site Development, Section 4.106.4, Electric Vehicle (EV) Charging for New Construction.

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

Less Than Significant Impact. State and local agencies regulate the use and consumption of energy through various methods and programs. As a result of the passage of Senate Bill (SB) 32 (the California Global Warming Solutions Act of 2006), which seeks to reduce the effects of GHG emissions, a majority of the state regulations are intended to reduce energy use and GHG emissions. These include, among others, CCR Title 24, Part 6 and Part 11, described above.

At the local level, the City's Building and Safety Division enforces the applicable requirements of the Title 24 and CALGreen Code. On December 5, 2017, the City adopted a Climate Action Plan which identified specific strategies for increasing energy efficiency and reduce GHG emissions and updated the General Plan 2035. The General Plan includes policies and actions to promote energy efficiency. **Table 5: City of Redlands General Plan Consistency** discusses project consistency with relevant policies and actions in the General Plan.

As discussed in **Table 5** and under **Impact VI.a)**, the proposed project would include energy-efficient appliances, heaters, HVAC systems, and solar PV electrical power-generating systems and these features would comply with applicable state and local energy regulating policies. The project's energy consumption would be typical of other residential development projects in Southern California and would not result in an increased energy demand beyond the capacity of SCE or the City. As such, the project would not conflict with or obstruct any plans for renewable energy or energy efficiency and a less than significant impact would occur.

Table 5: City of Redlands General Plan Consistency

Principles and Actions		Project Compliance
8-P.1	Promote energy efficiency and conservation technologies and practices that reduce the use and dependency of nonrenewable resources of energy by both City government and the community.	Consistent. The project would comply with the state's Building Energy Efficiency Standards and CALGreen, which require the use of energy-efficient appliances, mechanical equipment, HVAC systems, and/or solar PV panels per the most current Title 24 standards. The project will include energy-efficient appliances, lighting, and mechanical equipment in their design. In addition, the proposed residences will be required to incorporate PV solar systems into their design to reduce the building energy efficiency demand on the local grid (if constructed under 2019 Title 24 standards).
8-A.1	Work with Southern California Edison Company (SCE) and Southern California Gas Company to educate the public about the need to conserve energy resources and the higher energy efficiency of new appliances and building materials.	
8-A.2	Support San Bernardino County and San Bernardino Associated Governments (SANBAG) in implementation of their energy-related policies.	
8-A.4	Continue pursuit of sustainable energy sources—such as hydroelectricity; geothermal, solar, and wind power; and biomethane—to meet the community's needs.	
8-A.5	Accelerate the adoption of solar power and/or other alternative energy usage in Redlands.	
8-A.8	Implement and enforce California Code of Regulations Title 24 building standards (parts 6 and 11) to improve energy efficiency in new or substantially remodeled construction. Consider implementing incentives for builders that exceed the standards included in Title 24 and recognize their achievements over the minimum standards.	
8-A.9	Encourage the use of construction, roofing materials, and paving surfaces with solar reflectance and thermal emittance values per the California Green Building Code (Title 24, Part 11 of the California Code of Regulations) to minimize heat island effects.	
8-A.10	Integrate trees and shade into the built environment, to mitigate issues such as stormwater runoff and the urban heat island effect.	Consistent. The project would include landscaping throughout the project site that will allow stormwater runoff to infiltrate and trees to provide shade.

Source: City of Redlands, General Plan 2035

VII. Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS: *Would the project:*				
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 Section 1803.5.3 of the California Building Code), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

A geotechnical and infiltration evaluation (*Geotechnical Study*) was prepared for the proposed project by Petra Geosciences, Inc. in March 2019 and can be found in its entirety in **Appendix D** of this IS/MND. The findings of the *Geotechnical Study* are incorporated herein by reference.

Discussion

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

No Impact. Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely along active faults, and typically occurs during earthquakes of magnitude five (5) or higher. Ground rupture only affects the area immediately adjacent to a fault.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The act requires the state Geologist to establish regulatory zones, known as Alquist-Priolo (AP) Earthquake Fault Zones, around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). According to the applicable AP Map for the project site,[24] the project site is not affected by a state-designated AP Earthquake Fault Zone. No active or potentially active fault is known to exist at this site, nor is the site situated within an AP Earthquake Fault Zone or a Special Studies Zone.[25] The nearest zoned fault to the site is the San Andreas Fault zone, San Bernardino Mountains section, located approximately 3.5 miles northeast of the site. Therefore, project implementation would not expose people or structures to potential substantial adverse effects involving rupture of a known earthquake fault and there would be no impact.

a)ii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less than Significant Impact. The geologic structure of the entire Southern California area is dominated mainly by northwest-trending faults associated with the San Andreas system. The site is located in a seismically active region.

24 State of California, Department of Conservation California Geological Survey Website, Regional Geologic & Hazards Mapping Program-Alquist-Priolo Earthquake Fault Zone act, https://maps.conservation.ca.gov/cgs/EQZApp/app/, Accessed August 28, 2020

25 Bryant, W.A, and Hart E.W.. 2007. "Fault Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps," California Geological Survey: Special Publication 42.

According to the City's General Plan Faults Map,[26] the project site is located in an area of high seismic hazards. While the potential for strong seismic ground shaking cannot be eliminated, adherence to California Building Code (CBC) design requirements and other applicable standards and practices of earthquake resistant construction, as required by the California Building Permit process, would reduce such risk to the extent feasible. The proposed residential development would be constructed in accordance with the current CBC and other applicable standards and practices of earthquake-resistant construction and would also be required to comply with provisions set forth in Title 15 of the City of Redlands Municipal Code. This would reduce potential impacts from strong ground shaking to less than significant. Furthermore, the proposed residential development has been designed to be consistent with the General Plan Principles and Actions below that mitigate potential seismic hazards. Therefore, the project would have a less than significant impact with respect to seismic ground shaking.

a)iii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction occurs when loose, saturated sandy soil deposits lose internal strength and transform from a solid to a liquefied state due to reduced stresses within the soils mass. This phenomenon is most often induced by strong ground shaking associated with earthquakes. According to the General Plan Liquefaction Map,[27] the project site is not located within a mapped liquefication hazard zone, although it is in close proximity to an area mapped as having a high liquefaction potential. Due to the groundwater level of the site, however, liquefaction is not considered a hazard at the site.[28] Therefore, the project would have a less than significant impact with respect to substantial adverse effects associated with liquefaction.

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

Less Than Significant Impact. According to the General Plan Liquefaction Map,[29] which also maps areas of the City susceptible to landslides, the project site is not in an area that has either low to medium or medium to high susceptibility to potential landslides. The site vicinity is located in an area that has relatively flat to gently sloping terrain, making the potential for landslides negligible. Therefore, the project would have a less than significant impact with respect to substantial adverse effects associated with landslides.

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

Less Than Significant Impact. Development of the project is anticipated to involve grading and ground disturbance during construction activities. There is the potential for these activities to expose soils and

[26] City of Redlands General Plan 2035, page 7-27.

[27] City of Redlands General Plan 2035, page 7-28.

[28] Petra Geosciences, Inc. 2019. Due-Diligence/Feasibility Geotechnical Assessment, Approximately 46-Acre+/- Property Off West Domestic Avenue, City of Redlands, San Bernardino County, California.

[29] City of Redlands General Plan 2035, page 7-28.

increase the potential for soil erosion from wind or stormwater runoff. Pursuant to the CBC, the project applicant must prepare an Interim Erosion and Sediment Control Plan. The project is required to comply with the National Pollutant Discharge Elimination System (NPDES), and because the project would disturb a soil area of one (1) or more acres, the project is required to obtain and comply with the State Water Resources Control Board (SWRCB) NPDES General Permit No. CAS000002 waste discharge requirements (WDRS) for discharges of stormwater runoff associated with construction activity. The project is also required to include preparation of a Storm Water Pollution Prevention Plan (SWPPP) that recommends appropriate BMPs to control erosion and sediment. Compliance with the requirements of the CBC, as well as NPDES requirements for erosion control, grading, and soil remediation, would ensure that impacts related to soil erosion are reduced to less than significant.

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

Less than Significant Impact. The *Geotechnical Study* found the site to be relatively flat and a soil composition of sand and silty sand alluvium. Groundwater was not encountered in borings taken for the *Geotechnical Study*, which explored to a depth of approximately 65 feet below grade. The *Geotechnical Study* recommends over-excavation of 6 feet and compaction of 85 percent for cut lots and over-excavation of 3 feet for streets and non-structural areas. Over-excavated areas are recommended to be filled with engineered fill. Compliance with project design recommendations provided in the *Geotechnical Study* would ensure that impacts related to the potential for landslides, liquefaction, lateral spreading, subsidence, or collapse with project implementation are reduced and a less than significant impact would occur.

d) Would the project be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code, creating substantial direct or indirect risks to life or property?

Less than Significant Impact. Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking when dry. The expansion potential of any particular expansive soil is determined by the percentage of clay and the type of clay in the soil. Expansive near-surface soil is subject to high volume changes during seasonal fluctuations in moisture content, which can cause cracking of shallow foundations, floor slabs, concrete flatwork, and pavements. Portions of the City may support expansive soils.

According to the *Geotechnical Study*, the expansion potential of the site's soil is considered very low.[30] Additionally, as discussed in **Impact VII.c)** above, the *Geotechnical Study* recommends over-excavation of native soils and replacement with engineered fill. With implementation of the recommended soils treatment and due to the classification of the soil on-site, substantial direct or indirect risks to life or property as a result of the project are less than significant.

[30] Petra Geosciences, Inc. 2019. Due-Diligence/Feasibility Geotechnical Assessment, Approximately 46-Acre+/- Property Off West Domestic Avenue, City of Redlands, San Bernardino County, California.

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

No Impact. The proposed project would connect to City sewer and water service and does not propose the use of septic tanks. The City of Redlands Municipal Utilities and Engineering Department (MUED) provides sewer service. There currently exists an 18-inch line beneath Domestic Avenue.[31] A portion of this trunk sewer line will be replaced with a deeper line in order to convey all wastewater along the northerly portion of the project site. Within the project site, a series of 8-inch sewer lines will be constructed within the public streets looping through the various neighborhoods. The sewer system will be designed and installed pursuant to City of Redlands standards. Because no septic tanks are proposed, no impact would occur.

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

Less than Significant Impact The *Cultural/Paleontological Resources Assessment for the Bergamot Specific Plan, City of Redlands, County of San Bernardino, California* performed by DUKE CRM indicated that the project site has no recorded fossils or paleontological resources and the site has low sensitivity for such resources. Nonetheless, in the event fossils are discovered during ground disturbance, implementation of mitigation measure GEO-1 would ensure materials are managed appropriately. Therefore, the project would have a less than significant impact with respect to destroying any unique paleontological resource or unique geologic feature.

Mitigation Measures

GEO-1 If archaeological and/or paleontological discoveries are made during construction, all work in the immediate vicinity of the find shall be halted and notification made to the Development Services Department of the City of Redlands. The project proponent shall retain a qualified archaeologist or paleontologist to assess the nature and significance of the find and make recommendations prior to further disturbance.

[31] City of Redlands. Redlands Sewer Map. Accessed September 15, 2020. https://www.arcgis.com/apps/webappviewer/index.html?id=f79a9476094244faa43941f17ae6cd42.

VIII. Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS: *Would the project:*				
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?	☐	☐	☒	☐

The analysis and findings throughout this section are based on the *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis, Citrus Valley Residential Project* prepared by Vista Environmental dated July 13, 2020, revised date October 19, 2020. This report, referred to herein as *AQ/Energy/GHG Report*, is provided as **Appendix A1** of this IS/MND.

Global Climate Change

California is a substantial contributor of greenhouse gases (GHGs), emitting over 400 million tons of carbon dioxide (CO_2) per year. Climate studies indicate that California is likely to see an increase of 3 to 4 degrees Fahrenheit over the next century. Methane (CH_4) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO_2, CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO_2 concentrations ranged from 180 to 300 parts per million. For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 parts per million in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range.

Regulations and Significance Criteria

The Intergovernmental Panel on Climate Change (IPCC) developed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts per million CO_2 equivalent (CO_2e) concentration is required to keep global mean warming below 2 degrees Celsius, which in turn is assumed to be necessary to avoid significant levels of climate change.

Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets:

- 2010: Reduce GHG emissions to 2000 levels;
- 2020: Reduce GHG emissions to 1990 levels; and
- 2050: Reduce GHG emissions to 80 percent below 1990 levels.

In addition, the passage of Senate Bill (SB) 32 (the California Global Warming Solutions Act of 2006) requires statewide GHG emissions to be reduced to 40 percent below 1990 levels by 2030. SB 32 requires that the CARB determine what the statewide GHG emissions level was in 1990 and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons (MT) of CO_2e ($MTCO_2e$).

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. In actuality, GHG emissions from the proposed project would combine with emissions emitted across California, the U.S., and the world to cumulatively contribute to global climate change.

Discussion

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

Less Than Significant Impact. The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, and construction equipment. The project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed in **Appendix A1**. A summary of the results is shown below in **Table 6: Project-Related Greenhouse Gas Annual Emissions**.

As shown in **Table 6**, the proposed project would create 4,294.27 $MTCO_2e$ per year, which is equivalent to 4.73 $MTCO_2e$ per year per service population. According to the threshold of significance provided in the Redlands Climate Action Plan (CAP), a cumulative global climate change impact would occur if the GHG emissions exceed 5.0 $MTCO_2e$ per year per service population. Therefore, a less than significant generation of GHG emissions would occur from construction and operation of the proposed project.

Table 6: Project Related Greenhouse Gas Annual Emissions

Category	Greenhouse Gas Emissions (Metric Tons per Year)			
	CO_2	CH_4	N_2O	CO_2e
Area Sources[1]	5.34	0.01	0.00	5.47
Energy Usage[2]	648.01	0.02	0.01	651.67
Mobile Sources[3]	3,114.42	0.08	0.00	3,116.49
Solid Waste[4]	37.88	2.24	0.00	93.84
Water and Wastewater[5]	136.08	0.54	0.01	153.94
Construction[6]	267.36	5.45	0.00	267.95
Total Emissions	**4,209.08**	**8.34**	**0.02**	**4,289.36**
Service Population[7]				907
MTCO2e per Service Population				**4.73**
City of Redlands CAP Threshold of Significance (Metric Tons CO_2e per Service Population)				**5.0**
Exceeds Threshold?				No

Notes:

1 = Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.

2 = Energy usage consists of GHG emissions from electricity and natural gas usage.

3 = Mobile sources consist of GHG emissions from vehicles.

4 = Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.

5 = Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

6 = Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.

7 = Service population obtained from CalEEMod default population values.

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 proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The applicable plan for the proposed project is the Redlands CAP that was prepared pursuant to Section 15183.5(b) of the CEQA Guidelines to be utilized as a tiering document for the General Plan, as well as future projects within the City that are consistent with the General Plan. Since the proposed project is consistent with the General Plan, the proposed project meets the criteria allowed for use of the Redlands CAP for analysis of the proposed project.

The Redlands CAP incorporates the guidelines established in CARB's 2017 Scoping Plan. The 2017 Scoping Plan was prepared to meet the most current GHG emissions reduction targets set in Executive Order S-3-15 and SB 32 that recommends local governments develop plans to reduce GHG emissions to 6 $MTCO_2e$

per capita per year by the year 2030, and 2 $MTCO_2e$ per capita per year by the year 2050. Since the Redlands CAP was prepared in coordination with the General Plan that has a horizon year of 2035, the Redlands CAP provides a year 2035 target of 5 $MTCO_2e$ per capita per year, which was determined through interpolation of the 2030 and 2035 GHG emissions targets. As detailed in **Impact VIII.a)** above, the proposed project would generate 4.73 $MTCO_2e$ per year per service population, which is below the 5 $MTCO_2e$ per year per service population threshold provided in the Redlands CAP. Therefore, the proposed project is consistent with the Redlands CAP and would not conflict with the applicable plan adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant.

IX. Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS: *Would the project:*				
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?	☐	☐	☒	☐

The analysis and findings throughout this section are based on two (2) hazardous materials reports prepared for the project. A *Phase I and Limited Phase II Environmental Site Assessment* (*Phase I/II ESA*) was prepared by Petra Geosciences, Inc. on March 28, 2019, to address six (6) of the seven (7) parcels that comprise the project site (APNs 0167-031-02, 0167-031-04, 0167-031-05, 0167-031-06, 0167-031-07, and

0167-031-16); refer to **Appendix E1** of this IS/MND. An additional *Phase II Environmental Site Assessment* (*Phase II ESA*) was prepared by GeoTek, Inc. on December 9, 2019, to address the potential concern regarding the project site's historical agricultural use and possible pesticide use on the seventh parcel of the project site (APN 0167-031-03); refer to **Appendix E2** of this IS/MND.

Discussion

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

Less Than Significant Impact. Residential land uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Future residents may use common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and quantity used, the routine use of these products would not represent a substantial risk to public health or the environment. Therefore, a less than significant impact would occur.

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 With Mitigation Incorporated.

Construction Impacts

Construction activities associated with the proposed project would involve the use of heavy equipment and various construction materials such as concrete, paints, and adhesives. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and City ordinances regulating the handling, storage, and transportation of hazardous and toxic materials.

Existing On-site Hazardous Materials

The *Phase I/II ESA* identified the following conditions on the project site:

- The project site has been in use for agricultural purposes since the 1930s, specifically as a former citrus orchard. Several citrus groves remain on the project site. One (1) inactive water well, previously used to supply water to the orchards, was observed near the southeast corner of the project site but is not within the subject property. Three (3) gasoline-powered wind machine towers containing aboveground fuel storage tanks were also identified on the project site. However, these machines have not been in use for approximately 20 years.
- The project site is geographically located within the Crafton-Redlands plume boundary, a groundwater plume with known trichloroethylene (TCE). The Crafton-Redlands plume is located in the eastern and central portion of the Bunker Hill Groundwater Basin in San Bernardino County.

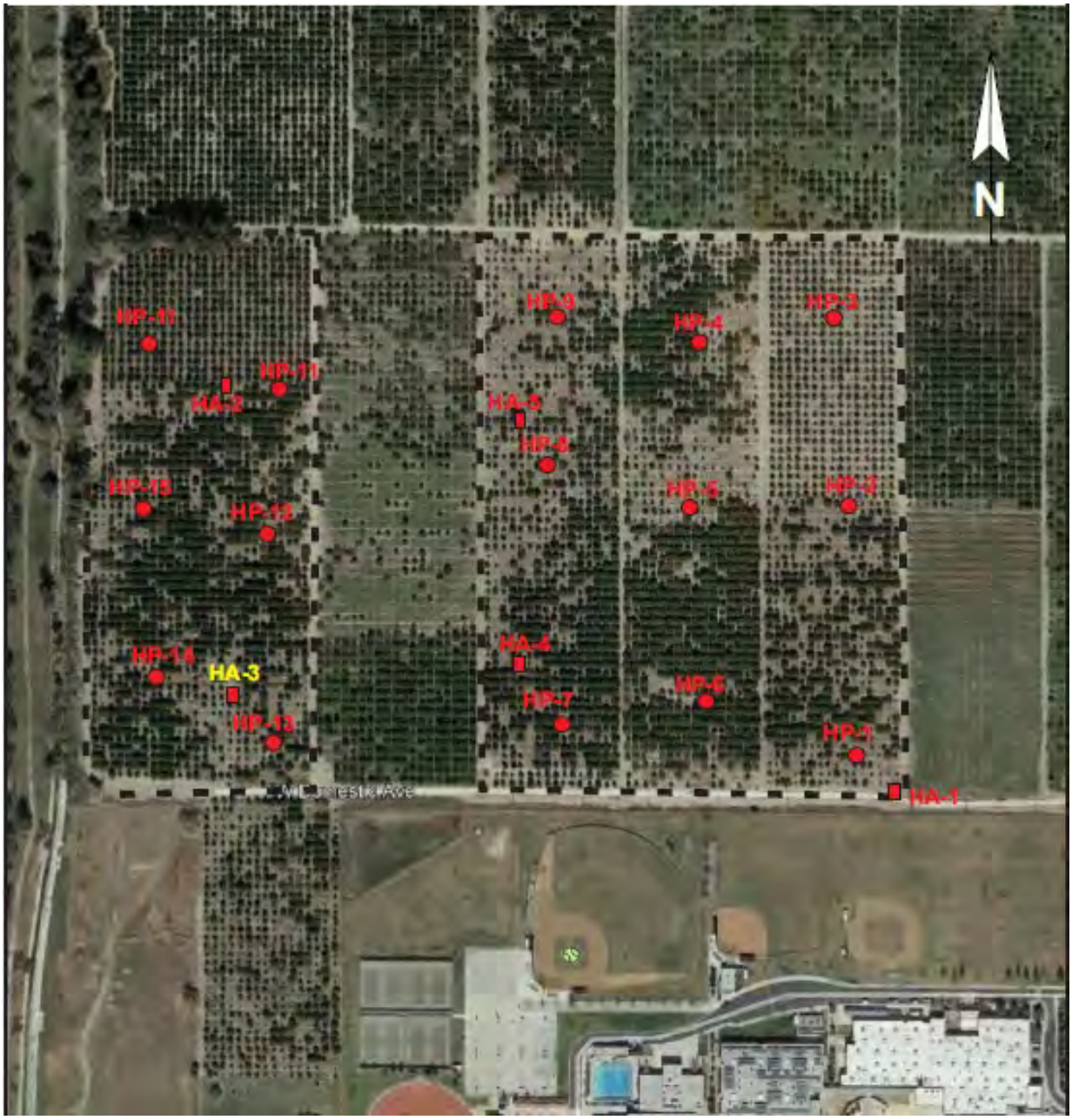
Although groundwater beneath the project site has been impacted, the depth to groundwater (greater than 100 to 200 feet below grade) and the concentrations of contaminants are sufficiently low and would not present a health risk to construction workers during grading/trenching activities or to future residents. As such, the Crafton-Redlands plume represents a de minimis condition to the project site.

- Homeless encampments were noted in at least two (2) areas along the western portion of the project site. Near these encampments were the largest concentration of dumped trash and debris in or along the south edge of the drainage in the northwest portion of APN's 0167-031-02 and -16. There were no visible signs of this debris containing hazardous substances; however, the trash was not disturbed. A few other areas of dumped debris were noted near dirt roads between the parcels containing ceramic tiles, carpet, lumber, interior vehicle parts, clothing, concrete block, drywall, and concrete slab fragments. Also scattered within the groves were remnants of clay and concrete pipe, fragments of smudge pots, and to a lesser extent windblown trash.

The *Phase I/II ESA* did not identify any existing Recognized Environmental Conditions (RECs) on the project site or on adjoining sites, with the exception of the Crafton-Redlands plume, which represents a de minimis condition as discussed above. However, due to the historical agricultural use of the site, soil testing was conducted due to the potential for residual agricultural chemicals in the soil from historic agricultural operations. As discussed in the *Phase I/II ESA*, soils from six (6) of the seven (7) parcels that make up the project site were tested in March 2019 for the presence of organochlorinated pesticides (OCPs) including dichlorodiphenyldichloroethylene (DDE), dichlorodiphenyltrichloroethane (DDT), and dieldrin(Refer to **Figure 2 – Location of Site HA-3**). All detectable concentrations of DDE, DDT, and dieldrin were found to be below both the California Human Health Screening Levels and EPA Region 9 Regional Screening Levels for residential use soils. In addition, testing for total petroleum hydrocarbons (TPH) was conducted. No concentrations were detected above the laboratory reporting limit for C4-C10 Gasoline Range. However, one (1) of the samples that was collected near stained surface soils adjacent to the concrete slab near one (1) of the wind machines that has been removed in the southwestern portion of APN 0167-031-02, contained concentrations of C11-C22 Diesel Range that exceeds the Santa Ana Regional Water Quality Control Board Tier 1 Environmental Screening Level (ESL). As a result, the March 2019 *Phase I/II ESA* determined that soil residues exceeding ESL values for C11-C22 Diesel Range were not considered suitable for reuse as fill within future residential development.

An additional *Phase II ESA* was conducted for the seventh parcel of the project site in December 2019. According to the *Phase I/II ESA*, analysis of the soil samples detected at Site HA-3 had measurable quantities of the OCP constituents DDD, DDE, DDT, dieldrin, and endrin (Refer to **Figure 2 – Location of Site HA-3**). However, analysis of the soil samples did not detect quantities of any of these OCP constituents that were above the regulatory screening levels. Nonetheless, because OCP/Diesel contaminated soils were not considered suitable for reuse, grading activities could result in the upset of unsuitable OCP/Diesel contaminated soils. Therefore, the project applicant would be required to remove unsuitable OCP/Diesel-contaminated soils found in Site HA-3 prior to site grading activities, as identified in **Figure 2 – Location of Site HA-3** (Mitigation Measure HAZ-1). Such materials would then be required to be disposed of at a licensed facility with confirmation sampling to show that all remaining soil OCP/Diesel concentrations are below the U.S. Environmental Protection

Figure 2, Location of Site HA-3



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Agency (EPA) Regional Screening Levels (RSLs) and/or Department of Toxic Substances Control modified Screening Levels (DTSC-SLs), as applicable.

Concurrent with the treatment of contaminated soils, Mitigation Measure HAZ-2 would require the that any discolored subsurface soils or unanticipated hazardous materials discovered during soil excavation shall be left in place and shall revert to Mitigation Measure HAZ-1 for protocol treatment of contaminated soils.

Operational Impacts

Operational activities would include standard maintenance (i.e., landscape upkeep, exterior painting and similar activities) involving the use of commercially available products (e.g., pesticides, herbicides, gas, oil, paint, etc.) the use of which would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accidental release of hazardous materials into the environment.

With implementation of Mitigation Measure **HAZ-1** and Mitigation Measure **HAZ-2**, the project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. A less than significant impact would occur

Mitigation Measures

HAZ-1 Prior to issuance of a grading permit, the project applicant shall submit documentation as proof, to the City Engineer, that contaminated soils encountered at Site HA-3 (as identified on *Figure 3 – Phase II Sample Location Map* of the project Phase I/II Environmental Site Assessment) of the project site have been disposed of at a licensed facility with confirmation sampling to show that contamination concentrations of remaining soils are below the U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) and/or Department of Toxic Substances Control modified Screening Levels (DTSC-SLs), as applicable.

If discolored subsurface soils or unanticipated hazardous materials are discovered, the above documentation and disposal processes shall apply. In no event shall the project applicant proceed with site grading activities at any location on the site, where OCP/Diesel contamination are found to be present above regulatory thresholds for commercial use.

HAZ-2 Any discolored subsurface soils or unanticipated hazardous materials discovered during soil excavation shall be left in place and shall revert to Mitigation Measure HAZ-1 for protocol treatment of contaminated soils.

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

Less Than Significant Impact. The project site is located north of Citrus Valley High School on the opposite side of Domestic Avenue. Although the residential development occurs within 0.25 miles of a school, no hazardous materials would be emitted as a result of the construction of the residential units. The storage and use of hazardous materials are not associated with residential uses; therefore, impacts associated with emission of hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of a school would be less than significant.

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

No Impact. According to the California Environmental Protection Agency's Cortese List Data Resources Database,[32] the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore, no impact would occur. However, as described above, the site has been investigated for the presence of hazardous materials contamination and mitigation identified to reduce impacts to less than significant.

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?

Less Than Significant Impact. The project site is located between two (2) public airports. San Bernardino International Airport is located 2.1 miles to the northwest and Redlands Municipal Airport is located 2.6 miles to the east. The City of San Bernardino 2005 General Plan, Figure LU-4: San Bernardino International Airport Planning Boundaries, currently shows that the project site falling within the Airport Influence Area. However, it should be noted that the Airport Master Plan (AMP) and Comprehensive Land Use Plan (CLUP) for San Bernardino International Airport (SBIA) are currently in the process of being prepared. As a result, precise noise contours and safety zones are not available at this time until adoption of the SBIA AMP and CLUP.[33]

As shown in the *Redlands Municipal Airport Land Use Compatibility Plan Review*, the project site is located outside the Redlands Municipal Airport Influence Area.[34] Based on the project site's location, the project would not result in a safety hazard or excessive noise for people residing in project area. This impact would be less than significant.

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

[32] California Environmental Protection Agency website. Accessed August 27, 2020 .https://calepa.ca.gov/sitecleanup/corteselist/

[33] City of San Bernardino General Plan Land Use Element. November 1, 2005. Figure LU-4: San Bernardino International Airport Planning Boundaries.

[34] Redlands Municipal Airport Land Use Compatibility Plan Review. November 10, 2015. Accessed August 27, 2020 https://raacp.org/wp-content/uploads/2016/07/Coffman-2015-Redlands-Airport-Land-Use-Compatibility-Plan-Review.pdf

Less Than Significant Impact. The project site does not contain any emergency facilities and does not serve as an emergency evacuation route. During project construction, the contractor would be required to maintain adequate emergency access for emergency vehicles as required by the City. Development of the site with single-family residential homes would not interfere with an adopted emergency response or evacuation plan. Access to the future residential development would be provided via Domestic Avenue and the future extension of Texas Street to the north (via new Street N roadway connection) and would be maintained for ingress/egress.

In addition, the project does not propose any changes to adjacent roadways, including Texas Street, Domestic Avenue, or new Street N, that could potentially impair emergency response or evacuation (lane reductions, narrowing, permanent road closures, etc.). Therefore, the project would not interfere with an adopted emergency response or evacuation plan and a less than significant impact would occur.

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

Less Than Significant Impact. According to General Plan Figure 7-4 – Fire Hazards, high fire risk areas in Redlands include San Timoteo and Live Oak Canyons, in addition to Crafton Hills. Additionally, according to the General Plan, open spaces in the City are susceptible to destructive wildland fires, often exacerbated by dry weather and Santa Ana winds. The project site is not located in or near a State Responsibility Area and does not contain lands classified as very high fire hazard severity zones.[35] The proposed project is located in an urbanized area of the City and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. This impact would be less than significant.

[35] California Department of Forestry and Fire Prevention. FHSZ Viewer. Accessed September 18, 2020. https://egis.fire.ca.gov/FHSZ/.

X. Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY: *Would the project:*				
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

This section relies on information contained in the *Preliminary Drainage Report* prepared by Huitt-Zollars in July 2020 and a *Preliminary Water Quality Management Plan* (WQMP) prepared by Huitt-Zollars in July 2020, included as **Appendix F1** and **F2** in this IS/MND, respectively.

Discussion

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

Less Than Significant Impact. As part of Section 402 of the Clean Water Act, the EPA has established regulations under the National Pollutant Discharge Elimination System (NPDES) program to control direct stormwater discharges. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The City is within the jurisdiction of the Santa Ana RWQCB.

Construction Impacts

Construction activities associated with the proposed residential development would be subject to NPDES requirements. Construction sites with 1 acre or more of soil disturbance are required to apply for coverage for discharges under the General Construction Permit by submitting an Notice of Intent (NOI) for coverage and developing a Storm Water Pollution Prevention Plan (SWPPP), which would include a site plan showing existing and proposed buildings, lots, roadways, stormwater collection and discharge points, drainage patterns across the project, and general topography both before and after construction. The project would disturb 1 or more acres and is therefore subject to compliance with NPDES requirements. The SWPPP must list BMPs to be implemented in order to minimize the impact of stormwater runoff and address construction site pollutants.

Pursuant to Redlands Municipal Code Section 15.54.160, new development or development projects shall implement stormwater management practices to minimize runoff and increase infiltration. The City of Redlands MUED would review and approve BMPs contained in the SWPPP to be implemented to reduce the discharge of pollutants during construction. The SWPPP shall identify erosion control BMPs to minimize pollutant discharges during construction activities. These identified BMPs would include stabilized construction entrances, sand bagging, designated concrete washout, tire wash racks, silt fencing, and curb cut/inlet protection. Compliance with Redlands Municipal Code Section 15.54.160, as well as NPDES requirements, would reduce construction-related impacts on water quality to less than significant.

Operational Impacts

Long-term impacts to water quality occur when impacts related to urban runoff increase due to project operations. A reduction of permeable surfaces would be considered a water quality impact, as permeable surfaces allow for rain and runoff to infiltrate into the ground. Infiltration both reduces the amount of flow that is capable of washing off additional pollutants and filter water removing potential pollutants.

These changes have the potential to affect long-term water quality. The project involves construction of 317 single-family residences, recreation areas, and associated hardscapes. Project implementation would result in a reduction of permeable surfaces, since vacant land would be replaced with residential uses. Thus, the water quality issues of concern would involve urban runoff associated with the new land uses.

With compliance with existing federal, state, and local regulations related to water quality, implementation of BMPs included in the project construction SWPPP, and implementation of design recommendations included in the project's *Preliminary Drainage Report*, the project would result in less than significant impacts to water quality resulting from project operation. The proposed project would not generate hazardous wastewater that would require any special waste discharge permits. All wastewater associated with the project's interior plumbing systems would be discharged into the local sewer system for treatment at the regional wastewater treatment plant. Impacts would be less than significant with implementation of required BMPs and design recommendations.

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 Redlands MUED provides local water service in the City and would serve the proposed project. The City of Redlands is an implementing agency of the 2015 San Bernardino Valley Regional Urban Water Management Plan (UWMP), amended in June 2017. The UWMP provides a summary of water supply sources for the area, as well as management strategies to meet targets for future water use, including groundwater supply. Domestic water supplies from this service provider are reliant on four (4) sources: purchased imported water (from the State Water Project); groundwater (from the Bunker Hill Subbasin and Yucaipa Subbasin); surface water (from the Mill Creek Watershed and Santa Ana River Watershed); and recycled water (from the City's wastewater treatment plant).

The project involves development of 317 residential units, which would result in increased water consumption, placing greater demands on groundwater supplies. However, the project would not substantially decrease groundwater supplies such that it would impede sustainable groundwater management of the basin. Based on the UWMP, the long-term analysis of the groundwater table during average years and dry years indicates that the supply will still be capable of meeting the City's demand through 2040. To maximize the use of local water resources and reduce dependence on imported water supplies, the City has established conservation pricing methods based on the cost of providing service to each customer, developed water loss management programs, and increased public education on demand management. The region has also taken steps to increase supply reliability by recharging current imported water supplies during wet years to enhance groundwater supplies for use in dry years. Continued compliance with these strategies would ensure that future development in the City occurs in a sustainable manner with regard to groundwater supply and does not outpace the ability to provide sufficient water supply to residents.

According to the City's General Plan Sustainable Community Element, the City has recently seen a substantial drop in overall and per capita water use as compared to historical levels as a result of ongoing conservation measures. The General Plan contains principles and actions aimed at further implementing water conservation measures throughout the planning horizon. Compliance with these principles and actions would further reduce the project's impacts to groundwater supplies. Therefore, a less than significant impact would occur with project implementation.

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

Less Than Significant Impact. The project proposes to develop a residential community with associated parks and landscaping on a site that is currently vacant land. The project site's existing runoff flows northerly and westerly via sheet flow, eventually flowing into the existing drainage channel to the west within the Caltrans's SR-210 right-of-way.

Construction and operation of the proposed project would increase the net area of impermeable surfaces on the site. The project would include on-site infiltration in the form of two (2) at-grade infiltration/detention basins located in the project site's western parklands, to capture and dispose of stormwater to mitigate the 100-year flows to existing conditions. By ensuring flows do not exceed existing conditions, water discharged off-site would not cause or exacerbate downstream erosion or siltation. The infiltration system design, described in greater detail below, would be designed by the project civil engineer, in compliance with City guidelines. Once construction is completed, the project would consist of impervious surfaces and landscaping, and therefore the project site would not have exposed soils that would be subjected to substantial erosion. Impacts would be less than significant.

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

Less Than Significant Impact. The City's stormwater drainage system serves an area of approximately 37 square miles. Stormwater runoff flows by gravity into the Mission Channel, Morrey Arroyo Creek, and San Timoteo Canyon, and discharges to the Santa Ana River. Drainage throughout the city is generally from east to west to one (1) of two (2) main existing major stormwater drainage facilities.

The development of 317 residences and associated hardscapes would change drainage patterns and increase the amount of impermeable surfaces on the project site, which would in turn increase runoff volumes entering the City's stormwater collection system. However, drainage areas and detention basins are proposed to mitigate increases in stormwater runoff leaving the site. According to the *Preliminary Drainage Report* prepared for the project, all on-site runoff from the residential development would be collected by proposed curb inlets and conveyed by proposed storm drain lines in two (2) separate drainage areas, identified as Drainage Area 1 (South) and Drainage Area 2 (North) in the *Preliminary Drainage*

Report. Both Drainage Areas 1 (40.38 acres) and 2 (18.3 acres) drain to the same concrete-lined channel that borders the project site to the west at two (2) separate outlets, which connect to the channel via outlet pipes. Because of the incremental peak discharges resulting from the project, detention basins are proposed downstream of the Drainage Areas to mitigate the 100-year flows to existing conditions. Detention basins 1 (South) and 2 (North) are combination basins that allow for the infiltration of the low impact development (LID) design capture volume and provide supplemental flood storage for larger storm events. Detention basins 1 (South) and 2 (North) would have a storage capacity of 3.46 acre-feet and 1.58 acre-feet at the top of the outlet riser, respectively. An emergency spillway at least 2 feet above the grate inlet for sufficient freeboard would also be included in the event that the basin overtops.

In addition, the project site is not located in an area identified as a flood risk area based on Figure 7-3: Flood Hazards, of the General Plan Health Community Element (Section 7.4, Safety).[36] Therefore, the project would not substantially increase the rate or amount of surface runoff, which could result in on- or off-site flooding. Impacts would be less than significant.

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

Less Than Significant Impact. During construction, the project applicant would be required to comply with drainage and runoff guidelines pursuant to the City of Redlands. Compliance with these guidelines would reduce the potential for polluted runoff. The project is subject to the City's water quality and NPDES requirements. A WQMP has been prepared for the project.

Operation of the proposed project would increase the net area of impermeable surfaces on the site; however, the project applicant would be required to obtain permits to connect to the existing storm drainage system prior to construction. Detention basins are proposed downstream of the Drainage Areas to mitigate the 100-year flows to existing conditions. Therefore, the increase in discharges due to additional impervious surfaces would not affect local storm drain capacity. The project would not result in substantial pollutant loading such that treatment control BMPs would be required to protect downstream water quality. The entirety of the project site (excluding public streets Street N and Domestic Ave) would drain to the proposed infiltration/detention basins. Because of the significant grade differential between the east and west boundaries of the project, as well as the potential for flooding onto residential properties, the implementation of vegetated swales is not included as part of the design. With implementation of the BMPs and adherence to existing water quality and NPDES requirements, impacts from polluted runoff, such as from oil and other pollutants from parking areas, would be reduced to acceptable levels. Impacts would be less than significant.

[36] City of Redlands General Plan Healthy Community Element. December 5, 2017. Figure 7-3: Flood Hazards.

c)iv) 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 impede or redirect flood flows?

Less Than Significant Impact. While the project would alter the existing drainage pattern on-site through the addition of impervious surfaces, the implementation of project design features—specifically, the on-site infiltration/detention basins—would reduce this impact to a less than significant level.

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

No Impact. According to the applicable Federal Emergency Management Agency (FEMA) Floodplain Insurance Rate Map (FIRM) Panel No. 06071C8704H dated August 28, 2008, the project site is within Flood Zone X.[37] Zone X is determined to be outside of the 0.2 percent annual chance floodplain. In addition, the project site is not located near any large inland bodies of water and is more than 50 miles from the Pacific Ocean, a condition that precludes inundation by tsunami. According to the General Plan's Flood Hazard Map (General Plan Figure 7-3), the project site is not located within a dam inundation area. Therefore, since the project site is not at risk for flood hazards, tsunami or seiche, there would be no impact relative to the risk of release of pollutants due to project inundation.

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

No Impact. The proposed project has developed a WQMP to address the project's quality and quantity of stormwater runoff and provide BMPs for the construction and operation of the project to ensure compliance with the current General Stormwater Permit. The proposed project would be consistent with the management strategy outlined by the UWMP for local surface water and groundwater in the San Bernardino Valley. As such, the proposed project would not conflict with or obstruct the General Stormwater Permit or the San Bernardino Valley Regional UWMP. There would be no impact.

[37] Federal Emergency Management Agency. FEMA Flood Maps website. Accessed September 1, 2020. https://www.fema.gov/flood-maps

XI. Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING: *Would the project:*				
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?	☐	☐	☒	☐

The proposed project involves the development of 317 single-family residences with associated utilities, infrastructure, open space and recreational areas on approximately 58.64 acres. The project site is bounded by agricultural uses (to the north and east), Citrus Valley High School and agricultural uses (to the south) with the Griffin Homes Heritage Specific Plan farther to the south, and the SR-210 freeway (to the west). The project site currently supports agricultural uses (citrus orchards).

Discussion

a) Would the project physically divide an established community?

No Impact. The physical division of an already established community typically refers to the construction of a linear feature, such as an interstate highway, railroad tracks, or removal of a means of access, such as a bridge, which would impact mobility within an existing community and an outlying area. The proposed project does not propose construction of any roadway, flood control channel, or other structure that would physically divide any portion of the community. The project proposes to develop single-family residences with associated utilities, infrastructure, open space, and recreational areas on vacant land that are readily accessible by existing roadways. The proposed project is consistent with the surrounding land uses and would not divide an established community. Therefore, no impact would occur.

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

Less than Significant Impact. The project site is currently designated Low Density Residential, per the City's General Plan. The Low Density Residential land use designation allows for the development of single-family residential development, with a maximum density of 6 dwelling units per acre (du/ac), with an overall gross density of approximately 5.7 du/ac.

Additionally, the proposed project would involve a change in the existing zoning designation. The current zoning designation of the project site is Science Research Park (SRP) of the East Valley Corridor Specific Plan. The EV/SRP is intended to create, preserve and enhance areas for science, medical, and research and development uses. A specific plan amendment is proposed as part of the project to remove the

project site from the East Valley Corridor Specific Plan and establish the Bergamot Specific Plan. The proposed single-family homes and related infrastructure would be subject to development standards established by the Bergamot Specific Plan, including design guidelines to define the community and visual character.

Upon approval by the City Council, the proposed project would be consistent with both the General Plan and Zoning Code. Furthermore, the project-level review of the proposed residential development portion of the project includes a site design review to ensure compliance with site-specific development standards, as outlined in the City's Zoning Code and other applicable ordinances. With project approval, the residential development would then be adjacent to the East Valley Corridor Specific Plan to the north and east, which allows commercial, professional, or industrial uses. The East Valley Corridor Specific Plan contains development standards specifically addressing transitional buffering measures when residential and nonresidential land uses abut one another, such as increased landscape requirements, reduced massing, and increased setbacks between the residential and nonresidential uses, in order to establish appropriate transitions between uses. With compliance with the above plans and policies, the proposed project would not conflict with any land use plan, policy or regulation, and a less than significant impact would occur.

XII. Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
MINERAL RESOURCES: *Would the project:*				
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?	☐	☐	☒	☐

Discussion

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

Less than Significant Impact. The City of Redlands is required by the Surface Mining and Reclamation Act of 1975 (SMARA) to adopt policies recognizing the importance of the identified mineral resources, clarifying the intent that this information is to be used when making land use decisions in areas designated to be of statewide or regional significance, and emphasizing the conservation and development of identified mineral deposits. Figure 6-4, Mineral Resources, in the Vital Environment Element of the General Plan shows mineral land classifications and designated aggregate resource sectors as identified by the California Geological Survey (CGS), including Mineral Resource Zones (MRZs).[38] The classifications used to define MRZs are as follows:[39]

- MRZ-1: Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- MRZ-2: Areas where geologic data indicate that significant PCC-Grade aggregate resources are present.
- MRZ-3: Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.

According to Figure 6-4, Mineral Resources, in the General Plan, the project site is located within an area designated as MRZ-2. The Santa Ana Wash adjoining Redlands contains high quality construction aggregates that have been mined since the 1920s. Mining in the Santa Ana Wash is being done on both

[38] City of Redlands. 2017. General Plan 2035, Chapter 6, Vital Environment Element.

[39] State Mining and Geology Board, California Department of Conservation. *Guidelines for Classification and Designation of Mineral Lands*.

sides of the boundary between the cities of Redlands and Highland, and new areas are currently being proposed for mining along the northern project site boundary.[40]

As discussed throughout this IS/MND, historical uses of the project site included agricultural uses, and have not included mineral extraction. The project site does not currently support mineral extraction and the project does not propose mineral extraction activities.

The project site is located south of a portion of a Regionally Significant Construction Aggregate Resource Area.[41] Construction aggregate is located throughout this region within the jurisdictions of the City of Redlands, City of Highland, and large portions of the County of San Bernardino. While development of the project would impact 58.64 acres of MRZ-2, it would not impact a Regionally Significant Construction Aggregate Resource Area. Furthermore, General Plan Policy Action 6-A.32 states that surface mining permits be denied where unmitigated adverse impacts would be significantly greater than at alternative locations within the San Bernardino Production-Consumption Region. The site is located directly adjacent and near to existing development (adjacent to Citrus Valley High School with residential to the east and southeast) that would be impacted significantly if the site were to be utilized for the mining of construction aggregate. Therefore, the City's General Plan designation and zoning classification do not permit mining activities on the project site. Consequently, potential impacts to these resources are considered to be less than significant.

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?

Less than Significant Impact. Refer to **Impact XII.a)** above. The proposed project would not result in the loss of availability of a locally important mineral resource recovery site and potential impacts regarding mineral resources would be less than significant.

[40] City of Redlands General Plan 2035, p. 6-13.
[41] County of San Bernardino Countywide Plan, 2016, Environmental Analysis, Chapter 5, Mineral Resources.

XIII. Noise

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE: *Would the project result in:*				
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 groundborne vibration or groundborne 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?	☐	☐	☐	☒

The analysis and findings throughout this section are based on the *Noise Impact Analysis, Citrus Valley Residential Project* prepared by Vista Environmental dated July 15, 2020, revised date October 20, 2020. This report, referred to herein as *Noise Study*, is provided as **Appendix G** of this IS/MND.

Fundamentals of Sound and Environmental Noise

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is perceived to be twice as loud and 20 dBA higher is perceived to be four (4) times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites,

machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are several metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period is often evaluated based on the day-night sound level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.

Fundamentals of Environmental Groundborne Vibration

Sources of earth-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as earth-moving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per second is used to evaluate construction-generated vibration for building damage and human complaints.

Discussion

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

Less Than Significant Impact With Mitigation Incorporated.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include site preparation and grading of the project site, building construction of the guard shack with restroom, paving of the trailer stalls and on-site roadway and pedestrian walkway systems, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site are students and staff at Citrus Valley High School, located as near as 50 feet south of the project site. The nearest homes are located 750 feet to the east of the project site, on the east side of Texas Street.

Section 8.06.120(G) of the City's Municipal Code exempts noise sources associated with new construction, remodeling, rehabilitation or grading of any property from the City's noise standards provided construction activities that occur do not take place between the hours of 7:00 a.m. and 6:00 p.m. on weekdays and Saturdays, with no activities occurring at any time on Sundays or federal holidays. However, the City construction noise standards do not provide any limits to the noise levels that may be created from construction activities and even with adherence to the City standards, the resultant construction noise levels may result in a significant substantial temporary noise increase to the nearby residents.

To determine if the proposed construction activities would create a significant substantial temporary noise increase, the Federal Transit Authority (FTA) construction noise criteria thresholds have been utilized, which shows that a significant construction noise impact would occur if construction noise exceeds 80 dBA during the daytime at any of the nearby homes or school. Construction noise impacts to the nearby sensitive receptors were calculated through use of the Federal Highway Administration's Roadway Construction Noise Model and the parameters and assumptions detailed in the *Noise Study*. The results are shown below in **Table 7: Construction Noise Levels at Nearby Sensitive Receptors**.

Table 7 shows that the greatest construction noise impacts would be as high as 79.5 dBA L_{eq} during the site preparation phase at Citrus Valley High School, located south of the project site. All calculated construction noise levels shown in **Table 7** are within the FTA daytime construction noise standard of 80 dBA averaged over 8 hours. Therefore, through adherence to the limitation of allowable construction times provided in Section 8.06.120(G) of the City's Municipal Code, construction-related noise levels would not exceed any standards established in the General Plan or Noise Ordinance, nor would construction activities create a substantial temporary increase in ambient noise levels from construction of the proposed project. Impacts from construction-related noise would be less than significant.

Table 7: Construction Noise Levels at Nearby Sensitive Receptors

Construction Phase	Construction Noise Level (dBA Leq) at:	
	School to the South	Homes to the East
Site Preparation	79.5	60.6
Grading	79.4	63.3
Building Construction	77.9	61.9
Paving	75.9	56.8
Painting	70.8	49.9
FTA Construction Noise Threshold[1]	**80**	**80**
Exceeds Thresholds?	No	No
Source: Vista Environmental 2020.		

Operational Impacts

Potential noise impacts associated with the operation of the proposed project would be from project-generated vehicular traffic on the nearby roadways. In addition, the proposed homes would be impacted by SR-210, where the nearest travel lane is located 220 feet west of the project site, and from activities at the proposed City Park that may create exterior and interior noise levels in excess of City standards at the proposed homes. The noise impacts to the nearby existing homes and school and proposed homes in the project have been analyzed separately below.

Roadway Vehicular Noise Impacts to Nearby Sensitive Receptors

Vehicle noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three (3) primary factors: 1) the volume of traffic; 2) the speed of traffic; and 3) the number of trucks in the flow of traffic. The proposed project does not propose any uses that would require a substantial number of truck trips and the proposed project would not alter the speed limit on any existing roadway; therefore, the proposed project's potential off-site noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the proposed project.

Policy 9.0v of the City's General Plan defines a significant impact as a 4 dB increase where the existing noise level exceeds the clearly compatible noise standard for the affected land use, or as a 6 dB increase where the existing noise level is below the clearly compatible noise standard for the affected land use. The potential off-site traffic noise impacts created by the ongoing operation of the proposed project have been analyzed through utilization of the FHWA model and parameters described in the *Noise Study* and the FHWA model noise calculation spreadsheets provided in the *Noise Study*. The proposed project's off-site traffic noise impacts have been analyzed for the existing year, opening year 2025, and horizon year 2040 conditions that are discussed below.

Existing Year Conditions

The proposed project's potential off-site noise impacts have been calculated through a comparison of the existing year scenario to the existing year with project scenario. The results of this comparison are shown in **Table 8: Existing Year Project Traffic Noise Contributions**. **Table 8** shows that for the existing year conditions, the proposed project's permanent noise increases to the nearby sensitive receptors from the generation of additional vehicular traffic would not exceed the increase thresholds detailed in General Plan Policy 9.0v. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels for the existing year conditions. Impacts would be less than significant.

Table 8: Existing Year Project Traffic Noise Contributions

Roadway	Segment	dBA CNEL at Nearest Receptor[1]			
		Existing	Existing Plus Project	Project Contribution	Increase Threshold
Texas Street	North of Domestic Avenue[3]	56.0	56.4	0.4	+6 dBA
Texas Street	South of Domestic Avenue[3]	56.3	57.4	1.1	+6 dBA
Texas Street	South of Pioneer Avenue[3]	59.3	60.3	1.0	+6 dBA
Texas Street	South of San Bernardino Avenue	61.5	61.8	0.3	+4 dBA
Pioneer Avenue	West of Texas Street[3]	58.8	58.8	0.0	+6 dBA
Pioneer Avenue	East of Texas Street	61.9	62.0	0.1	+4 dBA
San Bernardino Avenue	East of Texas Street	65.4	65.5	0.1	+4 dBA

Notes:

1 = Distance to nearest residential or school use shown in Table H; does not take into account existing noise barriers.

2 = Increase threshold based on General Plan Policy 9.0v, which defines a significant impact as a 4 dB increase where the existing noise level exceeds the clearly compatible noise standard for the affected land use or 6 dB where it is below the clearly compatible noise standard of 60 dBA CNEL for residential and 65 dBA CNEL for school uses.

3 = Since the noise created from these roadways are below the noise created from Interstate 210 at the nearby homes/school of 56.0 dBA CNEL, the roadway segment noise was combined with Interstate 210, in order to provide more accurate noise levels experienced at the nearby sensitive receptors.

Source: Noise Impact Analysis, Table M, p. 27.

Opening Year 2025 Conditions

The proposed project's potential off-site noise impacts have been calculated through a comparison of the opening year 2025 without project scenario to the opening year 2025 with project scenario. The results of this comparison are shown in **Table 9: Opening Year 2025 Project Traffic Noise Contributions**. **Table 9** shows that for the opening year 2025 conditions, the proposed project's permanent noise increases to the nearby sensitive receptors from the generation of additional vehicular traffic would not exceed the increase thresholds detailed in General Plan Policy 9.0v. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels for the opening year 2025 conditions. Impacts would be less than significant.

Table 9: Opening Year 2025 Project Traffic Noise Contributions

Roadway	Segment	dBA CNEL at Nearest Receptor[1]			
		2025 No Project	2025 Plus Project	Project Contribution	Increase Threshold
Texas Street	North of Domestic Avenue[3]	56.8	57.1	0.3	+6 dBA
Texas Street	South of Domestic Avenue[3]	57.1	58.1	1.0	+6 dBA
Texas Street	South of Pioneer Avenue[3]	57.8	59.2	1.4	+6 dBA
Texas Street	South of San Bernardino Avenue	62.5	62.8	0.3	+4 dBA
Pioneer Avenue	West of Texas Street[3]	59.0	59.0	0.0	+6 dBA
Pioneer Avenue	East of Texas Street	62.5	62.6	0.1	+4 dBA
San Bernardino Avenue	East of Texas Street	66.0	66.1	0.1	+4 dBA

Notes:

1 = Distance to nearest residential or school use shown in Table H; does not take into account existing noise barriers.

2 = Increase threshold based on General Plan Policy 9.0v, which defines a significant impact as a 4 dB increase where the existing noise level exceeds the clearly compatible noise standard for the affected land use or 6 dB where it is below the clearly compatible noise standard of 60 dBA CNEL for residential and 65 dBA CNEL for school uses.

3 = Since the noise created from these roadways are below the noise created from Interstate 210 at the nearby homes/school of 56.0 dBA CNEL, the roadway segment noise was combined with Interstate 210, in order to provide more accurate noise levels experienced at the nearby sensitive receptors.

Source: Noise Impact Analysis, Table N, p. 28.

Horizon Year 2035 Conditions

The proposed project's potential off-site noise impacts have been calculated through a comparison of the horizon year 2035 without project scenario to the horizon year 2035 with project scenario. The results of this comparison are shown in **Table 10: Horizon Year 2035 Project Traffic Noise Contributions. Table 10** shows that for the horizon year 2035 conditions, the proposed project's permanent noise increases to the nearby sensitive receptors from the generation of additional vehicular traffic would not exceed the increase thresholds detailed in General Plan Policy 9.0v. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels for the horizon year 2035 conditions. Impacts would be less than significant.

Table 10: Horizon Year 2035 Project Traffic Noise Contributions

Roadway	Segment	dBA CNEL at Nearest Receptor[1]			
		2035 No Project	2035 Plus Project	Project Contribution	Increase Threshold
Texas Street	North of Domestic Avenue[3]	57.6	57.8	0.2	+6 dBA
Texas Street	South of Domestic Avenue[3]	57.8	58.7	0.9	+6 dBA
Texas Street	South of Pioneer Avenue[3]	58.2	59.5	1.3	+6 dBA
Texas Street	South of San Bernardino Avenue	62.8	63.1	0.3	+4 dBA
Pioneer Avenue	West of Texas Street[3]	56.3	56.4	0.1	+6 dBA
Pioneer Avenue	East of Texas Street	62.9	63.0	0.1	+4 dBA
San Bernardino Avenue	East of Texas Street	66.6	66.6	0.1	+4 dBA

Notes:

1 = Distance to nearest residential or school use shown in Table H; does not take into account existing noise barriers.

2 = Increase threshold based on General Plan Policy 9.0v, which defines a significant impact as a 4 dB increase where the existing noise level exceeds the clearly compatible noise standard for the affected land use or 6 dB where it is below the clearly compatible noise standard of 60 dBA CNEL for residential and 65 dBA CNEL for school uses.

3 = Since the noise created from these roadways are below the noise created from Interstate 210 at the nearby homes/school of 56.0 dBA CNEL, the roadway segment noise was combined with Interstate 210, in order to provide more accurate noise levels experienced at the nearby sensitive receptors.

Source: Noise Impact Analysis, Table O, p. 28.

Proposed Park Noise Impacts

The proposed project includes development of a public park that would contain baseball and soccer fields that may create noise levels that exceed City noise standards to the proposed homes, but not to existing homes to the east due to distancing (0.43 mile). General Plan Policy 9.0u requires all new residential projects that are constructed near public parks to be consistent with the limits contained in the Noise Ordinance, including Section 8.06.070, which limits the exterior noise at the proposed single-family homes to 50 dBA between 10:00 p.m. and 7:00 a.m. and 60 dBA between 7:00 a.m. and 10:00 p.m. In addition, Section 8.06.080 of the Municipal Code limits interior noise created from the public park at the proposed single-family homes to 45 dBA anytime of the day. Since a typical new home is constructed to meet the required CCR Title 24, Part 6 building energy-efficiency standards, which requires the installation of dual-paned windows and enhanced insulation requirements that provides a minimum 25 dB of exterior to interior noise reduction, this analysis uses only the exterior noise standards, since it is not possible to exceed the interior noise standards without also exceeding the exterior noise standards.

Table 11: Operational Noise Levels at the Nearest Homes to the Proposed Public Park summarizes the baseball and soccer field reference noise levels and shows the anticipated noise level from each source at the nearest homes in the project to each field. . The analysis of operational noise levels was not extended beyond to include existing homes to the east due to distancing (0.43). **Table 11** shows that soccer field

activities would exceed the City's residential nighttime noise standard of 50 dB at the nearest homes. This would be considered a significant impact. Therefore, Mitigation Measure NOI-1 would be implemented, which restricts use of the soccer fields between the hours of 10 p.m. and 7 a.m. Through implementation of Mitigation Measure NOI-1, noise created from the proposed public park would result in a less than significant impact.

Table 11: Operational Noise Levels at the Nearest Homes to the Proposed City Park

Noise Source	Reference Noise Measurement		Calculated Noise Levels		City Noise Standards (Day/Night)	Exceeds Standard? (Day/Night)
	Distance Receptor to Source (feet)	Reference Noise Level (dBA Leq)	Distance to Homes (feet)	Noise Level[1] (dBA Leq)		
Baseball Field (Bleachers)	25	60.9	150	40.4	60/50	No/No
Soccer Field (Field Center)	115	59.9	70	53.8	60/50	No/Yes

Notes:

1 = The calculated noise levels account for the noise reduction provided by the proposed 6.0-foot high wall between the proposed homes and City Park as detailed on the Proposed Fence and Wall Plan (see Figure 3 of the Noise Impact Analysis).

Source: Noise Impact Analysis, Table P, p. 29.

Roadway Vehicular Noise Impacts to Proposed Homes

General Plan Policy 9.0e requires that the noise levels at the proposed homes be limited to 60 dBA CNEL at the exterior of the homes and 45 dBA CNEL at the interior of the homes. It is anticipated that the primary source of noise impacts to the project site would be traffic noise from SR-210, where the nearest travel lane is located as near as 220 feet west of the project site. The proposed homes would also experience some background traffic noise impacts from the proposed project's internal roadways and neighboring residential roadways. As the traffic on these local streets would consist of low traffic volumes at slower speeds and the traffic noise from these roads would not make a significant contribution to the noise environment, the noise levels from these local roads were not analyzed. The FHWA traffic noise prediction model parameters used in this analysis, as well as the FHWA model printouts used, are provided in the *Noise Study*. The exterior and interior noise impacts to the proposed homes have been analyzed separately below.

Exterior Noise Impacts to Proposed Homes

The anticipated exterior noise levels have been calculated for the backyards of the nearest proposed homes to SR-210 with construction of the proposed 6-foot sound wall as shown below in **Table 12: Proposed Homes Exterior Noise Levels from SR-210 Prior to Mitigation. Table 12** shows that with implementation of a proposed 6-foot sound wall, exterior noise resulting from the project would exceed the City's residential exterior noise standard of 60 dBA CNEL at Lots 298 and 301, which are located on the northwest portion of the project site. This is considered a significant impact. Therefore, Mitigation Measure NOI-2 would be implemented, which requires a minimum 6.5-foot high wall on the west side of Lots 300, 301, and 302 and a minimum 7.5-foot high wall on the west side of Lots 297, 298, and 299. As shown in **Table 13: Proposed Homes Mitigated Exterior Noise Levels from SR-210**, with implementation of Mitigation Measure NOI-2, the exterior noise levels would be within the City's residential exterior noise

standard and would result in a less than significant impact. The sound walls would be limited in their horizontal extent (two separate walls) and not readily visible to motorists on I-210 because of their location within the project site (i.e., not adjacent to the roadway).

Table 12: Proposed Homes Exterior Noise Levels from SR-210 Prior to Mitigation

Lot Number	Calculated Exterior Noise Level (dBA CNEL)	Sound Wall Height[1] (feet)	City Residential Exterior Noise Standard[2] (dBA CNEL)	Exceeds Standard?
236	59.0	6.0	60	No
248	58.9	6.0	60	No
260	58.9	6.0	60	No
272	58.8	6.0	60	No
298	63.0	6.0	60	Yes
301	60.9	6.0	60	Yes

Notes:
1 = Sound wall height based on the 6-foot high wall depicted in the Fence and Wall Plan (see Figure 3 in the Noise Study).
2 = City's residential exterior noise standard from General Plan Policy 9.0e.
Source: Noise Impact Analysis, Table Q, p. 30.

Table 13: Proposed Homes Mitigated Exterior Noise Levels from SR-210

Lot Number	Calculated Exterior Noise Level (dBA CNEL)	Sound Wall Height[1] (feet)	City Residential Exterior Noise Standard[2] (dBA CNEL)	Exceeds Standard?
236	59.0	6.0	60	No
248	58.9	6.0	60	No
260	58.9	6.0	60	No
272	58.8	6.0	60	No
298	59.2	7.5	60	No
301	59.5	6.5	60	No

Notes:
1 = Sound wall height based on the 6-foot high wall depicted in the Fence and Wall Plan (see Figure 3 in the Noise Study).
2 = City's residential exterior noise standard from General Plan Policy 9.0e.
Source: Noise Impact Analysis, Table R, p. 31.

Interior Noise Impacts to Proposed Homes

To assess the interior noise levels, the same proposed homes analyzed for the exterior private backyard analysis were also analyzed for their interior noise levels. The results are shown **Table 14: Proposed**

Homes Interior Noise Levels from SR-210. **Table 14** also shows the interior noise levels calculated based on 25 dB of attenuation, which is the minimum exterior to interior noise reduction rate for new homes that are constructed to meet the required CCR Title 24, Part 6 building energy-efficiency standards, which require the installation of dual-paned windows as well as enhanced insulation requirements. **Table 14** shows that the interior noise levels for both the first and second floors of the proposed homes would be within the City's residential interior noise standards of 45 dBA CNEL. Therefore, the proposed project would comply with the City's residential interior noise standards. Impacts would be less than significant.

Table 14: Proposed Homes Interior Noise Levels from SR-210

Lot Number	Floor	Exterior Noise Level at Building Façade (dBA CNEL)	Interior Noise Level[1] (dBA CNEL)	City Residential Interior Noise Standard[2] (dBA CNEL)	Exceeds Standard?
236	1	60.6	35.6	45	No
	2	65.8	40.8	45	No
248	1	60.4	35.4	45	No
	2	65.7	40.7	45	No
260	1	60.4	35.4	45	No
	2	65.7	40.7	45	No
272	1	60.4	35.4	45	No
	2	65.7	40.7	45	No
298	1	62.2	37.2	45	No
	2	69.8	44.8	45	No
301	1	61.7	36.7	45	No
	2	67.8	42.8	45	No

Notes:

1 = Based on standard dual pane windows and doors with a 26 STC rating, which are required per Title 24 energy saving requirements.

2 = City's residential interior noise standard from General Plan Policy 9.0e.

Source: Noise Impact Analysis, Table S, p. 31.

Mitigation Measures

NOI-1 No soccer practice or games shall be permitted on the soccer fields between the hours of 10 p.m. and 7 a.m. daily. This shall be enforced through programmed field light controls and signage placed around the soccer fields.

NOI-2 The project applicant shall construct a minimum 6.5-foot high wall on the west side of Lots 300, 301, and 302 and a minimum 7.5-foot high wall on the west side of Lots 297, 298, and 299. The walls shall be constructed of concrete masonry units (CMUs) and shall

be free of any decorative cutouts or openings. This measure shall be implemented and verified by the City's Building Department, prior to the issuance of the Certificate of Occupancy for Lots 297, 298, 299, 300, 301, and 302.

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

Less Than Significant Impact.

Construction Impacts

The construction activities for the proposed project are anticipated to include site preparation and grading, building construction of the 317 single-family homes and public park, paving of the on-site roads and parking areas, and application of architectural coatings. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment. The nearest off-site structure where people may sit, which makes them much more susceptible to vibration, would be school buildings at Citrus Valley High School that are located as near as 530 feet south of the project site.

Section 9.06.090(G) limits vibration activities to vibration levels that are not discernible at or beyond the boundary line of private property or at 150 feet from the vibration source if on a public space or public right of way. Based on these standards, there is a potential that groundborne vibration may expose persons to excessive vibration levels. In order to provide a conservative analysis, the construction activities have been analyzed based on the standard of being discernible at the nearest sensitive receptors, which are the school buildings at Citrus Valley High School located as near as 530 feet south of the project site.

The primary source of vibration during construction would be from the operation of a vibratory roller. A vibratory roller would create a vibration level of 0.21 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest sensitive receptors (530 feet away from the proposed project) would be 0.007 inch per second PPV, which would be below both Caltrans distinctly perceptible vibration level of 0.04 inch per second PPV threshold and structural damage threshold that ranges between 0.08 and 0.5 inch per second PPV. Construction activities associated with the proposed project would be below the distinctly perceptible levels of vibration at the nearby sensitive receptors. Impacts would be less than significant.

Operational Impacts

The proposed project would consist of the development of 317 single-family homes and a public park. The ongoing operation of the proposed project would not include the operation of any known vibration sources other than typical on-site vehicle operations for a residential development. Therefore, a less than significant vibration impact is anticipated from operation of the proposed project.

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 proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is San Bernardino International Airport located approximately 2.1 miles to the northwest of the project site. The *Airport Layout Plan Narrative Report for San Bernardino International Airport,* prepared by Coffman Associates (November 2010) provides the airport noise contours for both the existing (2010) conditions and the ultimate noise contours. According to Figure 5 of the *Airport Layout Plan Narrative Report for San Bernardino International Airport,* even at ultimate buildout of the airport, the 65 dBA noise contours would barely extend a half-mile from the runway, which is aligned away from the project site. As such, the project site is located well outside of the 65 dBA CNEL noise contours of San Bernardino International Airport. No impacts would occur from aircraft noise.

XIV. Population and Housing

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING: *Would the project:*				
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?	☐	☐	☐	☒

Discussion

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. The project would require a temporary construction workforce which could induce population growth in the project area. The temporary workforce would be needed to construct the residential units and associated improvements to allow for water, sewer, and stormwater as well as public sidewalks, curb and gutter, and landscaping. Current data provided by the California Employment Development Department (EDD) found that the unemployment rate for the City of Redlands is at 2.7 percent, or 1,000 people.[42] As such, the project's temporary employment requirements could be met by the City of Redlands' existing labor force without people needing to relocate into the project region.

[42] California Employment Development Department website. Accessed September 8, 2020. https://www.labormarketinfo.edd.ca.gov/

Because of the nature of the project, workers who are already present in the local labor force typically fill the kinds of labor skills required for the project.

Based on City's 2035 General Plan EIR, the average household size in the City is 2.65 persons per household.[43] As such, the project would create housing for approximately 840 residents (317 units X 2.65 persons = 840). The 2018 Annual Element Progress Report of the Housing Element of the 2035 General Plan identifies a need for an additional 1,877 housing units in the City.[44] This project proposes to construct 317 housing units on the site. The project as proposed is consistent with the anticipated population growth of the General Plan and is consistent with the Housing Element of the General Plan. The project is in an urbanized area and would not require extension of roadway or utility infrastructure that would have the potential to induce growth. Therefore, impacts associated with growth inducement would be less than significant.

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

No Impact. The project site is currently vacant and would not result in the displacement of any housing. As such, the project would not displace a substantial number of people, nor would it necessitate the construction of housing elsewhere. No impact would occur as a result of the project.

XV. Public Services

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

[43] City of Redlands 2035 General Plan Draft Environmental Impact Report, p. 2-21.
[44] City of Redlands 2020 Annual Element Progress Report of the Housing Element. Accessed March 25, 2021.

Discussion

a)i) 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 fire protection?

Less than Significant Impact. The project would be served by the Redlands Fire Department. There are four (4) fire stations in the City. Redlands Fire Station No. 263 is the closest fire station to the project site, located approximately 1 mile southeast of the site at 10 W. Pennsylvania Avenue. The Redlands Fire Department has a response goal of 7:00 minutes or less, 90 percent of the time, from the first call to arrival of the first responder. At this time, the City has a response from first call to arrival of 10:01 minutes, 90 percent of the time. However, due to the project's location, the response time to the project site from Station No. 263 would be 5:00 minutes.[45] This is within the 7:00 minute response goal of the City.

Development of the project would result in an increased demand for fire protection services. Assuming there would be on average 2.65 persons per single-family household (per the 2035 General Plan EIR), there could be approximately 840 persons residing in the development. The incremental increased demand for fire protection services would be offset by the developer's payment of the applicable development impact fee(s) prior to issuance of building permits. Payment of all applicable development impact fees (DIF) is a typical and standard requirement for new developments to pay for their fair share of public facilities and services. Resolution No. 7951 specifies costs for various governmental facilities including fire protection facilities fee. No additional mitigation measures are needed for the proposed project.

The project would also be required by the City through conditions of approval to provide a minimum of fire safety and support fire suppression activities, including compliance with state and local fire codes, fire sprinklers, a fire hydrant system paved access, and secondary access routes. Therefore, the project would not result in substantial adverse physical impacts associated with fire protection services, and a less than significant impact would occur.

a)ii) 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 police protection?

Less than Significant Impact. The project would be served by the Redlands Police Department. There are four (4) police stations in the City. The closest police station to the project site is located approximately 1.75 miles south of the site at 1270 W. Park Avenue. The Redlands Police Department has an average response time of 6.5 minutes and a service ratio of 1.1 officers per 1,000 residents.[46]

45 Citygate Associates, LLC. 2020. Fire Department Assessment and Deployment Study City of Redlands.
46 City of Redlands General Plan 2035, p. 4-44.

Development of the project would result in an increased demand for police protection services. Assuming there would be on average 2.65 persons per single-family household (per the 2035 General Plan EIR), there could be approximately 840 persons residing in the development. The incremental increased demand for police services would be offset by the developer's payment of the applicable development impact fee(s) prior to issuance of building permits. To offset the increased demand, the project would be subject to payment of development impact fees, as set forth in the General Plan's "Principles of Managed Development,"[47] and in the City's resolution establishing development impact fees, Resolution No. 7951, adopted April 2, 2019.[48] Resolution No. 7951 specifies costs for various governmental facilities, including an open space and parks fee, library fee, storm drain facilities fee, public facilities fee, fire protection facilities fee, police facilities fee, transportation system improvement fee, sewer capital improvement fee, water capital improvement fee, solid waste capital improvement fee, and acquisition of water stocks and water rights fee. Payment of the development impact fees per Resolution No. 7951 would ensure that the project provides its fair share of funds for the construction of any new police facilities/equipment, and a less than significant impact would occur. No additional mitigation measures are needed for the proposed project.

a)iii) 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 schools?

Less than Significant Impact. The project would be served by public schools within the Redlands Unified School District (RUSD). There are currently seventeen (17) elementary schools, five (5) middle schools, and six (6) high schools within the RUSD. Citrus Valley High School is the closest school to the project site, located immediately south of the site.

The project would increase the population in the local area and would consequently place greater demand on the existing public school system by generating additional students to be served by the RUSD. The project would be required to pay applicable school impact fees to RUSD in accordance with Senate Bill (SB) 50, the Leroy F. Greene School Facilities Act of 1998. Therefore, impacts would be less than significant.

a)iv) 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 parks?

Less than Significant Impact. There are currently eighteen (18) established parks, which comprise over 253 acres of land, in the City. Texonia Park, at 1413 Texas Street, is located 0.8 miles south of the project

47 City of Redlands General Plan 2035, p. 4-4.

48 City of Redlands Resolution No. 7951, https://cityofredlands.org/sites/main/files/file-attachments/7951.pdf accessed August 31, 2020

site, and may serve the residents of the project, once the project is completed.[49] Additionally, the project proposes to construct open spaces areas within the project site: an 11.71-acre public park and a landscaped private paseo with associated common areas. Together, this would total 15.49 acres of open space. The environmental impacts of constructing parks within the site, which would contribute to the City's park system, have been evaluated in this document, and mitigation measures identified, where necessary, to reduce impacts to less than significant.

Similar to **Impact XV.a)ii)** above, the project is subject to the provisions of Resolution No. 7951 that specifies costs for various governmental facilities. Therefore, payment of applicable development impact fees would be paid prior to building permit issuance for future development of park facilities and would assist in reducing the potential impacts associated with substantial adverse physical impacts associated with the provision of new parks to a less than significant level.

a)v) 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 other public facilities?

Less than Significant Impact. As discussed above, the project is not anticipated to result in substantial physical impacts associated with the provision of other governmental facilities. The project would be subject to the provisions of Resolution No. 7951 that specifies costs for government facilities through the payment of development impact fees in accordance with Resolution No. 7951. These fees would be set aside for future development of governmental facilities. In addition, the project would not generate a substantial new local population, either directly or indirectly, with the addition of approximately 840 residents. Therefore, a less than significant impact to other public facilities is anticipated with the project.

49 City of Redlands. 2020. Texonia Park. Accessed September 9, 2020. https://www.cityofredlands.org/post/texonia-park.

XVI. Recreation

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
RECREATION:				
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?	☐	☐	☒	☐

Discussion

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

Less than Significant Impact. Because the project would construct new homes and it is anticipated that residents would utilize nearby parks and recreational facilities, project development would likely increase the use of existing parks and recreational facilities. Texonia Park is the nearest park to the project site (0.8 miles south) and is a 10.7-acre neighborhood park with a lighted mini-soccer fields, basketball courts, and picnic and playground facilities.[50] The project itself also includes an 11.74-acre public park located on the westerly portion of the project site adjacent to SR-210, and a 3.75-acre landscaped paseo within the interior of the project site. In total, the project proposes approximately 15.49 acres of parkland.

The payment of development impact fees would also ensure that the project provides its fair share of funds for parks, per Resolution No. 7951 regarding funding for public facilities improvements, to offset the incremental increase in existing recreational facility use that would be created by the project. While Resolution No. 8109 permits applicants to request a credit for park fees when a proposed dedication of park land is incorporated into the project, the Resolution limits the credit from exceeding the required park fees that would otherwise be paid and establishes that the credit amount is negotiable. This ensures that any credit in lieu of park fees will only account for the parkland to be dedicated by the project and any remaining value will be paid be the project applicant. Therefore, project implementation would not result in substantial physical deterioration of recreational facilities and a less than significant impact would occur.

50 City of Redlands. 2020. Texonia Park. Accessed September 9, 2020. https://www.cityofredlands.org/post/texonia-park.

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. To offset the increased use of existing recreational facilities, the project proposes to create an 11.74-acre public park located on the westerly portion of the project site adjacent to SR-210. Additionally, the project proposes to construct a 3.75-acre landscaped paseo within the interior of the project site. In total, the project proposes approximately 15.49 acres of parkland. The construction of the project's proposed recreational facilities would occur in compliance with City standards for parks and recreational facilities, specifically, Redlands Municipal Code Title 12, "Streets, Sidewalks and Public Places." The project would also be subject to the provisions of Resolution No. 7951 for payment of development impact fees for future development of park facilities.

Therefore, it is not anticipated that construction of the project's proposed recreational facilities would have a significant adverse physical effect on the environment. A less than significant impact would occur.

XVII. Transportation

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION: *Would the project:*				
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?	☐	☒	☐	☐

The analysis and findings throughout this section are based on two (2) transportation reports prepared for the project. A *Citrus Valley Traffic Analysis* (Traffic Analysis) was prepared by Urban Crossroads dated June 30, 2020, revised date October 16, 2020; refer to **Appendix H1** of this IS/MND. An additional transportation report, *Citrus Valley Vehicle Miles Traveled [VMT] Analysis* (VMT Analysis) was prepared by Urban Crossroads dated June 30, 2020, revised date November 16, 2020, in order to address CEQA requirements relative to VMT impacts; refer to **Appendix H2** of this IS/MND.

Discussion

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

Less Than Significant Impact.

Existing Conditions

This section provides a summary of the existing circulation network and the General Plan Circulation Network. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the City in the vicinity of the proposed project, as identified on the City's General Plan Circulation Element or in the East Valley Corridor Specific Plan, are described below.

Roadways

Texas Street is a two (2) -lane undivided roadway in the study area. Texas Street is designated as a collector north of Pioneer Avenue and as a minor arterial south of Pioneer Avenue on the General Plan. The roadway cross-section for a secondary highway consists of two (2) travel lanes in each direction and 8-foot shoulders.

Pioneer Avenue is a two (2)-lane undivided roadway west of Texas Street and a two (2)-lane undivided roadway east of Texas Street, with curb and gutter improvements in place along the north side of the road between Tennessee Street and Texas Street. Consistent with the East Valley Corridor Specific Plan, Pioneer Avenue is designated as a collector (66-foot right-of-way) between Alabama Street and Texas Street. Pioneer Avenue is designated as a collector on the General Plan.

Tennessee Street is a two (2)-lane undivided roadway north of Lugonia Avenue and widens to a four (4)-lane undivided roadway south of Lugonia Avenue. There are no curb and gutter improvements north of Lugonia Avenue and only on the west side of the street between Lugonia Avenue and Colton Avenue. South of Colton Avenue, both sides of the street have curb and gutter improvements. Tennessee Street is designated as a minor arterial (88-foot right-of-way) on the General Plan, with two (2) travel lanes in each direction and 8-foot shoulders.

San Bernardino Avenue, west of Orange Street, is designated as a major arterial (six [6] lanes; 120-foot right-of-way) in the East Valley Corridor Specific Plan. The roadway cross-section for a major arterial consists of three (3) travel lanes in each direction. San Bernardino Avenue is designated as a major arterial (132-foot right-of-way) between Texas Street and Orange Street with three (3) travel lanes in each direction, and as a minor arterial (88-foot right-of-way) east of Orange Street with two (2) lanes in each direction on the General Plan.

Lugonia Avenue, west of Karon Street, is designated as a major highway (four [4] lanes; 104-foot right-of-way) in the East Valley Corridor Specific Plan. The roadway cross-section for a major highway consists of two (2) travel lanes in each direction with a continuous two (2)-way left-turn lane.

Bicycle/Pedestrian Facilities and Public Transit Facilities

There are no existing sidewalks along Domestic Avenue and Texas Street within the project area. There currently are no existing bicycle paths or trails. Since many of the roadways are not fully constructed as designated in the General Plan Circulation Element, limited pedestrian facilities exist in the vicinity of the project.

The study area is currently served by Omnitrans, a public transit agency serving the City and County, with bus service in the study area along San Bernardino Avenue and Lugonia Avenue via Route 15.

Projected Future Traffic

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. The trip generation rates used for this analysis are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their *Trip Generation Manual, 10th Edition* (2017). For purposes of this analysis, the following ITE land use codes have been utilized: 1) ITE land use code 210 (Single Family Residential Detached); and 2) ITE land use code 488 (Soccer Complex).

Baseball field land use is not readily available in the ITE *Trip General Manual*. As such, the *San Diego Municipal Code Land Development Code Trip Generation Manual* (2003) has been utilized to determine the trip generation rates for the following land use: Park (Baseball Field)

Based upon the above, the proposed project is anticipated to generate a total of 3,254 vehicle trip-ends per day with 239 a.m. peak hour trips and 368 p.m. peak hour trips.

Fair Share Payments

The development of the proposed project is not anticipated to require the construction of any off-site improvements; however, there are improvement needs identified at off-site intersections for future traffic analysis scenarios where the project would contribute traffic. Therefore, the project applicant's responsibility for the project's contributions towards off-site intersection deficiencies is fulfilled through payment of fair share or participation in the preexisting fee programs that would be assigned to construction of recommended improvements identified in the *Traffic Analysis*, as provided for in City Requirement TR-1 below. The project applicant would be required to pay requisite fair share contributions and fee payments consistent with the City's requirements. Specifically, the project applicant is required to pay the project's fair share amount of $555,215 for the improvements identified in Table 1-2 of the *Traffic Analysis* at intersections located in the City, in accordance with the most recent construction cost index dated July 1, 2021. The fair share payment would be required to be submitted prior to the issuance of building permits. Detailed fair share calculations for each peak hour have been provided in **Table 15: Project Fair Share Calculations for Intersections** for the applicable deficient study area intersections.

Recommended Project Roadway Site Access Improvements

Exhibit 5: Site Adjacent Roadway and Site Access Recommendations shows the recommended roadway improvements needed to accommodate site access, as provided in the *Traffic Analysis.* A description of each improvement is provided in Mitigation Measure TR-1 below.

Traffic Signal Warrant

A multi-way stop control warrant has been evaluated based on the future project volumes at the intersection of Street L/Domestic Avenue (intersection leading up to the soccer and baseball fields) and Texas Street/Domestic Avenue. Based on the future project volumes, the intersection of Street L/Domestic Avenue is not anticipated to meet a multi-way stop control warrant. However, according to the California Manual on Uniform Traffic Control Devices (CA MUTCD), the application of a multi-way stop control may also include the need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes. Since the intersection is proposed to provide pedestrian access from the adjacent Citrus Valley High School to the proposed ball fields, an all-way stop control shall be implemented at this location. Vehicles would be forced to stop at the intersection, which would provide better visibility in the event pedestrians use the crosswalk. In addition, the CA MUTCD indicates that an all-way stop control may be applicable at an intersection of two (2) residential neighborhood collector streets of similar design and operating characteristics if it would improve traffic operational characteristics of the intersection. The intersection of Texas Street and Domestic Avenue is anticipated to meet a multi-way stop warrant with

future project traffic volumes. Implementation of this multi-way stop control is included as part of the recommended improvements provided in City Requirement TR-2 below.

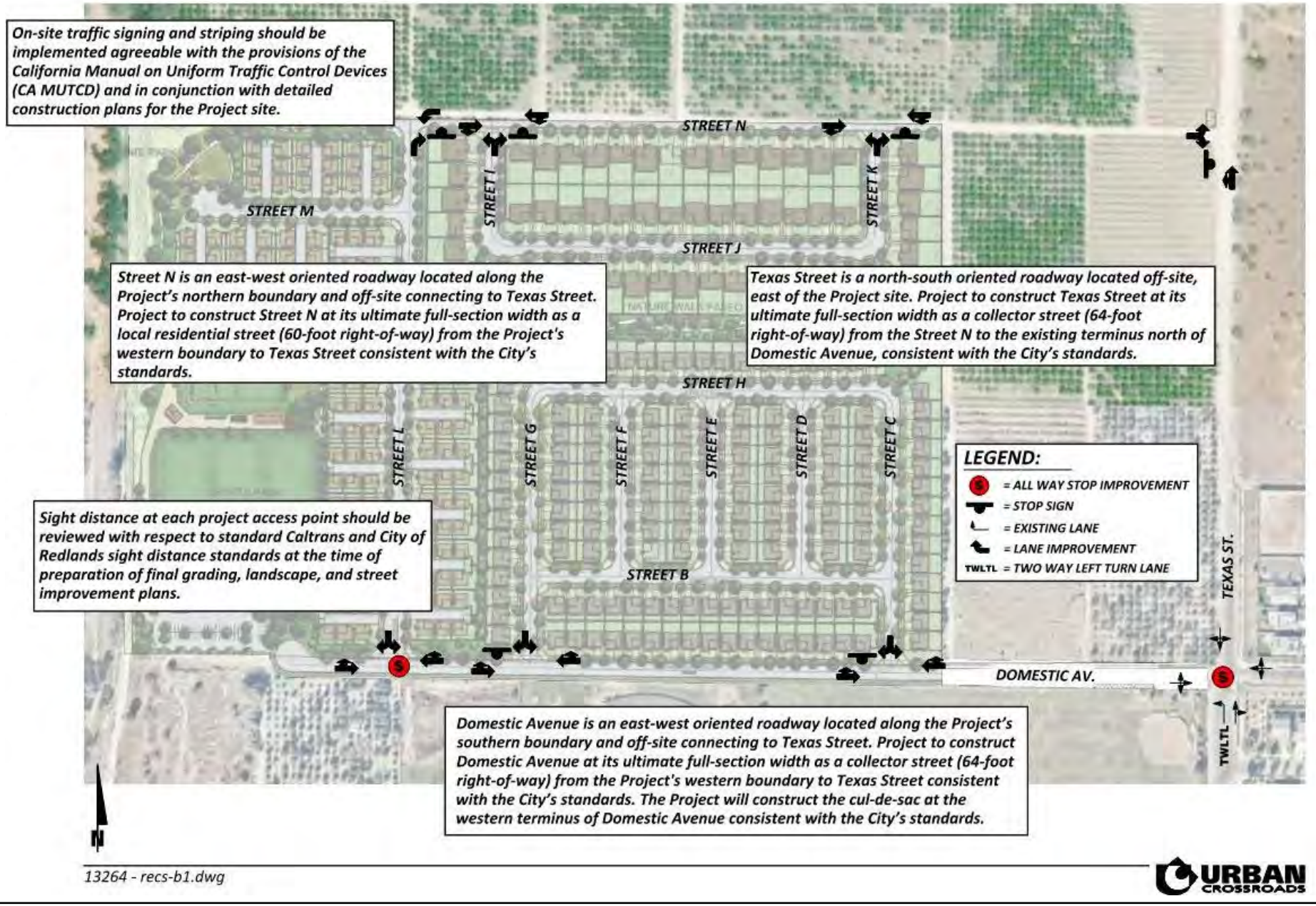
Table 15: Project Fair Share Calculations for Intersections

ID	Intersection	Hour	Existing	Project	2040 With Project Volume	Total New Traffic	Project % of New Traffic
2	I-210 NB Ramps/ Tennessee Street and San Bernardino Avenue	AM	2,130	156	3,776	1,646	9.5%
		MD	2,913	239	5,584	2,671	8.9%
		PM	3,228	239	5,642	2,414	**9.9%**
3	Tennessee Street/ San Bernardino Avenue	AM	1,517	156	2,995	1,478	10.6%
		MD	1,700	240	4,168	2,468	9.7%
		PM	1,801	240	3,964	2,163	**11.1%**
5	Texas Street/Pioneer Avenue	AM	1,099	240	1,938	839	28.6%
		MD	1,064	369	2,623	1,559	23.7%
		PM	1,138	369	2,253	1,115	**33.1%**
6	Texas Street/San Bernardino Avenue	AM	1,625	203	3,134	1,509	13.5%
		MD	1,792	313	4,384	2,592	12.1%
		PM	1,975	313	3,979	2,004	**15.6%**

Notes:

BOLD = Denotes highest fair share percentage

Source: Urban Crossroads, Citrus Valley Traffic Analysis, November 10, 2020. Table 8-1, p. 101.



BERGAMOT SPECIFIC PLAN
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Michael Baker INTERNATIONAL

NOT TO SCALE

Source: Urban Crossroads

Site Adjacent Roadway and Site Access Recommendations

Exhibit 5

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Based on traffic forecasts conducted in the *Traffic Analysis*, the project's contribution to fair share payments for future roadway improvements at the intersections identified in **Table 15** would be required to reduce impacts relative to the performance of the circulation system, as discussed in City Requirement CTR-1 below. In addition, project-specific roadway improvements would be implemented, as provided for in City Requirement CTR-2 below as part of the project's conditions of approval. These City Requirements cause the project to conform with City program plans, ordinances and policies addressing the circulation system, resulting in a less than significant impact.

City Requirements/Conditions of Approval

CTR-1 Prior to the issuance of building permits, the project applicant shall pay the project's fair share amount of $555,215 for the improvements identified in Table 1-2 of the *Traffic Analysis* at intersections located in the City of Redlands, or as agreed to by the City and project applicant, in conjunction with all other applicable transportation fees (including but not limited to the City's development impact fees).

CTR-2 Recommended roadway improvements shall be constructed by the project applicant as design features in conjunction with development of the project site as follows:

Street L/Street N:

- Install a stop control on the northbound approach and a right-turn lane.
- Construct a westbound left-turn lane.

Street I/Street N:

- Install a stop control on the northbound approach and a shared left-right turn lane.
- Construct an eastbound shared through-right turn lane.
- Construct a westbound shared left-through lane.

Street K/Street N:

- Install a stop control on the northbound approach and a shared left-right turn lane.
- Construct an eastbound shared through-right turn lane.
- Construct a westbound shared left-through lane.

Street L/Domestic Avenue:

- Install a stop control on all approaches (all-way stop control).
- Construct a southbound shared left-right turn lane.
- Construct an eastbound shared left-through lane.
- Construct a westbound shared through-right turn lane.

Street G/Domestic Avenue:

- Install a stop control on the southbound approach and a shared left-right turn lane.
- Construct an eastbound shared left-through lane.
- Construct a westbound shared through-right turn lane.

Street C/Domestic Avenue:

- Install a stop control on the southbound approach and a shared left-right turn lane.
- Construct an eastbound shared left-through lane.
- Construct a westbound shared through-right turn lane.

Texas Street/Street N:

- Install a stop control on the eastbound approach and a shared left-right turn lane.
- Construct a northbound left turn lane.

Texas Street/Domestic Avenue (#4):

- Install a stop control on the northbound and southbound approaches, converting the intersection to an all-way stop control. Given the proximity to the adjacent Citrus Valley High School and the adjacent residential developments (including the proposed project), an all-way stop control will provide better visibility for pedestrian crossings as vehicles would be required to stop before the crosswalk.

Domestic Avenue:

- Construct Domestic Avenue at its ultimate half-section on the north side of the roadway as a collector (64-foot right-of-way) and on the south side as a local street (60-foot right-of-way with 20-feet of pavement) from the project's western boundary to Texas Street, consistent with the City's standards. Construct the cul-de-sac at the western terminus of Domestic Avenue consistent with the City's standards.

Street N:

- Construct Street N at its ultimate half-section width as a collector (64-foot right-of-way) plus one 12-foot lane on the north side from the Project's western boundary to Texas Street, consistent with the City's standards.

Texas Street:

- Construct Texas Street as a collector (66-foot right-of-way) from Street N to the existing terminus north of Domestic Avenue, consistent with the City's standards. The Project is to accommodate 20-32 feet of pavement on the east side (varies) and a minimum of 14 feet of pavement on the west side.

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

Less Than Significant Impact.

<u>San Bernardino County Transportation Authority VMT Screening Tool Results</u>

Changes to the CEQA Guidelines (Section 15064.3) became effective July 1, 2020, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new

measure for identifying transportation impacts for land use projects. The City utilizes the San Bernardino County Transportation Authority VMT Screening Tool (Screening Tool). The Screening Tool allows users to input an assessor's parcel number (APN) to determine if a project's location meets one (1) or more of the screening thresholds for land use projects identified in the Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory).

Each of the applicable screening thresholds were evaluated to determine if the proposed project would be expected to cause a less than significant impact to VMT without requiring a more detailed VMT analysis. If the screening thresholds are not met, then project-generated VMT are calculated and compared to the applicable VMT threshold as identified in the *City of Redlands CEQA Assessment VMT Analysis Guidelines* (City Guidelines). The City Guidelines provides details on appropriate "screening thresholds" that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed analysis. Screening thresholds are broken into the following types described below. A land use project need only meet one (1) of these screening thresholds to result in a less than significant impact. Upon completion of the screening, it was determined that the project is not eligible to screen out based on any of these thresholds.

- Project Type Screening
    - The City Guidelines identifies projects that are consistent with the current Sustainable Communities Strategy (SCS) or General Plan, and that generate less than 3,000 metric tons of CO2e per year, as presumed to have a less than significant impact on VMT. Based on the City Guidelines, single-family residential projects of 167 dwelling units or fewer would meet this threshold. As the proposed project exceeds this dwelling unit cap, the project is not eligible to screen out based on project type screening.
- Map Based Screening based on Low VMT Area
    - As noted in the City Guidelines, residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) tend to exhibit similarly low VMT. The Screening Tool uses the subregional San Bernardino Transportation Analysis Model (SBTAM) to measure VMT performance within individual traffic analysis zones (TAZ) within the region. The project's physical location based on parcel number was input into the Screening Tool to determine the TAZ's VMT as compared to the County average. The parcel containing the proposed project was selected and the Screening Tool was run for VMT per service population (i.e., population and employment) measure of VMT. Based on the Screening Tool results, the project is not located within an already low VMT-generating TAZ, and the project is not eligible to screen out based on map-based screening.
- Transit Priority Area (TPA) Screening
    - Consistent with guidance identified in the Technical Advisory and City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within .5 mile of an existing major transit stop or an existing stop along a high quality transit corridor) may be presumed to have a less than significant impact absent substantial evidence to the contrary. Based on the Screening Tool results, the project site is not located within .5 mile of an existing major

transit stop or along a high-quality transit corridor, and the project is not eligible to screen out based on TPA screening.

Project VMT

The City Guidelines identify the SBTAM as the appropriate tool for conducting VMT analysis for land use projects in San Bernardino County. Consistent with City Guidelines, project VMT was calculated using the most current version of SBTAM. The SBTAM base year model and cumulative year models were run, and project VMT was then calculated for both the base year model (2012) and cumulative year model (2040) and linear interpolation was used to determine the project's baseline (2020) VMT. The VMT value is then normalized by dividing by the project's service population (SP), which was determined to be 1,018 people for the purposes of the VMT analysis. As the project contains only residential and does not contain office, retail, industrial or other employment type uses, the project's SP is inclusive of only population.

As shown in **Table 16: Project VMT Per Service Population (SP)**, the project baseline (2020) VMT per SP is 20.55 and the project cumulative (2040) VMT per SP is 25.88.

Table 16: Project VMT Per Service Population (SP)

	2020	2040
Population	1,018	1,018
Employment	0	0
VMT	20,920	26,349
VMT Per SP	20.55	25.88
Source: Urban Crossroads, Citrus Valley VMT Analysis, June 30, 2020. Table 2, p. 4.		

Table 17: Baseline 2020 VMT Per SP Comparison illustrates the comparison between the 2020 project VMT per SP to the 2020 San Bernardino County VMT per SP. As shown, the project would be 38 percent below the existing 2020 VMT per SP for San Bernardino County, which meets the City's threshold of 15 percent below the existing VMT per SP for the San Bernardino County. As such, the project's impact on VMT for baseline conditions is less than significant.

Table 17: Baseline 2020 VMT Per SP Comparison

	VMT Per SP
Project	20.55
San Bernardino County	33.13
Percent Above/Below	-38%
Source: Urban Crossroads, Citrus Valley VMT Analysis, June 30, 2020. Table 3, p. 4.	

Table 18: Baseline 2040 VMT Per SP Comparison illustrates the comparison between the 2040 project VMT per SP to the 2040 San Bernardino County VMT per SP. As shown, the project would be 26.7 percent below the cumulative 2040 VMT per SP for San Bernardino County, which meets the City's threshold of

15 percent below the cumulative VMT per SP for the San Bernardino County. As such, the project's impact on VMT for cumulative conditions is less than significant.

Table 18: Baseline 2040 VMT Per SP Comparison

	VMT Per SP
Project	25.88
San Bernardino County	35.30
Percent Above/Below	-26.7%
Source: Urban Crossroads, Citrus Valley VMT Analysis, June 30, 2020. Table 4, p. 4.	

Based on the above, the proposed project would result in a less than significant impact relative to VMT and no City Requirement is required.

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. Final project site plans would be subject to City review and approval, which would ensure that project driveway intersections and internal circulation are safe, with adequate sight distance, driveway widths and stop signs where necessary for entering and exiting the site. This would prevent any impacts due to a design feature. The project site is surrounded by agricultural uses (to the north and east), Citrus Valley High School and agricultural uses to the south with the Griffin Homes Heritage Specific Plan farther to the south, and the SR-210 freeway to the west, and would not create hazards due to incompatible uses because the project would introduce additional residential uses to the project area. Therefore, impacts related to hazardous geometric design features or incompatible uses would be less than significant.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact With Mitigation Incorporated. The project has multiple accesses to allow for emergency vehicles. The project is proposed to access Domestic Avenue via Streets C, G, and L, and future Street N via Streets I, K, and L. The project access designs (width, grade, slope, vertical clearance, gate type, gate width and gate entry feature) shall be provided to the City and/or Fire Authority for review and approval of adequate access. For emergency access roadways with a cross-section of less than 36 feet in width, the local Fire Authority should be consulted for minimum width and parking restrictions. Final project site plans would be subject to City review and approval, which would ensure that project driveway intersections and internal circulation are safe, with adequate sight distance, driveway widths and stop signs where necessary for entering and exiting the site.

Furthermore, a construction work site traffic control plan shall be submitted to the City for review and approval prior to the start of any construction work (Mitigation Measure TR-1). The plans shall show the location of any roadway, sidewalk, bike route, bus stop or driveway closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. Temporary traffic controls used around the construction area should adhere to the standards set forth in the CA MUTCD

and construction activities should adhere to applicable local ordinances. Consequently, on-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project. With the implementation of City Requirement TR-1, impacts would be less than significant.

Mitigation Measure

TR-1 A construction work site traffic control plan shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of any construction work. The plans shall show the location of any roadway, sidewalk, bike route, bus stop or driveway closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. Temporary traffic controls used around the construction area should adhere to the standards set forth in the California Manual of Uniform Traffic Control Devices (2014) and construction activities should adhere to applicable local ordinances.

XVIII. Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
TRIBAL CULTURAL RESOURCSE:				
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 a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion

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

Less Than Significant Impact With Mitigation Incorporated. Chapter 905, Statutes of 2004 (i.e., SB 18) and Chapter 905, Statutes of 2014 (i.e. AB5 52) requires Lead Agencies contact and consult with California Native American tribes prior to amending or adopting any specific plan, and evaluate a project's potential to impact "tribal cultural resources." Additionally, AB 52 requires tribes interested in development projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming an application subject to CEQA complete to notify the requesting tribe of the opportunity to consult on the project. The City of Redlands notified seven (7) tribes with traditional lands or cultural places located within the boundaries of San Bernardino County, for the purposes of Senate Bill 18, on May 20, 2020, and five (5) tribes, for the purposes of Assembly Bill 52, on May 12, 2020, including the Gabrieleño Band of Mission Indians – Kizh Nation, Morongo Band of Mission Indians, Soboba Band of Luiseño Indians, San Manuel Band of Mission Indians, and the Torres Martinez Desert Cahuilla Indians. The lead agency consulted with tribes that requested consultation on the project and integrated appropriate mitigation measures for the project.

If tribal cultural resources are inadvertently discovered during construction, the project would have a less than significant impact on tribal cultural resources with incorporation of the following mitigation measures, which ensure proper identification of potential tribal cultural resources.

Mitigation Measures

TCR-1 Prior to the issuance of any ground disturbance-related permits (such as grading permits), the project developer/applicant shall provide the lead agency evidence of agreements with the consulting tribe(s) for Tribal monitor(s) representing tribe(s) that participated in consultation with the Lead Agency. Tribal monitors shall be present for all project related ground-disturbing activities (which includes ground disturbing activities such as tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal, drainage and irrigation removal, hardscape removal (benches, signage, boulders, walls, seat walls, fountains, etc.), and archaeological surveys, testing, and data recovery.

Prior to the issuance of any ground disturbance-related permits (such as grading permits), the Lead Agency shall contact and coordinate with consulting Tribe(s) as reasonably determined by the Lead Agency to facilitate communications with the Project developer/applicant so that all Parties can develop a mutually-acceptable Tribal

Monitoring and Treatment Plan which includes the scope of monitoring, scheduling of monitors from individual consulting Tribe(s), and the course of action for inadvertent discoveries. The Plan shall be developed in accordance with current professional archaeology standards. Any mitigation plan that results in the removal of cultural resources (artifacts, ecofacts, features, etc.) from their original provenience shall also include a comprehensive discussion of resource processing, analysis, curation, and reporting protocols and obligations. This Plan shall be approved and adopted by the Lead Agency prior to the of any ground disturbance-related permits. The Plan's implementation in the field shall be enforced by the Lead Agency for the life of the Project's ground disturbing activities.

TCR-2 If a tribal cultural resource is discovered within the Project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and, if necessary, an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the Consulting Tribes, the Project applicant/developer, and the Lead Agency shall confer regarding treatment of the discovered resource(s). No historic or prehistoric resources identified during monitoring will require preservation; however, all discoveries must be assessed for archaeological or cultural significance in adherence to CEQA, and if determined to be CEQA-significant, additional mitigation measures may be required to reduce the effect of grading impacts. Following the securing of the discovery site from further disturbance, tribal representatives, will adhere to the stipulation for inadvertent discoveries within the Tribal Monitoring and Treatment Plan. This evaluation process may include archaeological excavations or test trenches, basic recordation, non-destructive methods for analysis of artifacts, and Native American participation in the site assessment. If that evaluation process concludes that the discovered resources are CEQA significant, then the stipulations of TCR-3 will be implemented for treatment and disposition. All final reports regarding the resource recovery fieldwork are to be submitted to the local CHRIS Information Center, the Lead Agency, and Consulting Tribe(s).

TCR-3 California Public Resources Code 21074 defines ''tribal cultural resources. In brief, a resource is a "tribal cultural resource" if it is either: (I) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national or state register of historical resources, or listed in a local register of historic resources. Pub. Resources Code, § 21074 (a)

In the event that Tribal Cultural Resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

- The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to tribal cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Redlands with evidence of same:

a) Complete avoidance and preservation in situ, or reburial of the resources in a location onsite. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.
b) A curation agreement with an appropriate qualified repository within San Bernardino County or Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.
c) If more than one Native American Group is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated in a qualified repository within San Bernardino County or Riverside County that meets federal standards per 36 CFR Part 79 by default.

Should reburial of collected cultural items be preferred, it shall not occur until after the Phase IV monitoring report has been submitted to the City of Redlands. Should curation be preferred, the developer/permit applicant is responsible for all costs and the repository and curation method shall be described in the Phase IV monitoring report.

a)ii) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) is listed in a local register of historical resources as defined in PRC §5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); or (4) is determined to be a historical resource by a project's Lead Agency (PRC §21084.1 and State CEQA Guidelines §15064.5[a]).

A resource may be listed as a historical resource in the California Register if it meets any of the following National Register of Historic Places criteria as defined in PRC §5024.1(C):

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

B. Is associated with the lives of persons important in our past.

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

D. Has yielded, or may be likely to yield, information important in prehistory or history.

A "substantial adverse change" to a historical resource, according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

As detailed above, consultation with Native American tribal representatives was conducted by the lead agency. If tribal cultural resources are inadvertently discovered during construction, proper identification and treatment is necessary to ensure a less than significant impact to tribal cultural resources. Therefore, with the implementation of Mitigation Measure TCR-1, impacts to tribal cultural resources determined significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1, with Native American input and participation, would be reduced to a less than significant level.

XIX. Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS: *Would the project:*				
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?	☐	☐	☒	☐

Discussion

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.

Electrical and Natural Gas

Southern California Edison (SCE) would provide electricity to the proposed project. Currently, 12-kilovolt (KV) power lines exist along Texas Street. The project would connect to these service lines with the final configuration of these service lines to be approved by SCE. In addition, the entire project would comply with Energy Building Regulations adopted by the California Energy Commission (CCR Title 24) and any adopted City of Redlands energy conservation requirements.

The Southern California Gas Company (SoCalGas) would supply natural gas service to the proposed project. The project would connect to service lines with the final configuration to be approved by SoCalGas.

Water

The City of Redlands MUED provides local water service in the City. There is currently an existing 12-inch water main within Texas Street at the intersection of Texas Street and Domestic Avenue. A series of 8-inch and 12-inch water mains would be constructed within Domestic Avenue, the extension of Texas Street, and the future public streets (including Street N) to provide domestic water service to the project site. The project would protect in place two (2) existing private water wells within the study area and relocate one irrigation appurtenance.

Recycled Water

The City of Redlands MUED does not currently provide recycled water service to this property. A future recycled water main will be installed in Domestic Avenue extending from Texas Street to the west to Street L. This recycled water line will then extend north along Street L to allow for future connections at Texas Street and future development to the north.

Wastewater

The City of Redlands MUED provides sewer service. An existing 18-inch trunk sewer line is located in Domestic Avenue adjacent to the project site. This trunk sewer line conveys wastewater westerly under SR-210 to the City of Redlands' Wastewater Treatment Facility. A portion of this trunk sewer line would be replaced with a deeper line in order to convey all wastewater along the northerly portion of the project site. Within the project site, a series of 8-inch and 10-inch sewer lines would be constructed within the public streets looping through the various neighborhoods, with the final configuration to be approved by the City of Redlands MUED.

Stormwater Drainage

Currently, the project site is unimproved and creates no significant stormwater flows. The project site's existing runoff flows northerly and westerly via sheet flow, eventually flowing into the existing drainage channel to the west within the SR-210 Caltrans right-of-way. This drainage channel drains to Reach 5 of the Santa Ana River.

The City of Redlands *Drainage Master Plan* (DMP) prepared in 2014 and its predecessor, the *Comprehensive Storm Drain Plan* (CSDP) # 4 updated by the County of San Bernardino in 2013, provide the planned hydrology for the watershed where the project is located. Both studies utilize current General Plan land use designations to determine runoff values for the areas being analyzed. For this project site,

the future developed condition runoff values were based on a Low Density Residential land use designation. Due to the similar land use of the proposed Specific Plan and the current land use designation, the drainage runoff from the site would be the same as the values determined in the DMP.

As explained in subsection X.c.iii, existing drainage patterns would be modified to conduct stormwater appropriately. All lots within the project site would be graded to allow runoff to drain toward a designated street or area drain, leading to the proposed on-site storm drain infrastructure. Grate inlets, curb and gutters, and storm drain pipes appropriately sized would collect the runoff and direct it to two aboveground infiltration basins located within the public park in the western portion of the site. Both of the proposed basins will have overflow structures that discharge into the drainage channel that runs along the western boundary of the project site. In addition, runoff from the park would be conveyed to these basins. The system would be designed to mitigate the 100-year flows to existing conditions.

Conclusion

As described above, the project would utilize existing electrical, natural gas, water and wastewater facilities, and stormwater drainage facilities, therefore not requiring construction of new facilities or the expansion or current facilities. A less than significant impact would occur.

Connections to local water and sewer mains would involve temporary and less than significant construction impacts that would occur in conjunction with other on-site improvements. No additional improvements are needed to either sewer lines or treatment facilities to serve the proposed project. Standard connection fees would address any incremental impacts of the proposed project. In addition, the City of Redlands has implemented a Water Conservation Plan, outlined in the Redlands Municipal Code Title 13, Chapter 13.06 to reduce water use. With implementation of these required water-saving measures, water demand for the proposed project is expected to be within the estimated citywide water demand numbers. Therefore, impacts would be less than significant.

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

Less Than Significant Impact. Water service would be provided to the proposed project site by the City of Redlands MUED. The 2015 San Bernardino Valley Regional UWMP, amended in June 2017, was prepared for the City of Redlands and therefore accounts for the water usage that would be attributed to development of the project site, consistent with its existing land use designation and zoning classification. According to the UWMP, the City has four (4) sources of water to provide to its service area: purchased imported water from the State Water Project; groundwater from the Bunker Hill Subbasin and the Yucaipa Subbasin; surface water from the Mill Creek and Santa Ana River watersheds; and recycled water.

The Water Supply Reliability Assessment in the UWMP concludes that the City has adequate supplies to meet projected demands under multiple dry year scenarios, taking into account the recent prolonged drought.[51] The proposed project would have sufficient water supplies available to serve the project from

51 Water Systems Consulting, Inc. 2015 San Bernardino Valley Regional Urban Water Management Plan (amended June 2017).

existing entitlements and resources. Therefore, impacts associated with water supplies would be less than significant.

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

Less Than Significant Impact. According to the General Plan Livable Community Element, most wastewater generated by sewered development within the project site is treated at the City's wastewater treatment plant on the south side of the Santa Ana River wash at Nevada Street. Average flow is about 5.6 million gallons per day (mgd). Secondary treatment capacity is about 9.5 mgd, which will allow for anticipated growth of the City over the next 20 years. Since the project is included within the City's anticipated growth, the project's wastewater demand would not exceed the capacity of the wastewater treatment plant. A less than significant impact would occur.

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. Waste collection services are provided within Redlands city limits by the Quality of Life Department. Solid waste originating from Redlands is primarily disposed of by the Quality of Life Department at the California Street Landfill and by the County of San Bernardino at the San Timoteo Sanitary Landfill. Both landfills are within City limits. The San Timoteo Sanitary Landfill is located approximately 6.5 miles south of the site. The California Street Landfill, located approximately 1.2 miles west, is the closest landfill to the site. The California Street Landfill has a maximum capacity of 11,400,000 cubic yards, with a remaining capacity of 5,168,000 cubic yards. The California Street Landfill accepts a maximum of 829 tons per day, or 302,858 tons per year. The estimated closure year for the California Street Landfill is 2042.[52]

Construction Impacts

Waste generated by the construction process would primarily consist of discarded materials and packaging. Based on an average home size of 2,000 sf and a construction waste generation factor of 4.34 pounds per sf, approximately 4.34 tons of waste would be generated during the construction of each home, for a total of 1,375.78 tons of waste project-wide. Additional waste would be expected from the construction of internal streets, common areas, infrastructure installation, and other project-related construction activities.

The project would be required to comply with City adopted Ordinance 2544, which requires all construction development to adhere to construction waste diversion and recycling requirements and also

[52] CalRecycle. SWIS Facility/Site Activity Details – California Street Landfill (36-AA-0017). Accessed September 18, 2020. Available at https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1855?siteID=2637.

facilitates the City's compliance with State recycling mandates (AB 939) for ensuring the recycling of construction and demolition debris. The project, as a condition of approval with the City, would be required to submit a Site and Building Recycling Plan outlining the following:

- The location and design of all existing and proposed recycling and trash enclosures,
- Site access points for solid waste and recycling,
- Collection vehicles and a design of the grading of the site,
- Operational criteria for the proposed use of the property and,
- Capacity requirements for the waste generation of the building.

Construction waste generated that cannot be recycled by the proposed project would likely be disposed at the California Street Landfill due to its proximity to the project site. The California Street Landfill is not expected to reach its total maximum permitted disposal capacity during the project's construction period, and construction waste generated by the project is not anticipated to cause this landfill to exceed its maximum permitted daily disposal volume. Because the project would generate a relatively small amount of solid waste per day, the California Street Landfill would have sufficient daily capacity to accept solid waste generated by the project. Construction impacts relative to solid waste generation would be less than significant.

Operational Impacts

Based on CalRecycle's estimated solid waste generation rate of 12.23 pounds (lbs) per household per day for residential sources,[53] the project would generate an estimated 3,876.91 lbs or 1.94 tons of solid waste daily. Annually, the project would generate an estimated 1,415,072 lbs or 707.5 tons of solid waste (317 units x 12.23 lbs x 365 days). This equates to 0.0023 percent of the California Street Landfill's annually accepted amount of solid waste, which is considered to be nominal. Operational impacts relative to solid waste generation would be less than significant.

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

Less Than Significant Impact. Considering the availability of landfill capacity as described in **Impact XIX.d)** above, the proposed project's solid waste disposal needs can be adequately met without a significant impact on the capacity of the nearest landfill, the California Street Landfill. Therefore, it is not expected that the proposed project would impact the City's compliance with State-mandated (AB 939) waste diversion requirements. Impacts would be less than significant.

53 CalRecycle website. Accessed September 15, 2020. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates

XX. Wildfire

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
WILDFIRE: *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?	☐	☐		

The proposed project involves the development of 317 single-family residences with associated utilities, infrastructure, open space and recreational areas on approximately 58.64 acres. The project site is bounded by agricultural uses (to the north and east), Citrus Valley High School and agricultural uses (to the south) with the Griffin Homes Heritage Specific Plan farther to the south, and the SR-210 freeway (to the west). The project site currently supports agricultural uses (citrus orchards).

Discussion

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

No Impact. According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program,[54] the project site is not located in or near a state responsibility area and does not contain lands classified as very high fire hazard severity zones in or near a local responsibility

[54] California Department of Forestry and Fire Protection, Fire and Resource Assessment Program (FRAP) website. Accessed September 8, 2020. https://frap.fire.ca.gov/mapping/maps/.

area. In addition, the proposed project would be required to comply with the City's Emergency Plan and Hazard Mitigation Plan and the emergency access requirements of the California Fire Code, which include but are not limited to providing access with adjoining uses and providing suitable access for emergency vehicles. The project site is serviced by Redlands Fire Station No. 263 located approximately 1 mile southeast of the site at 10 W. Pennsylvania Avenue, and would not impair an adopted emergency response plan or emergency evacuation plan. There would be no impact.

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

No Impact. Refer to **Impact XX.a)** above. The project site is not located in or near a state responsibility area. The nearest state responsibility areas are located approximately 4 miles to the east and 4 miles to the south of the project site. In addition, the project site does not contain lands classified as very high fire hazard severity zones, nor is the project site adjacent to wildlands subject to wildfires. Urban levels of fire protection would be provided to the project area upon project completion. In addition, the project would adhere to building codes and any conditions included through review by the fire department. As such, this project would not exacerbate wildfire risks or expose project occupants to pollutant concentrations or the uncontrolled spread of a wildfire. Therefore, there would be no impact.

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

No Impact. As discussed above, the project site is not located in or near a state responsibility area and does not contain lands classified as very high fire hazard severity zones. The project includes the construction of 317 single-family homes, public park, and associated utilities. However, installation and future maintenance of these facilities would not increase the risk of fire because the proposed residential uses on-site would not include any features that would have the potential to exacerbate fire risk or result in temporary or ongoing impacts to the environment. The project would also provide access with adjoining uses and suitable access for emergency vehicles. Therefore, there would be no impact.

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

No Impact. The project site is not located in or near a state responsibility area and does not contain lands classified as very high fire hazard severity zones. The project would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Therefore, there would be no impact.

XXI. Mandatory Findings of Significance

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

Discussion

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?

As concluded in Section IV, *Biological Resources*, the proposed project would not have the potential to: degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare, threatened species. With implementation of Mitigation Measures BIO-1 through BIO-5, impacts would be reduced to a less than significant level.

As concluded in Section V, *Cultural Resources*, the proposed project would not eliminate important examples of the major periods of California history or prehistory, with implementation of State and local regulations. The project would result in a less than significant impact to cultural resources and no additional mitigation measures are required.

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)?

In accordance with CEQA Guidelines Section 15183, this environmental analysis was conducted to determine if there were any project-specific effects that are peculiar to the project or its site. No project-specific significant effects peculiar to the project or its site were identified that could not be mitigated to a less than significant level. The project would not induce substantial population growth. The project would contribute to environmental effects in the areas of biological resources, cultural resources, hazards/hazardous materials, noise, transportation, and tribal cultural resources. However, these would not be cumulatively considerable, since they are site-specific. Further, mitigation measures and City Requirements are incorporated herein mitigate any potential impacts associated with these environmental issues. Cumulative projects would be required to prepare the appropriate CEQA environmental documentation on a project-by-project basis. Therefore, the project does not have impacts that are individually limited, but cumulatively considerable.

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

Given the scope and nature of the proposed development, and with mitigation implemented to address existing project site conditions and for proper removal of contaminated soils (HAZ -1 and HAZ-2), the project would not result in environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly. Compliance with applicable existing laws and regulations and implementation of recommended mitigation measures would ensure that the project would not result in substantial adverse effects on human beings. Therefore, impacts would be less than significant and no additional mitigation measures are required.

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