

INITIAL STUDY

FOR

THE CITY OF MURRIETA

FOR THE

JEFFERSON AVENUE APARTMENT PROJECT

Lead Agency:

City of Murrieta

One Town Square
24601 Jefferson Avenue
Murrieta, California 92562

Project Applicant:

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1. PROJECT INFORMATION

- i) Project Title: Jefferson Avenue Apartment Project
- ii) Applicant: Mr. Barton L. Buchalter, Esq.
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- ii) Lead Agency Name: City of Murrieta
Address: 1 Town Square
Murrieta, CA 92562
- iii) Contact: James Atkins, Planner
Phone Number: (951) 461-6061
- iv) Project Location: The proposed Project is located along Jefferson Avenue northwest of the intersection of Jefferson Avenue and Murrieta Hot Springs Road in the City of Murrieta, Riverside County, California. The site is located in Section 7, Township 7 South, Range 3 West SBBM as found on the USGS – Murrieta Quadrangle, 7.5 Minute Series topographic. The geographic coordinates are as follows: 33.554600°, -117.201802° (Please refer to Figures 1 and 2 for Project location depicted at a regional and site level),

2. PROJECT DESCRIPTION

A. Introduction

This document is being prepared by the City of Murrieta for the Jefferson Avenue Apartments Project. The City will consider entitlements for the development of a 160-unit apartment complex within the project site along Jefferson Avenue within the City of Murrieta. The Applicant is Mr. Barton L. Buchalter, Esq., Principal of Murrieta Hot Springs/Jefferson, L.P. The purpose of the Project is to provide additional housing options to serve the growing population of the City of Murrieta and surrounding area.

B. Project Characteristics

The approximately 9.18 net acre site is located in the City of Murrieta, which is located within Riverside County, California. It is comprised of one parcel—APN 949-220-048-8—located along Jefferson Avenue northwest of the intersection of Jefferson Avenue and Murrieta Hot Springs Road. The project will require a design review and development permit from the City of Murrieta.

The proposed site will be developed with ten (10) buildings as shown on the site plan provided as Figure 3, which will make up the Jefferson Avenue Apartments Project. The site is planned to contain seven (7) apartment buildings that will ultimately provide a total of 160 apartment units at a density of 17.43 dwelling units per acre within the 9.18-acre site. The breakdown of apartment units per building is shown below:

- Building 1 will contain 24 apartment units, and will be 3 stories in height.
- Building 2 will contain 24 apartment units, and will be 3 stories in height.
- Building 3 will contain 24 apartment units, and will be 3 stories in height.

- Building 4 will contain 24 apartment units, and will be 3 stories in height.
- Building 5 will contain 16 apartment units, and will be 3 2 stories in height.
- Building 6 will contain 24 apartment units, and will be 2 3 stories in height.
- Building 7 will contain 24 apartment units, and will be 3 stories in height.

The project proposes 18 parking garages for residents of the proposed Jefferson Avenue Apartments, which will contain a total of 160 parking spaces, or 1 garage space per dwelling unit. Additionally, the project proposes 180 additional parking spaces for resident and guest use; these spaces are inclusive of 34 electric vehicle spaces, and 8 handicapped spaces, for a total of 340 parking spaces provided. Access to the project will be provided by two gated drives located on Jefferson Avenue.

Off-site improvements that need to be completed as part of the project include curb and gutter on the adjacent street, and lighting and landscaping along Jefferson Avenue on the project side of the street.

The Project includes a leasing office (Building 8), a club house with a tree covered patio (Building 9), and a gym for residents (Building 10). The following additional amenities will be developed in support of the project: BBQ area at the swimming pool; swimming pool with spa; children's play area with playground equipment; dog park; and, open play area adjacent to the pool.

The Project will install two WQMP Basins, one at the northwestern corner of the site, and one at the southeastern portion of the site. These bioretention basins will collect and manage onsite runoff.

The Project will connect to all utilities—water, natural gas, electricity, sewer, and telecommunications—adjacent to the project site within Jefferson Avenue. Utilities, such as the electricity lines fronting the property will be undergrounded as part of the construction of the Project. Although the project does not include any onsite solar facilities, it does include the installation of 34 electric vehicle charging stations.

List of All Applications

1. Development Permits DP-2020-2170: Required to permit the proposed project improvements at the site, such as site buildings and landscaping

Construction Scenario

The anticipated construction sequence is as follows, but may be adjusted to conform to specific conditions at the time of actual construction:

1. Clear and grub, and demolish small onsite structure;
2. Preparation of subgrade;
3. Mass-grade site and road beds;
4. Installation of the northerly and southerly storm drain systems;
5. Installation of public sewer systems;
6. Installation of public water systems;
7. Fine grade to prepare for surface improvements;
8. Installation of building foundations;
9. Install private utilities, including water quality infrastructure;
10. Install curb, gutters, sidewalks and first asphalt lift;
11. Complete construction of buildings;
12. Install landscaping; place final lift of asphalt; and
13. Install signage and striping.

Most of the preceding construction activities are self-explanatory. The buildings will be developed with a combination of wood and steel framing, and the exterior will be stucco, similar to surrounding structures. Construction will be completed in closely spaced, sequential phases with the entirety of the horizontal to be completed first. This will include clearing and grubbing, grading and installation of utilities, and may also

include development of internal paved roadways. Once the horizontal improvements are completed, the Applicant plans to develop the site one or two structures at a time. About 30 to 45 days after the construction for the first building(s) begins, another one or two buildings will be constructed. This pattern of phasing will continue until the site has been completed, and with each phase, one or two more structures with associated landscaping will be built. This will enable the Applicant to complete the important structures to the Jefferson Avenue Apartments operations, such as the leasing office, early on in process of constructing the site, and also will enable units within completed buildings to be rented and occupied prior to the completion of the remaining structures and site improvements. Construction should be initiated in mid- to late-2021 and the project should open for occupancy in late-2022 or early-2023. The project site will require about 7,150 cubic yards (CY) of cut and 66,450 CY fill, with a net import of approximately 59,300 CY, shown on the Conceptual Earthwork Map provided as Figure 4. Construction details are further discussed in the Air Quality evaluation in Appendix 1. It is anticipated that between 65 and 80 construction workers will be on site at any given time during construction. Please note that all proposed mitigation measures identified in this document are fully incorporated into the Project Mitigation Monitoring and Reporting Program.

C. Description of the Project Site

The Project site is rectangular parcel of land that is bounded to the southwest by Jefferson Avenue, to the northwest by a commercial/business complex, to the northeast by a commercial shopping center. The approximately 9-acre site is located mid-block north of the corner of Jefferson Avenue and Murrieta Hot Springs Road. The project site is highly disturbed from past grading and other disturbances. The site topography can be described as essentially flat with a shallow slope from north to south. The project site contains ruderal (weedy) vegetation that has been bladed and no onsite structures other than remnants of a small abandoned structure along the southern boundary of the site near Jefferson Avenue, which will be demolished or relocated as part of this project. The overall setting is that of a moderately urbanized location, in the process of becoming more highly urbanized. Refer to the aerial photograph in Figure 2 for a representation of the existing project site.

D. Surrounding Land Uses

North: Commercial: two commercial complexes are located north of the project site. One is located along Jefferson Avenue, and the other is located along Madison Avenue, which parallels Jefferson Avenue.

South: Commercial: a restaurant, doctors office, and other businesses are located opposite the project site along Jefferson Avenue.

East: Commercial: a restaurant, doctors office, and other businesses are located on the opposite side of and along Jefferson Avenue.

West: Multi-Family Residential: a multi-family residential complex is located to the west of the project site along Jefferson Avenue.

E. General Plan Designation

Existing: Multi-Family Residential MFR
Proposed: No change in General Plan designation proposed

F. Zoning

Existing: Multi-Family Residential MF-2
Proposed: No change in zone classification proposed

G. Other Agencies whose approval may be required

Based on an evaluation of the specific project location, the proposed project will not require any permits from other agencies to support development of the site as proposed by the Owner applications. The amount of area to be disturbed by the whole project will be greater than one acre; therefore, the developer will be required to file a Notice of Intent (NOI) for a General Construction permit to comply with the National Pollutant Discharge Elimination System (NPDES) requirements. The NOI is filed with the State Water Resources Control Board and enforced by the San Diego Regional Water Quality Control Board. A Stormwater Pollution Prevention Plan (SWPPP) must be implemented in conjunction with construction activities. No other permits or agency requirements have been identified in association with the proposed project.

H. Have California Native American tribes traditionally and cultural affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? No.

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 21083.3.2.) 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.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

As indicated by the checklist on the following pages, there are no "Potentially Significant Impacts" associated with implementation of the proposed project that cannot be reduced to "Less than significant" with mitigation incorporated. An "X" next to an issue area in the following table indicates where mitigation is included to reduce impacts from "Potentially Significant" to "Less than significant".

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

<input type="checkbox"/>	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.

Tom Dodson & Associates
Prepared by

November 2020
Date


Lead Agency (signature)

12/10/20
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 or other regulations governing scenic quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – Adverse impacts to scenic vistas can occur in one of two ways. First, an area itself may contain existing scenic vistas that would be altered by new development. A review of the project area determined that there are no scenic vistas located internally within the area proposed for the development of the Jefferson Avenue Apartments Project. The proposed Project is located adjacent to existing development to the northwest, northeast, and southwest; the area southeast of the project site is vacant and contains the same ruderal (weedy) vegetation that has been bladed as found within the project site. The project site is located within an urbanized visual setting and is bordered mostly by surrounding roadways and commercial development. Furthermore, the site has been previously graded and does not have any distinctive visual features on the property. Therefore, the development of the Jefferson Avenue Apartments Project is not expected to impact any important scenic vistas within the project area.

A scenic vista impact can also occur when a scenic vista can be viewed from the project area or immediate vicinity and a proposed development may interfere with the view to a scenic vista. A scenic vista impact can also occur when a scenic vista can be viewed from the project area or immediate vicinity and a proposed development may interfere with the view to a scenic vista. The City of Murrieta General Plan indicates that the variety of rolling hillsides, mountain ranges (both the Santa Ana Mountains and the Santa Rosa Plateau), the Valley floor, and varied natural vegetation contributes to the unique visual character of Murrieta. The Project site is oriented in an area in which these important visual features are not prominent. The vistas from the project site at ground level are impeded by other structures along Jefferson Avenue, and where not impeded, only the tops of the nearby mountains are visible in any direction. These interrupted views indicate that developed at this site would not interrupt any important public views in any direction once developed. Furthermore, given that the project site is surrounded by commercial development in three directions, no private views would be interrupted by development of the Project at this site. Therefore, the proposed Project would have a less than significant potential to have a substantial adverse effect on a scenic vista. No mitigation is required.

- b. *Less Than Significant Impact* – The project site is developed with native and non-native vegetation, as well as two drainage features that bisect parts of the site. The site is essentially uniformly flat due to historic grading and it is currently vacant with non-native vegetation. The site has been designated

for multi-family residential use under both the prior General Plan and the current Murrieta General Plan. The northeastern boundary of the project site contains several immature trees, which do not fall under the City of Murrieta's Tree Preservation Ordinance (Municipal Code Section 16.42). As such, no mitigation measure needs to be implemented to ensure a less than significant impact. No roadways within the vicinity of the project site are considered eligible for official designation as a County or State Scenic Highway. No other scenic resources are located within the project site, and as such, there are no scenic resources within the site that would be damaged as a result of development of the Project. Therefore, there is a less than significant potential to damage a scenic onsite resource.

- c. *Less Than Significant With Mitigation Incorporated* – The Jefferson Avenue Apartment site is located within an urbanized area. The Murrieta General Plan has designated the project site for Multi-Family Residential Use and the zoning classification is the same. By developing this vacant site in accordance with City General Plan and design guidelines for multi-family uses (Murrieta Development Code (MDC) 16.08.040 Multi-family Residential Design Standards) and development plans (16.56.040 C Development Plan Permits), the visual character of this site will be converted to an urban visual setting consistent with surrounding single family and multi-family residences, but also consistent with the General Plan vision for the City at build-out. With the City's design elements incorporated in the Project, implementation of the proposed Project will be consistent with the surrounding urban setting and the potential aesthetic impacts to the site will result in a less than significant impact. In addition to the long-term visual effect, the City's General Plan EIR requires three mitigation measures to be implemented by projects to minimize visual impacts during construction. These are measures AES-1, AES-2, and AES-3 from the General Plan EIR. Thus, with implementation of these required measures and implementation of the City's design standards, the potential aesthetic impacts will be reduced to a less than significant level.

AES-1 For future development located in or immediately adjacent to residential zoned properties, construction documents shall include language that requires all construction contractors to strictly control the staging of construction equipment and the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. Construction equipment shall be parked and staged within the project site, as distant from the residential use, as reasonably possible. Staging areas shall be screened from view from residential properties.

AES-2 Construction documents shall include language requiring that construction vehicles be kept clean and free of mud and dust prior to leaving the development site. Streets surrounding the development site shall be swept daily and maintained free of dirt and debris.

AES-3 Construction worker parking may be located off-site with prior approval by the City. On-street parking of construction worker vehicles on residential streets shall be prohibited.

- d. *Less Than Significant With Mitigation Incorporated* – The implementation of the proposed Project will create new sources of light during the operational phases of the Project. Light and glare from interior and exterior building lighting, safety and security lighting, and vehicular traffic accessing the site will occur once the site is in operation. The proposed Project must be developed in accordance with the MDC, which would ensure that any building or parking area lighting would not significantly impact adjacent uses. Thus, the proposed Project will introduce a new source of light into the project area, but design requirements can limit the lighting impacts to the project site. To ensure that light does not result in intrusive lighting, the Project must comply with the City's requirements (General Plan EIR and related policies under Aesthetics, Section 5) that lighting be restricted to the project site through shielding and directing light downward, and compliance with Mt. Palomar lighting standards (MDC Section 16.18.100 (Lighting) and MDC Section 16.18.110 (Mount Palomar Lighting Standards)). To

ensure that light or glare (particularly off of structures with glass exteriors) does not result in intrusive lighting or glare to existing structures or persons in the project area, the following mitigation measure will be implemented:

AES-4 *Prior to approval of the Final Design, an analysis of potential glare from sunlight or exterior lighting to impact vehicles traveling on adjacent roadways shall be submitted to the City for review and approval. This analysis shall demonstrate that due to building orientation or exterior treatment, no significant glare may be caused that could negatively impact drivers on the local roadways or impact adjacent land uses. If potential glare impacts are identified, the building orientation, use of non-glare reflective materials or other design solutions acceptable to the City of Murrieta shall be implemented to eliminate glare impacts.*

With the implementation of mitigation measures **AES-1** through **AES-4**, the proposed Jefferson Avenue Apartments Project would have a less than significant potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The General Plan identified a total of 2,234 acres within the City Limits as supporting agricultural or mining uses. According to the California Department of Conservation Important Farmland Map Finder, the Project is located on land that is deemed “Farmland of Local Importance” (Figure II-1). The City, however, has not designated this site nor zoned this site for agricultural use, as the General Plan and Zoning Classifications are Multi-Family Residential. This indicates that the City intends for the project site to be developed for a use that would suit this land use designation/zoning classification in which it has assigned this project site. The City's General Plan EIR indicates that most of the Farmland of Local Importance is not in agricultural production, and was therefore not designated for agricultural use by the General Plan. Therefore, given that the City does not identify the project site for agricultural use, and that no Prime Farmland, Unique Farmland or Farmland of Statewide Importance has been identified within the project site, implementation of the proposed Project and conversion of the project site to the proposed multi-family

residential uses will not pose any significant adverse impact to agricultural resources or values. No mitigation is required.

- b. *No Impact* - Implementation of the proposed Project will not conflict with existing zoning (Multi-Family Residential) for agricultural use, or a Williamson Act contract. According to Figure 5.11-2 *Williamson Act Farmland (2006)* of the GPEIR, the proposed project site is not part of a Williamson Act contract. Please reference the discussion in II(a), above. Based on this information, the proposed Project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. No adverse impacts are anticipated and no mitigation is required.
- c. *No Impact* – The project site is not located within forest land, timberland or timberland zoned for Timberland Production. Therefore, the proposed Project will not 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 adverse impacts are anticipated and no mitigation is required.
- d. *No Impact* – The project site is not located within forest land and has no commercial forest trees on the property; therefore, the Project will not result in the loss of forest land or conversion of forest land to non-forest production use. No adverse impacts are anticipated and no mitigation is required.
- e. *No Impact* – Please refer to the discussion under issue II(a), above. Though the Project is located within a site considered to contain Farmland of Local Importance by the California Department of Conservation, no agricultural activities have been practiced on the site in recent history. Furthermore, the City has designated and zoned the site for Multi-Family Residential use, which does not permit agricultural uses to be carried out. The uses in the immediate vicinity surrounding the proposed Project do not currently support agricultural activities. Ultimately, the development of this site as the Jefferson Avenue Apartments Project would not involve other changes that would result in off-site agricultural land converting to a non-agricultural use. Furthermore, there is no forest land in the City of Murrieta that would be impacted by the development of the proposed Project. Therefore, the proposed Project would have a less than significant potential to 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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: An Air Quality Impact Analysis (AQIA) was prepared for the proposed project, it is provided as Appendix 1 to this Initial Study, is titled "Jefferson Avenue Apartments, Air Quality Impact Analysis, City of Murrieta" prepared by Urban Crossroads dated May 22, 2020.

Background

The Project is located within the City of Murrieta in the portion of Riverside County that lies within the South Coast Air Basin (Basin or SCAB). The project area is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and all of Orange County.

The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

The annual average temperatures throughout the SCAB vary from the low to middle 60s (degrees Fahrenheit). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Because the State of California had established Ambient Air Quality Standards (AAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California and the nation are shown in Table III-1. Sources and health effects of various pollutants are shown in Table III-2.

Table III-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Average Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O3) ⁸	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		–		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	–	–	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15.0 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	–	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9 ppm (10 mg/m³)		9 ppm (10 mg/m³)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	
Nitrogen Dioxide (NO2) ¹⁰	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO2) ¹¹	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	–	Ultraviolet Flourescence; Spectrophotometry (Paraosaniline Method)
	3 Hour	–		–	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas) ¹¹	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas) ¹¹	–	
Lead 8 ^{12,13}	30-Day Average	1.5 µg/m³	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m³ (for certain areas) ¹²	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Avg	–		0.15 µg/m³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Footnotes

- California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equalled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in

a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above 150 µg/m³, is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

- 3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4 Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7 Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
- 8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- 9 On December 14, 2012, the national PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primarily and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primarily and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 10 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 11 On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- 12 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 j.tg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 14 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

**Table III-2
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS**

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. 	<ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil. 	<ul style="list-style-type: none"> • Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. 	<ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. 	<ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: carbon monoxide, lead, ozone, particulate matter, nitrogen dioxide, and sulfur dioxide which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single- pollutant source Pb air monitoring sites

throughout the air district. On February 21, 2019, CARB posted the 2018 amendments to the state and national area designations. Table III-3 outlines the attainment designations for SCAB.

Table III-3
SOUTH COAST AIR BASIN EMISSIONS FORECASTS (EMISSIONS IN TONS/DAY)

Pollutant	State Status	National Status
Ozone – 1-hour standard	Nonattainment	—
Ozone – 8-hour standard	Nonattainment	Nonattainment
Carbon monoxide (CO)	Attainment	Attainment/Unclassified
Nitrogen dioxide (NO ₂)	Attainment	Attainment/Unclassified
Sulfur dioxide (SO ₂)	Attainment	Attainment/Unclassified
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
Lead ¹ (Pb ¹)	Attainment	Attainment/Unclassified

Notes: (1) Source of Federal and State status: California Air Resources Board October 2018.

Note: See Appendix 2.1 (part of Appendix 2, AQIA) for a detailed map of State/National Area Designations within the SCAB
“—” = The national 1-hour O₃ standard was revoked effective June 15, 2005.

¹ The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

Local Air Quality

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the District in order to provide Southern California residents with information about the air quality conditions. The Project site is located within the Temescal Valley area (SRA 26). The SCAQMD Temecula Valley monitoring station, located 6.98 miles northeast of the Project site, is the nearest long-term air quality monitoring station for O₃. The Temecula Valley monitoring station does not include data for CO, NO₂, PM₁₀, and PM_{2.5}. As such, the next nearest monitoring stations will be used. The Elsinore Valley monitoring station, located in SRA 25, is the next nearest monitoring station for CO, NO₂, and PM₁₀ is located approximately 11.17 miles northwest of the Project site. The Saddleback Valley monitoring station is located within SRA 19, roughly 27.57 miles northwest of the Project site, and is the nearest station that monitors PM_{2.5}. It should be noted that the Elsinore Valley and Saddleback Valley monitoring stations were utilized in lieu of the Temecula Valley monitoring station only in instances where data was not available.

The most recent three (3) years of data available is shown on Table III-4 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} for 2016 through 2018 was obtained from the SCAQMD Air Quality Data Tables. Additionally, data for SO₂ has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO₂ concentrations.

**Table III-4
AIR QUALITY MONITORING SUMMARY¹**

Pollutant	Standard	2016	2017	2018
O₃				
Maximum Federal 1-Hour Concentration (ppm)		0.092	0.104	0.107
Maximum Federal 8-Hour Concentration (ppm)		0.081	0.088	0.085
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	0	0	0
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	45	47	15
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.2	1.2	1.1
Maximum Federal 8-Hour Concentration	> 20 ppm	0.6	0.8	0.8
NO₂				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.051	0.049	0.041
Annual Average		0.008	0.008	0.009
PM₁₀				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 150 µg/m ³	99	133	104
Annual Federal Arithmetic Mean (µg/m ³)		21.4	22.5	22.4
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m ³	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m ³	4	9	9
PM_{2.5}				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 35 µg/m ³	24.79	19.50	20.80
Annual Federal Arithmetic Mean (µg/m ³)	> 12 µg/m ³	7.36	8.11	8.31
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m ³	0	0	0

µg/m³ = Microgram per Cubic Meter; ppm = Parts Per Million

Source: Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} was obtained from SCAQMD Air Quality Data Tables.

Standards of Significance

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the Initial Study Checklist in Appendix G of the State CEQA Guidelines (14 CCR §§15000, et seq.), which are listed at the beginning of this section. The SCAQMD has also developed regional significance thresholds for other regulated pollutants, as summarized at Table III-5. The SCAQMD's CEQA Air Quality Significance Thresholds (March 2015) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

**Table III-5
MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS**

Pollutant	Construction Thresholds	Operations Thresholds
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM₁₀	150 lbs/day	150 lbs/day
PM_{2.5}	55 lbs/day	55 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

Source: Regional Thresholds presented in this table are based on the SCAQMD Air Quality Significance Thresholds, March 2015

Impact Analysis

- a. ***Less Than Significant Impact*** – Projects such as the proposed Jefferson Avenue Apartment Project do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. In March 2017, the AQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993) (34). These indicators are:

Consistency Criterion No. 1: The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs or regional significance thresholds were exceeded. As evaluated, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

As evaluated, the Project's regional and localized operational-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, a less than significant impact is expected.

Conclusion

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

Consistency Criterion No.2: The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Murrieta General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities.

Operational Impacts – Consistency Criterion 2

The City of Murrieta General Plan designates the Project site as MFR. The MFR designation provides for attached and detached apartments and condominiums. Typical development consists of townhomes, condominiums, apartments, senior housing, and stacked flats. MFR encourages the development of integrated projects that provide complementary open spaces and amenities onsite (5). As previously stated, the total development is proposed to consist of 160 market rate apartments. The uses proposed by the Project are consistent with the City's land use designation. Additionally, the Project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds. On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion and Significance Determination

The Project would not result in or cause NAAQS or CAAQS violations. The proposed Project is consistent with the land use and growth intensities reflected in the adopted General Plan. Furthermore, the Project would not exceed any applicable regional or local thresholds. As such, the Project is therefore considered to be consistent with the AQMP, and would have a less than significant potential to conflict with or obstruct implementation of the applicable air quality plan.

- b. *Less Than Significant Impact* – Air pollution emissions associated with the proposed Project would occur over both a short and long-term time periods. Short-term emissions include fugitive dust from construction activities (i.e., site prep, demolition, grading, and exhaust emission) at the proposed Project site. Long-term emissions generated by future operation of the proposed Project primarily include energy consumption and trips generated by the future development.

Construction Emissions

Construction activities associated with the Project will result in emissions of VOCs, NOX, SOX, CO, PM10, and PM2.5. Construction related emissions are expected from the following construction activities: Site Preparation; Grading; Building Construction; Paving; and, Architectural Coating.

Grading Activities

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions". Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Based on information provided by the Project Applicant, earthwork to include 59,300 cubic yards of import. For purposes of analysis, the import quantity will be modeled with the CalEEMod default hauling trip length of 20 miles.

Construction Worker Vehicle Trips

Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were estimated based on information from CalEEMod defaults.

Construction Duration

Construction is expected to commence in May 2021 and will last through August 2022. The construction schedule utilized in the analysis, shown in Table III-6, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.¹ The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines. The duration of construction activity was based on the 2022 or 2023 opening year.

¹ As shown in the CalEEMod User's Guide Version 2016.3.2, Section 4.3 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

**Table III-6
CONSTRUCTION DURATION**

Phase Name	Duration
Site Preparation	10
Grading	158
Building Construction	180
Paving	20
Architectural Coating	20

Source: Construction activity based on the 2022 or 2023 opening year.

Construction Equipment

Site specific construction fleet may vary due to specific project needs at the time of construction. The associated construction equipment was generally based on CalEEMod 2016.3.2 defaults. A detailed summary of construction equipment assumptions by phase is provided at Table III-7.

**Table III-7
CONSTRUCTION EQUIPMENT ASSUMPTIONS**

Activity	Equipment	Amount	Hours per Day
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Grading	Crawler Tractors	3	8
	Excavators	1	8
	Graders	1	8
	Rubber Tired Dozers	1	8
Building Construction	Cranes	1	8
	Crawler Tractors	3	8
	Forklift	3	8
	Generator Sets	1	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

Source: In order to account for fugitive dust emissions associated with Site Preparation and Grading activities, Crawler Tractors were used in lieu of Tractors/Loaders/Backhoes.

Construction Impacts without Mitigation

CalEEMod calculates maximum daily emissions for summer and winter periods. The estimated maximum daily construction emissions without mitigation are summarized on Table III-8. Detailed construction model outputs are presented in Appendix 3.1 of the AQIA. Under the assumed scenarios, emissions resulting from the Project construction will not exceed criteria pollutant thresholds established by the SCAQMD for emissions of any criteria pollutant.

Table III-8
CONSTRUCTION EMISSIONS SUMMARY (WITHOUT MITIGATION)

Year	Emissions (lbs/day)					
	VOC	NO _x	CO	SO _x	PM-10	PM-2.5
Summer						
2021	5.43	60.83	26.69	0.08	11.96	6.59
2022	59.17	48.03	44.42	0.11	5.24	2.72
Winter						
2021	5.43	60.84	25.38	0.08	11.96	6.59
2022	59.16	48.01	42.84	0.11	5.24	2.72
Maximum Daily Emissions	59.17	60.84	44.42	0.11	11.96	6.59
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	NO	NO	NO	NO	NO	NO

Source: CalEEMod construction-source (mitigated) emissions are presented in Appendix 3.2.

Operational Emissions

Operational activities associated with the proposed Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from the following primary sources: Area Source Emission, Energy Source Emissions, and Mobile Source Emissions.

Area Source Emissions

Architectural Coatings: Over a period of time the buildings that are part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using CalEEMod.

Consumer Products: Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

Hearths/Fireplaces: The emissions associated with use of hearths/fireplaces were calculated based on assumptions provided in CalEEMod. The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development. To account for the requirements of this Rule, the unmitigated CalEEMod default estimates were adjusted to remove wood burning stoves and fireplaces. As the project is required to comply with SCAQMD Rule 445, the removal of wood burning stoves and fireplaces is not considered "mitigation" although it must be identified as such in CalEEMod in order to treat the case appropriately. Project includes no fireplaces within the units. There will be a fire pit in front of the clubhouse and several natural gas-fired public BBQs.

Landscape Maintenance Equipment: Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod.

Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity: Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of

electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using CalEEMod. The project does include gas range/oven, gas clothes dryers, and gas water heaters.

Title 24 Energy Efficiency Standards: California's Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity. The 2016 version of Title 24 will be observed by this proposed project.

Mobile Source Emissions

The Project related operational air quality emissions derive primarily from vehicle trips generated by the Project. Trip characteristics available from the *Jefferson Avenue Apartments Traffic Impact Analysis* (TIA) report were utilized in this analysis (provided as Appendix 9a to this Initial Study)

Fugitive Dust Related to Vehicular Travel: Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of break and tire wear particulates. The emissions estimate for travel on paved roads were calculated using CalEEMod.

Operational Impacts without Mitigation

As previously stated, CalEEMod calculates maximum daily emissions for summer and winter periods. As such, operational activities for summer and winter scenarios are presented in Table III-9. Detailed construction model outputs are presented in Appendix 3.1 of the AQIA. As indicated, Project operation-source emissions would not exceed the SCAQMD regional thresholds of significance for any criteria pollutants. Therefore, a less than significant impact is expected, and no mitigation is required.

**Table III-9
OPERATIONAL EMISSIONS (UNMITIGATED)**

Operational Activities – Summer Scenario	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM-10	PM-2.5
Area Source	4.25	2.81	14.39	0.02	0.29	0.29
Energy Source	0.05	0.41	0.17	2.62E-03	0.03	0.03
Mobile Source	3.52	14.13	33.60	0.11	9.61	2.66
Total Maximum Daily Emissions	7.82	17.34	48.16	0.13	9.94	2.98
SCAQMD Thresholds	55	55	550	150	150	55
Exceeds Thresholds?	NO	NO	NO	NO	NO	NO

Operational Activities – Winter Scenario	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM-10	PM-2.5
Area Source	4.25	2.81	14.39	0.02	0.29	0.29
Energy Source	0.05	0.41	0.17	2.62E-03	0.03	0.03
Mobile Source	3.16	14.64	29.04	0.10	9.61	2.66
Total Maximum Daily Emissions	7.46	17.85	43.60	0.12	9.93	2.98
SCAQMD Thresholds	55	55	550	150	150	55
Exceeds Thresholds?	NO	NO	NO	NO	NO	NO

Source: CalEEMod construction-source (mitigated) emissions are presented in Appendix 3.2.

Conclusion

The development of the Jefferson Avenue Apartment Project would have a less than significant potential to 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. *Less Than Significant Impact* – The analysis makes use of methodology included in the SCAQMD Final Localized Significance Threshold Methodology (LST Methodology). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS and/or CAAQS. Collectively, these are referred to as LSTs. The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4². LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

For this Project, the appropriate Source Receptor Areas (SRA) for the LST analysis is the SCAQMD Temecula Valley (SRA 26). LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

For purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. As a conservative measure, it is assumed that a maximum of 5 acres per day can be actively disturbed during site preparation and grading activities.

Sensitive Receptors

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as "sensitive receptors". These structures typically include residences, hotels, hospitals, etc. as they are also known to be locations where an individual can remain for 24 hours. Consistent with the *LST Methodology*, the nearest land use where an individual could remain for 24 hours to the Project site (in this case the nearest residential land use) has been used to determine construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5}, since PM₁₀ and PM_{2.5} thresholds are based on a 24-hour averaging time.

As per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a full 24 hours but are typically onsite for 8 hours or less. The *LST Methodology* explicitly states that "*LSTs based on shorter averaging periods, such as the NO₂ and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours.*" For purposes of analysis, if an industrial/commercial use is located at a closer distance to the Project site than the nearest residential use, the nearest industrial/commercial use will be utilized to determine construction and operational LST air impacts for emissions of NO₂ and CO an individual could be present at these sites for periods of 1 to 8 hours.

Project-Related Sensitive Receptors

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual and cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site (in this case the nearest residential

² The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

land use) has been used to determine localized construction and operational air quality impacts for emissions of PM₁₀ and PM_{2.5} (since PM₁₀ and PM_{2.5} thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM₁₀ and PM_{2.5} is an existing residential community approximately 133 feet/41 meters west of the Project site. As such, the 41-meter distance will be used for evaluation of localized PM₁₀ and PM_{2.5} emission impacts.

The nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_x and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours. Thus, the nearest receptor used for evaluation of localized impacts of NO_x and CO is represented by the Jefferson Pointe Professional Center, located 15 feet/5 meters northwest of the Project site. It should be noted that the *LST Methodology* explicitly states that “*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.*” As such a 25-meter receptor distance will be used for evaluation of localized NO_x and CO.

LST Construction Activities

LSTs for a 5-acre site during construction are used as a screening tool to determine if further detailed analysis is required. The thresholds used in for the construction-source LST analysis are presented below in Table III-10.

**Table III-10
MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS**

Pollutant	Construction Localized Thresholds
NO _x	371 lbs/day
CO	1,965 lbs/day
PM ₁₀	29 lbs/day
PM _{2.5}	9 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD *LST Methodology*, July 2008

Table III-11 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. For evaluation of localized NO_x, and CO, the Jefferson Pointe Professional Center, the 25-meter distance will be used. Without mitigation, localized construction emissions would not exceed the applicable SCAQMD LSTs for emissions of any critical pollutant. Outputs from the model runs for unmitigated construction LSTs are provided in Appendix 3.1 of the AQIA.

**Table III-11
LOCALIZED SIGNIFICANCE SUMMARY OF CONSTRUCTION (WITHOUT MITIGATION)**

On-Site Site Preparation Emissions	Emissions (lbs/day)			
	NOx	CO	PM-10	PM-2.5
Maximum Daily Emissions	60.79	21.85	11.76	6.53
SCAQMD Thresholds	371	1,965	29	9
Exceeds Thresholds?	NO	NO	NO	NO
On-Site Grading Emissions	Emissions (lbs/day)			
	NOx	CO	PM-10	PM-2.5
Total Maximum Daily Emissions	39.95	16.38	6.05	3.00
SCAQMD Thresholds	371	1,965	29	9
Exceeds Thresholds?	NO	NO	NO	NO

LST Long-Term Operational Activity

The development of the proposed project is located on 9.18 acres. As previously stated, the total development is proposed to consist of 160 attached multifamily housing (mid-rise) DUs. According to SCAQMD *LST Methodology*, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

CO "Hot Spot" Analysis

As summarized on Table III-12, the intersection of Jefferson Avenue and Murrieta Hot Springs Road would generate the highest AM/PM traffic volumes of 2,461 vehicles per hour (vph) and 3,480 vph, respectively. As such, Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP. The Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO "hot spots" are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

**Table III-12
EAPC (2021) TRAFFIC VOLUMES**

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Jefferson Avenue/ Driveway 1	428/1,388	878/580	0/0	9/5	1,315/ 1,973
Jefferson Avenue/ Driveway 2	425/1,402	878/580	0/0	49/28	1,352/ 2,010
Jefferson Avenue/ Murrieta Hot Springs Road	486/2,225	918/591	40/81	1,016/582	2,461/ 3,480

Source: Jefferson Avenue Apartments Traffic Impact Analysis (Urban Crossroads, Inc., 2020)

Conclusion

Results of the LST analysis indicate that, without the application of mitigation, the Project will not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive

receptors would not be exposed to substantial criteria pollutant concentrations during Project construction.

Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

- d. *Less Than Significant Impact* – The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include: Agricultural uses (livestock and farming); Wastewater treatment plants; Food processing plants; Chemical plants; Composting operations; Refineries; Landfills; Dairies; and, Fiberglass molding facilities. The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short- term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: A biological resources assessment and multiple-species habitat conservation plan (MSHCP) consistency analysis has been prepared for the Jefferson Avenue Apartments Project entitled "Biological Resources Assessment and MSHCP Consistency Analysis for the Jefferson Avenue Apartment Project Assessor Parcel Number: 949-220-048" prepared by Jacobs Engineering Group, Inc., dated August 2020 (Appendix 2). The following summary information has been abstracted from this report.

Summary of Findings

Introduction

The purpose of the BRA is to address potential effects of the project to designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW [formerly California Department of Fish and Game]) and/or the California Native Plant Society (CNPS). As part of the BRA, the Project site was also assessed to determine the extent (if any) of State and federal jurisdictional waters (i.e. Waters of the U.S. and Waters of the State) within the Project Area potentially subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and CDFW under Section 1602 of the California Fish and Game Code (FGC), respectively. In addition to the

BRA, Jacobs prepared a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis, which is included in the scope of this report. As part of the City of Murrieta's approval process, a Western Riverside County MSCHP compliance report is required. The purpose of this report is to assess whether the proposed Project is consistent with the conditions and provisions identified in the MSCHP.

Environmental Setting

The Project Area is within an urban environment that is situated at the north end of the Temecula Valley, approximately 9.5 miles southeast of Lake Elsinore and east of the southern end of the Santa Ana Mountains. Hydrologically, the Project Area is situated within an undefined Hydrologic Sub-Area (HSA 902.32). This HSA comprises a 32,148-acre drainage area, within the larger Santa Margarita Watershed (HUC 18070302). Soils within the Project Area are comprised primarily of Hanford fine sandy loam, 0 to 2 percent slopes, Monserate sandy loam, 5 to 8 percent slopes, eroded, Monserate sandy loam, 8 to 15 percent slopes, eroded and Ramona very fine sandy loam, 0 to 8 percent slopes, eroded. Due to previous and ongoing weed abatement activities (i.e. mowing or disking), the site is completely disturbed and no longer supports any native habitat.

The Project site is dominated by invasive, non-native and ruderal native plant species including slender wild oat (*Avena barbata*), brome grasses (*Bromus* spp.), Turkey- mullein (*Croton setiger*), red-stem filaree (*Erodium cicutarium*), mustard (*Hirschfeldia incana*), stinknet (*Oncosiphon piluliferum*) and hairy vetch (*Vicia villosa*). Additionally, there is a city storm drain outlet on the northeast side of the site that drains the adjacent commercial development. Runoff during winter rains and dry weather urban runoff from this outlet appear to periodically collect near the center of the Project site. Vegetation within the area around the drain outlet and swale is dominated by invasive, non-native species including scarlet pimpernel (*Lysimachia arvensis*), hood canarygrass (*Phalaris paradoxa*), curly dock (*Rumex crispus*) and saltcedar (*Tamarix ramosissima*). There are also several scattered mulefat (*Baccharis salicifolia*) and a re-sprouted Goodding's willow (*Salix gooddingii*) and Fremont cottonwood (*Populus fremontii*).

No wildlife species were observed within the Project Area during the BRA survey. Due to the level of disturbance within the Project Area and the site's proximity to surrounding existing development, only those wildlife species that are adapted to urban environments are expected to occur within the Project Area.

Of the 12 State- and/or federally-listed or Candidate species documented within the Murrieta quad, only the federally-listed as threatened spreading navarretia (*Navarretia fossalis*) and the State- and federally- listed as endangered least Bell's vireo (*Vireo bellii pusillus*) has been documented in the Project vicinity (within approximately 1 mile). No other State and/or federally listed species have been documented in the Project vicinity and due to the absence of suitable habitat on site, none are expected to occur.

Special Status Species and Species

Spreading Navarretia – Threatened (Federal): The federally listed as threatened spreading navarretia is an annual herb in the phlox family (Polemoniaceae). This species is present within the Project Area. Per the literature review, spreading navarretia has been documented within the Project site (1998) and immediate vicinity (CNDDDB 2020). Additionally, on May 6, 2020, botanist CJ Fotheringham identified several individual spreading navarretia on site, near the storm drain outlet on the northeast side of the Project site where runoff from the adjacent commercial development appears to periodically collect.

Least Bell's Vireo – Endangered (Federal and State): The least Bell's vireo (LBVI) is a State and federally listed endangered migratory bird species. This species is a small, olive-gray migratory songbird that nests and forages almost exclusively in riparian woodland habitats. The least Bell's vireo (LBVI) is a State and federally listed endangered migratory bird species.

Burrowing owl – Species of Special Concern (SSC): The burrowing owl (BUOW) is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. BUOW have not been documented within the Project Area. Per the literature review, the nearest

documented BUOW occurrence (2008) is approximately 0.7 miles south of the Project site (CNDDDB 2020). The result of the protocol-level BUOW presence/absence surveys that were conducted in April 2020 is that no burrowing owl individuals or sign were observed during the surveys. Furthermore, no burrowing owl individuals or sign were observed during the BRA survey conducted by Jacobs in July of 2020. Therefore, BUOW are considered absent from the Project Area at the time of survey.

MSHCP Consistency

The Project is consistent with the MSHCP policies found Section 6 which include Riparian/Riverine Areas/ Vernal Pools, Narrow Endemic Plant Species, Urban/Wildlands Interface, and Surveys for Special Status Species (BUOW).

Impact Analysis

- a. *Less Than Significant With Mitigation Incorporated* – Implementation of the Project does not have a potential for a significant adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. As discussed above, the proposed project does contain habitat suitable for burrowing owl within the project site; however, protocol-level presence/absence surveys that were conducted in April of 2020 indicate that no burrowing owl individuals or sign were observed during the surveys. Furthermore, no burrowing owl individuals or sign were observed during the BRA survey conducted by Jacobs in July of 2020. Therefore, BUOW are considered absent from the Project area at the time of survey and the Project is not likely to impact this species. Though the results of the habitat assessment survey will remain valid for the period of one year, or until April 2021, the following contingency mitigation measure shall be implemented to ensure that impacts to BUOW are less than significant:

BIO-1 *The Applicant shall be required to obtain another BUOW protocol survey if the site has not been disturbed prior to April 2021 to determine the persisting absence of BUOW onsite. Because BUOW are protected by applicable State and/or federal laws, including but not limited to the California Fish and Game Code (FGC) and Migratory Bird Treaty Act of 1918 (MBTA), if BUOW are found onsite during work activities, all activities likely to affect the animal(s) shall cease immediately and regulatory agencies shall be contacted to determine appropriate management actions.*

This is a contingency mitigation measure since the site does not contain any evidence of burrowing owls at present. This measure will ensure that if the site is inactive for a year after the April 2020 protocol survey, any burrowing owl that may come to inhabit the site will be properly protected. The federally listed as threatened spreading navarretia were identified several onsite near the storm drain outlet on the northeast side of the Project site on May 6, 2020. However, this species is a Covered Species under the Western Riverside County MSHCP and the proposed Project would qualify as a Covered Activity for which incidental take of a covered species has been provided for under the MSHCP. As previously described in this document, the Project site is not within any Criteria Cells, Cell Groups, or other areas identified for conservation under the MSHCP. Therefore, Project-related impacts to spreading navarretia are covered under the Incidental Take Permit issued for the MSHCP and mitigation for Project-related impacts to this species is provided through payment of the MSHCP Local Development Mitigation Fee. Given that no other State- and/or federally-listed threatened or endangered species, or other sensitive species are anticipated to occur within the project site based on the results of the BRA, the proposed project would have a less than significant potential to have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS with implementation of mitigation measure **BIO-1**.

- b. *Less Than Significant Impact* – Implementation of the proposed project will not have an adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies,

regulations, or by the CDFW or USFWS. The Project site consists of a disturbed 9.17-acre vacant lot that is surrounded on three sides by existing development and on one side by an adjacent vacant parcel. Due to previous and ongoing weed abatement activities (i.e. mowing or disking), the site is completely disturbed and no longer supports any native habitat. The Project site is dominated by invasive, non-native and ruderal native plant species. According to the BRA provided as Appendix 2 to this Initial Study, the Project site is not within any sensitive habitats, including any USFWS designated Critical Habitat for any federally-listed species. No Riparian/Riverine areas were found within the Project site. There are no natural or man-made streams or other aquatic or riparian habitats within the Project site. There is a graded swale where runoff from an outlet located along the northeast side of the site periodically collects, which supports a small cluster of mulefat, one willow re-sprout and one cottonwood re-sprout (see attached Site Photos). However, this vegetation is sparse, immature and not developed sufficiently enough to provide the biological functions and values required to support any of the sensitive riparian associated species that occur within the Plan Area. Based on the field survey conducted by Jacobs, and the information contained in Appendix 2, the proposed project has a less than significant potential to impact to riparian habitat or other sensitive communities are anticipated to occur as a result of implementation of the proposed project. No mitigation is required.

- c. *Less Than Significant Impact* – Please refer to the discussion under IV(b) above. According to the data gathered by Jacobs in Appendix 2, no federally protected wetlands occur within the project footprint. Additionally, the BRA determined that no Vernal Pools were identified within the Project site and based on a review of historic aerial imagery and USGS topographic maps, no vernal pools or other natural wetland features existed historically within the Project site. Storm-related runoff and dry weather urban runoff from the adjacent commercial development to the northeast collects near the existing outlet and appears to dissipate near the center of the Project site. However, the duration of any ponding that may result is brief and likely not of enough duration to support any listed crustacean (fairy shrimp) species associated with vernal pools in the MSHCP area. A total of 5.39 inches of rainfall occurred within the Project Area during March and April of 2020, which is almost double the average rainfall amount for March and April (2.78 inches) for this area. However, by the first week of May 2020, there was no longer any surface water present on site. Furthermore, the depressional areas where runoff collects within the Project site do not fit into the overall ecological system as a wetland or vernal pool, given that the site is completely disturbed and surrounded by existing development, and the only source of runoff is a man-made outlet that drains an existing commercial development. Therefore, implementation of the proposed project will have no potential to impact any federally protected wetlands—including, but not limited to, marsh, vernal pool, coastal, etc.—through direct removal, filling, hydrological interruption, or other means. No mitigation is required.
- d. *Less Than Significant With Mitigation Incorporated* – As indicated previously, the site and environs are completely urbanized; no large areas of open space exist in the immediate project area that would facilitate wildlife movement. Furthermore, wildlife movement would be constrained by the existing arterial roadway system that borders the project site, as well as the intensive urban development surrounding the project. However, when development proceeds, the project site could contain nesting birds, which could be adversely impacted. The federal Migratory Bird Treaty Act (MBTA) protects all native bird species. Impacts to these other bird species are not permitted in any part of the MSHCP area. A variety of birds, which are protected by the MBTA, could nest in the proposed project area. As such, to prevent interfering with native bird nesting, the following mitigation measure shall be implemented.

BIO-2 *The State of California prohibits the “take” of active bird nests. To avoid impacts to nesting birds (common and special status) during the nesting season (generally between February 1 to August 31), a qualified Avian Biologist shall conduct pre-construction nesting bird survey prior to Project-related disturbance to identify any active nests. If no active nests are found, no further action would be required. If an active nest is found, the biologist shall set appropriate no-work buffers around the nest, which would be*

determined based on the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

Thus, with implementation of the above measure, any effects on wildlife movement or the use of wildlife nursery sites can be reduced to a less than significant impact.

- e. *Less Than Significant Impact* – Based on the field survey, the project footprint contains a few trees that will be removed as part of the proposed project including a re-sprouted Goodding's willow (*Salix gooddingii*) and Fremont cottonwood (*Populus fremontii*). The City of Murrieta's Tree Preservation Ordinance (Municipal Code Section 16.42) defines protected trees under the ordinance as:
- A. Mature Native Oak Tree;
 - B. Mature Native Tree;
 - C. Mature Tree;
 - D. Historically Significant Tree; or,
 - E. Any tree required to be planted or preserved as environmental mitigation, or condition of approval for a discretionary permit.

Given the above definition, the trees that are located onsite are not believed to fall under the City of Murrieta's Tree Preservation Ordinance. Therefore, implementation of the proposed project has no potential to adversely impact any trees protected by the City of Murrieta's Tree Ordinance, and it will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. No impacts are anticipated and no mitigation is required.

- f. *Less Than Significant With Mitigation Incorporated* – The Project site is located within the Western Riverside County MSHCP, Southwest Area Plan. Per the Western Riverside County Regional Conservation Authority's online MSHCP Information Tool query, the Project site is within the Santa Ana Mountains Habitat Management Unit (HMU), but the Project site is not mapped within or adjacent to a Criteria Cell or Cell Group, and is therefore not targeted for conservation. Furthermore, the Project site is not mapped within any required survey areas for amphibians, mammals, Narrow Endemic Plants or other Criteria Area Species. However, the Project site is within a BUOW survey requirement area. Therefore, in addition to the BRA survey, a BUOW habitat suitability assessment survey and protocol-level presence/absence surveys were conducted for the Project area in accordance with the MSHCP requirements.

The Project is consistent with the MSHCP policies found Section 6 which include Riparian/Riverine Areas/ Vernal Pools, Narrow Endemic Plant Species, Urban/Wildlands Interface, and Surveys for Special Status Species (BUOW):

- The site is not mapped within any MSHCP Criteria Cell or Subunit.
- The site is not located in an area where additional surveys are required for any Amphibian, Mammal or other Criteria Area Species.
- The Project will not impact any Riparian/Riverine or Vernal Pool areas.
- The site is not within or adjacent any MSHCP Conservation Areas and therefore does not require mitigation measures pursuant Section 6.1.4 (pertaining to Urban/Wildlands Interface) of the MSHCP, which presents guidelines to minimize indirect effects of projects in proximity to the MSCHP Conservation Areas.
- The site is located within a BUOW survey area, as required by the MSHCP. However, a BUOW habitat suitability assessment was conducted and the result of survey was that no suitable BUOW

habitat exists on site and this species is considered absent from the Project Area at the time of survey.

- The site is not located within a Narrow Endemic Plant Species survey area and impacts to the federally listed spreading navarretia are covered under the MSHCP Incidental Take Permit. Mitigation for Project-related impacts to this species is provided through payment of the MSHCP Local Development Mitigation Fee.

Therefore, with implementation of mitigation measure **BIO-1** to protect BUOW, the proposed project will not have any adverse impact on locally protected species. No further mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: A cultural resources report has been prepared to evaluate the potential for cultural resources to occur within the project area of potential effect entitled “Historical/Archaeological Resources Survey Report: Jefferson Avenue Apartment Project, Assessor’s Parcel Number 949-220-048, City of San Murrieta, Riverside County, California” prepared by CRM TECH dated May 22, 2020 (Appendix 3). The following summary information has been abstracted from this report. It provides an overview and findings regarding the cultural resources found within the project area.

Background

As a part of the environmental review process for the undertaking, a Historical/Archaeological Resources Survey Report was prepared to in compliance with the California Environmental Quality Act (CEQA). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed Project would cause substantial adverse changes to any “historical resources,” as defined by CEQA, that may exist in or around the project area.

The purpose of the study is to provide the City of Murrieta with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any “historical resources,” as defined by CEQA, that may exist in or near the project area. In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, consulted with Native American and local community representatives, and carried out an intensive-level field survey.

The results of the records search indicate that two historic-period sites, 33-005785 (CA-RIV-5517H) and 33-005787 (CA-RIV-5519H), were previously recorded in the project area, and the field survey confirmed their continued presence. Site 33-005785 consists of a barbed-wire fence line of unknown age, while Site 33-005787 represents a concrete-and-stone “cooler” building constructed by a family of early settlers and local ranchers, the Rails, in 1936. Neither of these sites, however, meet any of the criteria for listing in the California Register of Historical Resources. As such, neither of them qualifies as a “historical resource” for CEQA-compliance purposes, although the 84-year-old cooler building at Site 33-005787 retains some local historical interest to the community. No other potential “historical resources” were identified within the project area.

Based on the research results summarized above, No Impacts related to “historical resources” are anticipated. No further cultural resources investigation is anticipated to be necessary under CEQA provisions unless the development plans undergo such changes as to include areas not covered by the cultural resources survey. However, in the interest of preserving the community’s historical heritage whenever possible, further consultation with the Murrieta Valley Historical Society is recommended to explore the possibility for the society to salvage the cooler building at 33-005787. If buried cultural materials are encountered during any earth-moving operations associated with the project, all work in that area should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

- a&b. *Less Than Significant With Mitigation Incorporated* – The Historical and Archaeological Resources Survey Report provided as Appendix 3 summarizes the findings of a cultural resources records search and field survey that was completed for this Project. The cultural resources report concluded that there are no such resources within the site, and as such no further cultural resources have been identified as being located on site. However, as stated in the summary above, further consultation with the Murrieta Valley Historical Society is recommended to explore the possibility for the society to salvage the spring structure within the project site. As such, the following mitigation measure shall be implemented to ensure this consultation occurs:

CUL-1 *The Applicant has initiated consultation with the Murrieta Valley Historical Society (MVHS) to explore the possibility of salvaging the spring structure and relocating it to at an off-site location. The Applicant shall provide MVHS an opportunity for the salvaging of the spring building at a location off-site, if desired by the MVHS. The Applicant shall not be required to retain the structure within the project site. The Applicant shall assist the MVHS with the relocation effort if requested. Further, the Applicant shall discuss placing a historical marker placard at the project site to commemorate the spring structure's historical significance to the community.*

CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

Per the above discussion and definition, no other historical or archaeological sites or isolates were about to be located within the Project boundaries; thus, none of them requires further consideration during this study. In light of this information and pursuant to PRC §21084.1, the following conclusions have been reached for the Project:

- No historical resources within or adjacent to the Project area have any potential to be disturbed as they are not within the proposed area in which the facilities will be constructed and developed, and thus, the Project as it is currently proposed will not cause a substantial adverse change to any known historical resources.
- No further cultural resources investigation is necessary for the proposed project unless construction plans undergo such changes as to include areas not covered by this study.

However, if buried cultural materials are accidentally exposed/discovered during any earth-moving operations associated with the Project, the following mitigation measure shall be implemented:

CUL-2 *Should any subsurface or other cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the City's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.*

With the above contingency mitigation incorporation, potential for impact to cultural resources will be reduced to a less than significant level. No additional mitigation is required.

- c. *Less Than Significant Impact* – As noted in the discussion above, no available information suggests that human remains may occur within the APE and the potential for such an occurrence is considered very low. Human remains discovered during the project will need to be treated in accordance with

the provisions of HSC §7050.5 and PRC §5097.98, which is mandatory. State law (Section 7050.5 of the Health and Safety Code) as well as local laws requires that the Police Department, County Sheriff and Coroner's Office receive notification if human remains are encountered. Compliance with these laws is considered adequate mitigation for potential impacts and no further mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. ENERGY: Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: An Energy Analysis (EA) was prepared for the proposed project, it is provided as Appendix 4 to this Initial Study, is titled "Jefferson Avenue Apartments, Energy Analysis, City of Murrieta," prepared by Urban Crossroads dated May 22, 2020.

Existing Conditions

The most recent data for California's estimated total energy consumption is from 2017 and natural gas consumption is from 2018, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2020 and included:

- Approximately 7,881 trillion British Thermal Unit (BTU) of energy was consumed;
- Approximately 2,137 billion cubic feet of natural gas

The California Energy Commission's (CEC) Transportation Energy Demand Forecast 2018-2030 was released in order to support the 2017 Integrated Energy Policy Report. The Transportation energy Demand Forecast 2018-2030 lays out graphs and data supporting their projections of California's future transportation energy demand. The projected inputs consider expected variable changes in fuel prices, income, population, and other variables. Predictions regarding fuel demand included:

- Gasoline demand in the transportation sector is expected to decline from approximately 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030
- Diesel demand in the transportation sector is expected to rise, increasing from approximately 3.7 billion diesel gallons in 2015 to approximately 4.7 billion in 2030
- Data from the Department of Energy states that approximately 3.9 billion gallons of diesel fuel were consumed in 2017

The most recent data provided by the EIA for energy use in California by demand sector is from 2017 and is reported as follows:

- Approximately 40.3% transportation;
- Approximately 23.1% industrial;
- Approximately 18.0% residential; and
- Approximately 18.7% commercial

In 2018, total system electric generation for California was 285,488 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 194,842 GWh which accounted for approximately 68% of the electricity it uses; the rest was imported from the Pacific Northwest (14%) and the U.S. Southwest (18%) (7). Natural gas is the main source for electricity generation at 47% of the total in-state electric generation system power as shown in Table VI-1.

Table VI-1
TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2018)

Fuel Type	CA In-State Generation (GWh)	Percent of CA In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	CA Power Mix (GWh)	Percent CA Power Mix (GWh)
Coal	294	0.15%	399	8,740	9,433	3.30%
Large Hydro	22,096	11.34%	7,418	985	30,499	10.68%
Natural Gas	90,691	46.54%	49	8,904	99,644	34.91%
Nuclear	18,268	9.38%	0	7,573	25,841	9.05%
Oil	35	0.02%	0	0	35	0.01%
Other	430	0.22%	0	9	439	0.15%
Renewables	63,028	32.35%	14,074	12,400	89,502	31.36%
Biomass	5,909	3.03%	772	26	6,707	2.35%
Geothermal	11,528	5.92%	171	1,269	12,968	4.54%
Small Hydro	4,248	2.18%	334	1	4,583	1.61%
Solar	27,265	13.99%	174	5,094	32,533	11.40%
Wind	14,078	7.23%	12,263	6,010	32,711	11.46%
Unspecified	N/A	N/A	17,576	12,519	30,095	10.54%
Total	194,843	100%	39,517	51,130	285,488	100%

Source: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html

An updated summary of, and context for energy consumption and energy demands within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below:

- California was the seventh-largest producer of crude oil among the 50 states in 2018, and, as of January 2019, it ranked third in oil refining capacity.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation’s jet fuel consumption in 2018.
- California’s total energy consumption is second-highest in the nation, but, in 2018, the state’s per capita energy consumption was the fourth-lowest, due in part to its mild climate and its energy efficiency programs.
- In 2018, California ranked first in the nation as a producer of electricity from solar, geothermal, and biomass resources and fourth in the nation in conventional hydroelectric power generation.
- In 2018, large- and small-scale solar photovoltaic (PV) and solar thermal installations provided 19% of California’s net electricity generation.

As indicated above, California is one of the nation’s leading energy-producing states, and California per capita energy use is among the nation’s most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

Electricity

The usage associated with electricity use were calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The Southern California region’s electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station.

Electricity is provided to the Project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area

encompassing approximately 50,000 square miles. SCE derives electricity from varied energy resources including fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator (ISO) is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities (such as SCE) still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that sufficient power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities.

Table VI-2 identifies SCE's specific proportional shares of electricity sources in 2018. As indicated in Table VI-2, the 2018 SCE Power Mix has renewable energy at 36% of the overall energy resources. Geothermal resources are at 8%, wind power is at 13%, large hydroelectric sources are at 1%, solar energy is at 13%, and coal is at 0%. Biomass and waste sources have increased by 1% since 2017. Natural gas remains at 17% since 2017.

**Table VI-2
SCE 2017 POWER CONTENT MIX**

Energy Resources	2017 SCE Power Mix
Eligible Renewable	36%
Biomass & waste	1%
Geothermal	8%
Small Hydroelectric	1%
Solar	13%
Wind	13%
Coal	0%
Large Hydroelectric	4%
Natural Gas	17%
Nuclear	6%
Other	0%
Unspecified Sources of Power*	37%
Total	100%

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

Natural Gas

The usage associated with natural gas use were calculated using the CalEEMod Version 2016.3.2. Natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The California Public Utilities Commission (CPUC) oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

Transportation Energy Sources

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2018, the Department of Motor Vehicles (DMV) identified 35 million registered vehicles in California, and those vehicles (as noted previously) consume an estimated 19 billion gallons of fuel each year. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 170,000 miles of highways and major roadways, more than 27 million passenger vehicles and light trucks, and almost 8 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. Petroleum comprises about 92% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. Nearly 19 billion gallons of on-highway fuel are burned each year, including 15.1 billion gallons of gasoline (including ethanol) and 3.9 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2016, Californians also used 194 million therms (a measure of energy content of natural gas) of natural gas as a transportation fuel, or the equivalent of 155 million gallons of gasoline.

Evaluation Criteria and Methodology

In compliance with Appendix G of the *State CEQA Guidelines*, this report analyzes the Project's anticipated energy use to determine if the Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

In addition, Appendix F of the *State CEQA Guidelines*, states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

Construction Energy Demands

The Jefferson Avenue Apartments development would develop 160 multi-family DUs over the course of 15 months. The total power cost of the onsite electricity usage during the construction of the Project is estimated to be approximately \$13,101.96, while the total electricity usage from onsite Project construction related activities is estimated to be approximately 137,727 kWh.

Project construction activities would consume an estimated 77,359 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. Additionally, it is estimated that 18,467 gallons of fuel will be consumed related to construction worker trips during full construction of the Project. It is estimated that 3,479 gallons of fuel will be consumed related to construction vendor trips from medium-heavy duty trucks during full construction of the Project, while it is estimated that 3,609,755 gallons of fuel will be consumed related to construction vendor trips from heavy-heavy duty trucks during full construction of the Project.

Construction Energy Efficiency/Conservation Measures

The equipment used for Project construction would conform to CARB regulations and California emissions standards. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

The Project shall utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle

idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations and best available control measures (BACM). More specifically, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. To this end, "grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Indirectly, construction energy efficiencies and energy conservation would be achieved for the proposed development through energy efficiencies realized from bulk purchase, transport and use of construction materials.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

Operational Energy Demands

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by resident, employee, and patron vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Energy Demands

As summarized on Table VI-3, the Project will result in 3,986,938 annual VMT and an estimated annual fuel consumption of 178,439 gallons of fuel.

**Table VI-3
TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION – ALL VEHICLES**

Vehicle Type	Annual VMT	Estimated Annual Fuel Consumption (gallons)
Light Duty Autos	2,174,986	66,854
Light Duty Trucks-1 ¹	146,943	5,402
Light Duty Trucks-2 ²	741,698	28,882
Medium Duty Trucks	459,845	22,338
Light-Heavy Duty Trucks-1 ³	60,689	4,252
Light-Heavy Duty Trucks-2 ⁴	19,815	1,340
Medium-Heavy Duty Trucks	69,871	6,982
Heavy-Heavy Duty Trucks	277,204	39,046

Vehicle Type	Annual VMT	Estimated Annual Fuel Consumption (gallons)
Other Bus	5,570	850
Urban Bus	4,625	928
Motorcycle	18,129	474
School Bus	3,716	463
Motor Home	3,847	627
TOTAL (ALL VEHICLES)	3,986,938	178,439

¹ Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

² Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

³ Vehicles under the LHDT1 category have a GVWR of 8,501 to 10,000 lbs.

⁴ Vehicles under the LHDT2 category have a GVWR of 10,001 to 14,000 lbs.

Facility Energy Demands

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCalGas; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized in Table VI-4.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or “plug-in” energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

Table VI-4
PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

Natural Gas Demand	kBTU/year
Apartments Mid Rise	1,623,860
Other Asphalt Surfaces	0
Parking Lot	0
TOTAL PROJECT NATURAL GAS DEMAND	1,623,860
Electricity Demand	kWh/year
Apartments Mid Rise	602,480
Other Asphalt Surfaces	0
Parking Lot	47,600
TOTAL PROJECT ELECTRICITY DEMAND	650,080

kBTU – kilo-British Thermal Units

Operational Energy Efficiency/Conservation Measures

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title24, California Green Building Standards Code). Although this project does not include solar facilities, it does include 34 electric vehicle charging stations.

It should also be noted that the Project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy

delivery systems or infrastructure because it would be served by the existing electric utility lines in the Project vicinity.

Project annual fuel consumption estimates presented previously in Tables VI-3 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Impact Analysis

- a. *Less Than Significant Impact* – As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California.
- b. *Less Than Significant Impact* – The Project is subject to California Building Code requirements. New buildings must achieve compliance with 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements.

The Project would provide for, and promote, energy efficiencies equal to or beyond those required under other applicable federal and State of California standards and regulations, and in so doing would meet or exceed all California Building Standards Code Title 24 standards. Moreover, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other residential uses of similar scale and intensity that are constructed and operating in California. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: A Geotechnical Evaluation report has been prepared to evaluate the potential geology and geotechnical constraints and impacts within the project area dated May 12, 2020, revised June 05, prepared by EEI Engineering Solutions (Appendix 5).

a. i. Ground Rupture

Less Than Significant Impact – The Project site is located in the City of Murrieta, which is an area with several active faults, including two Alquist-Priolo Special Study Zones classified as such under the Alquist-Priolo Earthquake Fault Zoning Act. Figure VII-1 shows where these faults are located as indicated by the City of Murrieta General Plan 2035. According to Figure VII-1, the larger Alquist Priolo zone traverses along Jefferson Avenue. The City of Murrieta requires any proposed tracts of four or more dwelling units to investigate the potential for and setback from ground rupture hazards. According to existing published geological information, the southwestern portion of the site is partially located within an Alquist-Priolo Earthquake Fault zone. The Geotechnical Investigation concluded

that there is no indication of active faulting (Holocene age, less than 11,000 before present). However, the Geotechnical Investigation recommends the establishment of a 50 foot-wide “Restricted Use Zone (RUZ)” from the edge of pavement on Jefferson Avenue for the proposed structures, which has been incorporated into the project design. Additionally, given the strong potential for groundshaking at the site, the following mitigation measure shall be implemented to ensure that the seismic design values outlined in the Geotechnical Investigation are incorporated into the final design for the proposed structures of the Jefferson Avenue Apartments Project.

GEO-1 Based upon the geotechnical investigation (Appendix 5 of this document), all of the recommended seismic design parameters identified in Appendix 5 (beginning on Page 5) shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including seismic soil stability on future project-related structures.

Please note: Garage 17 and Garage 18 are within the 50-foot Alquist Priolo “Restricted Use Zone”. The California Alquist Priolo Act specifically states that “habitable” structures are prohibited in this 50’ zone. Garages are not considered habitable structures, and are therefore acceptable. It should be realized that the purpose of the seismic design utilizing the above parameters is to safeguard against major structural failures and loss of life, but not to prevent damage altogether. Even if the structural engineer provides designs in accordance with the applicable codes for seismic design, the possibility of damage cannot be ruled out from a moderate to strong earthquake. Therefore, any impacts under this issue are considered less than significant with the implementation of the mitigation measure above.

ii. Strong Seismic Ground Shaking

Less Than Significant With Mitigation Incorporated – Several faults run through the City, and as with much of southern California, and the proposed structures will be subject to strong seismic ground shaking impacts should any major earthquakes occur in the future, particularly because the site is adjacent to/within the Elsinore Fault Zone, which, at this location is classified as an Alquist-Priolo Earthquake Zone. Additionally, several active Fault Zones as defined by Riverside County travel throughout the City, particularly in the area of the City in which the Project site is located as shown in Figure VII-1 which depicts the City’s General Plan Map of Riverside County Earthquake Fault Zones that traverse the City. As a result, and like all other development projects in the City and throughout the Southern California Region, the proposed Project will be required to comply with all applicable seismic design standards contained in the 2020 California Building Code (CBC), including Section 1613 Earthquake Loads. Compliance with the CBC will ensure that structural integrity of the occupied buildings will be maintained in the event of an earthquake. Furthermore, the Geotechnical Investigation concluded that there is no indication of active faulting; however, the seismic design parameters outlined in the Geotechnical Report shall be enforced through the implementation of mitigation measure **GEO-1** above. With implementation of this measure, impacts associated with strong ground shaking will be less than significant.

iii. Seismic-Related Ground Failure Including Liquefaction

Less Than Significant With Mitigation Incorporated – The Geotechnical Investigation includes seismic design measures that apply to liquefaction potential. The groundwater table at the site is on the order of 25 feet below grade, and up to 47 feet of relatively loose and generally granular alluvial deposits were encountered within the north-northeastern portion of the site. Based on the results of this and previous investigations at the site, the potential of liquefaction in the north-northeastern portion of the site is considered likely (see Figure VII-2). Therefore, remedial measures to alleviate and/or minimize the effect of liquefaction on the proposed improvements within the northern portion of the site are necessary. According to the Geotechnical Investigation, remedial grading measures to preclude or reduce the risk of damage resulting from liquefaction in this area of the site should be considered. As

such, the following mitigation measure that will enforce the overall geotechnical design parameters introduced in the Geotechnical Investigation shall be implemented:

GEO-2 *Based upon the geotechnical investigation (Appendix 5 of this document), all of the recommended design parameters identified in Appendix 5 (beginning on Page 10 at "Grading Recommendations") shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including remediation to address liquefaction.*

A combination of a "Remedial Grading" and utilization of a "Rigid Shallow Foundation System" enforced by the mitigation measure above will ensure that impacts associated with liquefaction will be less than significant.

iv. Landslides

Less Than Significant Impact – The project site is located in the City of Murrieta, and according to the City of Murrieta State Seismic Hazard Zone Map (Figure VII-3), the proposed project is not located in an area with an earthquake induced landslide potential. Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. Additionally, according to the Geotechnical Investigation, due to the presence of the very low onsite gradient, the potential for seismically induced landsliding to occur is very low. Therefore, the potential impacts related to landslide at the project site are considered less than significant.

- b. *Less Than Significant With Mitigation Incorporated* – The potential for soil erosion, loss of topsoil, and/or placing structures on unstable soils is anticipated to be marginally possible at the site during ground disturbance associated with construction. The project site is vacant with some non-native vegetation coverage. City grading standards, best management practices and the Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) are required to control the potential significant erosion hazards. The topography of the site generally slopes from the highest point to the south.

During Project construction when soils are exposed, temporary soil erosion could occur, which could be exacerbated by rainfall. Project grading would be managed through the preparation and implementation of a SWPPP, and will be required to implement best management practices to achieve concurrent water quality controls after construction is completed and the Jefferson Avenue Apartments are in operation. The following mitigation measures or equivalent best management practices (BMPs) shall be implemented to address these issues:

GEO-3 *Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. If covering is not feasible, then measures such as the use of straw bales or sandbags shall be used to capture and hold eroded material on the Project site for future cleanup.*

GEO-4 *All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Jefferson Avenue Apartments being constructed.*

With implementation of the above mitigation measures, implementation of the SWPPP, WQMP, and associated BMPs, any impacts under this issue are considered less than significant.

- c. *Less Than Significant With Mitigation Incorporated* – Refer to the discussion under VII(a), above. Potential instability associated with slope stability related to the project was determined to be less than significant. Mitigation measure **GEO-2** is required to minimize liquefaction impacts as there is a

likely potential for liquefaction to occur on the north- northwestern portion of the project site. According to the Geotechnical Report (page 9), the strong ground shaking causes pore-water pressure to raise, soils to lose their shear strength and become liquid, which could potentially result in large total and differential ground surface settlements as well as possible lateral spreading during an earthquake. Implementation of mitigation measure **GEO-2** will ensure that impacts related to lateral spreading are minimized to a level of less than significant. Furthermore, the Geotechnical Investigation concluded that no organic-rich soils with significant collapse potential were encountered and the site is not located in an area of known subsidence potential. Furthermore, the Geotechnical Report identified several recommendations for site construction that will ensure that the proposed project is constructed to address the geotechnical constraints of the project site. The onsite subsurface materials appear to be suitable for use as a structural fill provided that they are moisture conditioned (as needed) and meet the Geotechnical Investigation recommendations for size and organic content and are properly compacted. Thus, with the above mitigation measure, the Project will not have a significant potential to 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Any impacts are considered less than significant with mitigation.

- d. *Less Than Significant Impact* – The Geotechnical Investigation concluded that the underlying soil/bedrock at the site possess low expansive characteristics. The expansion potential of these materials is not considered to pose a hazard for the proposed site development. Therefore, the development of the Jefferson Avenue Apartment Project at this site will not create a substantial risk to life or property by being placed on expansive soils because none exist on the site. Any impacts are considered less than significant. No mitigation is required.
- e. *No Impact* – The Project does not propose any septic tanks or alternative wastewater disposal systems. Therefore, determining if the Project site soils are capable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater does not apply. No impacts are anticipated. No mitigation is required.
- f. *Less Than Significant With Mitigation Incorporated* – The potential for discovering paleontological resources during development of the Project is considered not likely based on the data gathered within the Cultural Resources Report provided as Appendix 3. No unique geologic features are known or suspected to occur on or beneath the site. However, because paleo resources are located beneath the surface and can only be discovered as a result of ground disturbance activities, the following measure shall be implemented:

GEO-5 *Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the City's onsite inspector. The paleontological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.*

With incorporation of this contingency mitigation, the potential for impact to paleontological resources will be reduced to a less than significant level. No additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: A Greenhouse Gas Analysis (GHGIA) was prepared for the proposed project, it is provided as Appendix 6 to this Initial Study, is titled "Jefferson Avenue Apartments, Greenhouse Gas Analysis, City of Murrieta," prepared by Urban Crossroads dated May 22, 2020. It includes the updated City CAP form.

Climate Change Setting

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. The majority of scientists also believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project like the proposed Project evaluated in this GHGA cannot generate enough GHG emissions to affect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on GCC.

Greenhouse Gases and Health Effects

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. The potential health effects related directly to the emissions of CO₂, CH₄, and N₂O as they relate to development projects such as the proposed Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would increase disease survival rates and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas.

Global Warming Potential

GHGs have varying Global Warming Potential (GWP) values. GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO₂ is utilized as the reference gas for GWP, and thus has a GWP of 1. Carbon dioxide equivalent (CO₂e) is a term used for describing the difference GHGs in a common unit. CO₂e signifies the amount of CO₂ which would have the equivalent GWP.

GWP for the Second Assessment Report, the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from 1 for CO₂ to 23,900 for SF₆ and GWP for the IPCC's 5th Assessment Report range from 1 for CO₂ to 23,500 for SF₆.

Greenhouse Gas Emissions Inventories

Global: Worldwide anthropogenic (human) GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2017. Based on the latest available data, the sum of these emissions totaled approximately 29,216,501 Gg CO₂e.

State of California: California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls, but is still a substantial contributor to the U.S. emissions inventory total. The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2019 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2017 GHG emissions period, California emitted an average 424.1 million metric tons of CO₂e (MMTCO₂e) per year.

Significance Thresholds

The City of Murrieta has not adopted a threshold of significance for GHG emissions. As such, a screening threshold of 3,000 MTCO₂e per year is applied herein, which is a widely accepted screening threshold used by the County of Riverside and numerous cities in the South Coast Air Basin and is based on the South Coast Air Quality Management District (SCAQMD) staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold").

Impact Analysis

- a. *Less Than Significant Impact* – The SCAQMD screening threshold of 3,000 MTCO₂e per year is utilized to determine whether construction or operational emissions will be significant.

**Table VIII-1
AMORTIZED ANNUAL CONSTRUCTION EMISSIONS (METRIC TONS PER YEAR)**

Year	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
2021	648.69	0.13	0.00	651.90
2022	614.28	0.11	0.00	616.92
Total Annual Construction Emissions	1262.97	0.23	0.00	1268.82
Amortized Construction Emissions (MTCO₂e)	42.10	0.01	0.00	42.29

Source: CalEEMod model output, See Appendix 3.1 of the GHGIA for detailed model outputs.

As shown above, the amortized construction emissions are well below the 3,000 MT CO₂e threshold, and as such, construction emissions are considered less than significant.

Operational Emissions

Operational activities associated with the proposed Project will result in emissions of CO₂, CH₄, and N₂O from the following primary sources:

- Area Source Emissions: Landscape Maintenance Equipment
- Energy Source Emissions: Co
- Mobile Source Emissions
- Water Supply, Treatment, and Distribution
- Solid Waste

Emissions Summary

The annual GHG emissions associated with the operation of the proposed Project are estimated to be 2,971.28 MTCO₂e per year as summarized in Table VIII-2.

**Table VIII-2
PROJECT GHG EMISSIONS (METRIC TONS PER YEAR)**

Year	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Annual construction-related emissions amortized over 30 years	42.10	0.01	0.00	42.29
Area Source	41.13	3.36E-03	7.00E-04	41.42
Energy Source	260.61	0.01	3.36E-03	261.86
Mobile Source	1,610.18	0.06	0.00	1,611.70
Waste	14.94	0.88	0.00	37.01
Water Usage	59.17	0.34	8.59E-03	70.29
Total CO₂e (All Sources)	2,064.58			

Source: CalEEMod model output, See Appendix 3.1 detailed model outputs.

Conclusion

The City of Murrieta has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 MTCO₂e per year to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City and numerous cities in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. As shown on Table VIII-2, the Project will result in approximately 2,064.58 MTCO₂e per year; the proposed Project would not exceed the SCAQMD/City's screening threshold of 3,000 MTCO₂e per year. Thus, project-related emissions would have a less than significant direct or indirect impact on GHG and climate change and no mitigation required.

- b. *Less Than Significant Impact* – A lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from greenhouse gas emissions. As such, the Project's consistency with AB 32, SB 32, and the City's CAP are discussed below.

As previously stated, pursuant to 15604.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Project's consistency with SB 32 (2017 Scoping Plan), is discussed below. It Consistency with AB 32 and the 2008 Scoping Plan is not necessary, since the target year for AB 32 and the 2008 Scoping Plan was 2020, and the Project's buildout year is 2021. As such the 2008 Scoping Plan does not apply and consistency with the 2017 Scoping Plan is relevant. Project consistency with SB 32 and the CAP is evaluated in the following discussion.

SB 32/2017 Scoping Plan Consistency

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 3-5 summarizes the Project's consistency with the 2017 Scoping Plan. As summarized, the Project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories.

Table VIII-3
2017 SCOPING PLAN CONSISTENCY SUMMARY

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	Consistent. The Project would use energy from Southern California Edison (SCE). SCE has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		Consistent. The Project would be designed and constructed to implement the energy efficiency measures for new commercial developments and would include several measures designed to reduce energy consumption. The Project would not interfere with or obstruct policies or strategies to establish annual targets for statewide energy efficiency savings and demand reduction.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		Consistent. The proposed Project would be designed and constructed to implement the energy efficiency measures, where applicable by including several measures designed to reduce energy consumption. The proposed Project includes energy efficient field lighting and fixtures that meet the current Title 24 Standards throughout the Project Site and would be a modern development with energy efficient boilers, heaters, and air conditioning systems.
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty EV by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets.
At least 4.2 million zero emission and plug-in hybrid light-duty EV by 2030.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.
Medium- and Heavy-Duty GHG Phase 2.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts improve transit-source emissions.

Action	Responsible Parties	Consistency
zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO _x standard.		
Last Mile Delivery: New regulation that would result in the use of low NO _x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to improve last mile delivery emissions.
Further reduce vehicle miles traveled (VMT) through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.”		Consistent. This Project would not obstruct or interfere with implementation of SB 375 and would therefore not conflict with this measure.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	Consistent. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.)	CalSTA, SGC, OPR, CARB, Governor’s Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	Consistent. The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	Consistent. The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.

Action	Responsible Parties	Consistency
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	Consistent. This measure would apply to all trucks accessing the Project site, this may include existing trucks or new trucks that are part of the statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to Improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		Consistent. The Project would not obstruct or interfere with agency efforts to deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	Consistent. When adopted, this measure would apply to all fuel purchased and used by the Project in the state. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	Consistent. The Project would be required to comply with this measure and reduce any Project-source SLPS emissions accordingly. The Project would not obstruct or interfere agency efforts to reduce SLPS emissions.
50% reduction in black carbon emissions below 2013 levels.		
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	Consistent. The Project would implement waste reduction and recycling measures consistent with State and City requirements. The Project would not obstruct or interfere agency efforts to support organic waste landfill reduction goals in the SLCP and SB 1383.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	Consistent. The Project would be required to comply with any applicable Cap-and-Trade Program provisions. The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	Consistent. The Project would not obstruct or interfere agency efforts to protect land from conversion through conservation easements and other incentives.

Action	Responsible Parties	Consistency
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity		Consistent. The Project site is vacant disturbed property and does not comprise an area that would effectively provide for carbon sequestration. The Project would not obstruct or interfere agency efforts to increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		Consistent. Where appropriate, Project designs will incorporate wood or wood products. The Project would not obstruct or interfere agency efforts to encourage use of wood and agricultural products to increase the amount of carbon stored in the natural and built environments.
Establish scenario projections to serve as the foundation for the Implementation Plan		Consistent. The Project would not obstruct or interfere agency efforts to establish scenario projections to serve as the foundation for the Implementation Plan.
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018	CARB	Consistent. The Project would not obstruct or interfere agency efforts to establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments Within	Consistent. The Project would not obstruct or interfere agency efforts to implement the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	Consistent. The Project would not obstruct or interfere agency efforts to identify and expand funding and financing mechanisms to support GHG reductions across all sectors.

As shown above, the Project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030.

City of Murrieta Climate Action Plan Consistency

The CAP recommends GHG emissions targets that are consistent with the reduction targets of the State of California and presents a number of strategies that will make it possible for the City to meet the recommended targets. The CAP also suggests best practices for implementation and makes recommendations for measuring progress (Murrieta, 2011b, p. 1-1). As indicated in Table VIII-4, the

proposed Project would be consistent with, or otherwise would not conflict with, the CAP's strategies, goals, and measures.

Table VIII-4
PROJECT CONSISTENCY WITH THE CITY OF MURRIETA CLIMATE ACTION PLAN

Cap Strategy	Analysis of Project Consistency
Strategy 1: Community Involvement Strategy	Not Applicable. The CAP's Community Involvement Strategy provides guidance to the City for conducting outreach programs to involve residents and businesses in GHG-reducing activities, assessments, and actions. The proposed Project would not affect the City's ability to conduct community outreach.
Strategy 2: Land Use and Community Vision Strategy	Consistent. The proposed Project would aid in creating a complementary balance of land uses throughout the community.
Strategy 3: Transportation and Mobility Strategy	Consistent. Any potential roadway improvements planned by the Project have been designed to City standards and would safely accommodate pedestrians and bicycles. The remaining goals and measures under the Transportation and Mobility Strategy are not applicable to the proposed Project.
Strategy 4: Energy Use and Conservation Strategy	Consistent. The Project would be required to comply with Title 24 California Code of Regulations (California Building Code), which establishes stringent energy efficiency requirements for new development. The remaining goals and measures under the Energy Use and Conservation Strategy are not applicable to the proposed Project.
Strategy 5: Water Use and Efficiency Strategy	Consistent. The Project would be required to comply with Murrieta Municipal Code Section 16.28 (Landscaping Standards and Water Efficient Landscaping), which would reduce the Project's energy demand associated with landscaping and water use. The remaining goals and measures under the Water Use and Efficiency Strategy are not applicable to the proposed Project.
Strategy 6: Waste Reduction and Recycling Strategy	Consistent. The Project has been designed to accommodate adequate infrastructure for water, sewer, storm water, and energy. The remaining goals and measures under the Waste Reduction and Recycling Strategy are not applicable to the proposed Project.
Strategy 7: Open Space Strategy	Consistent. The Project's incorporates a variety of trees, bushes, and groundcover.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – The Project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or may 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. During construction there is a potential for accidental release of petroleum products in sufficient quantity to pose a significant hazard to people and the environment. The following mitigation measure will be incorporated into the Storm Water Pollution Prevent Plan (SWPPP) prepared for the Project and implementation of this measure can reduce this potential hazard to a less than significant level.

HAZ-1 *All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure will be incorporated into the SWPPP prepared for the Project development.*

The Project consists of 160 market rate apartments; operation of such uses would not involve the use of a substantial amount of hazardous materials. Household cleaning supplies would be used in small quantities to support the apartments. Compliance with all Federal, State, and local regulations governing the storage and use of hazardous materials is required, and will ensure that the Project operates in a manner that poses no substantial hazards to the public or the environment. No further mitigation is required.

- c. *No Impact* – The project site is located greater than one-quarter mile from any public school. According to the Murrieta Unified School District website, and the Murrieta Unified School District Boundary Map (Figure IX-1), there are no existing or proposed schools located within one-quarter mile of the Project site. Murrieta Elementary School is located about one-half mile southwest of the project site at 24725 Adams Avenue, Murrieta, CA 92562. Based on this information, implementation of the Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No adverse impacts are anticipated. No additional mitigation is required.
- d. *No Impact* – The proposed Project consists of an approximately 9.18-acre parcel consisting entirely of previously graded and mowed vacant land surrounded by existing development. The Project will not be located on a site that is included on a list of hazardous materials sites that are currently under remediation. According to the California State Water Board's GeoTracker website (consistent with Government Code Section 65962.5), which provides information regarding Leaking Underground Storage Tanks (LUST), there are no open LUST clean-up sites within 2,500 feet of the Project site (Figure IX-2). There are two LUST cleanup sites that have been remediated, and are no longer considered hazardous to the environment and as such would not impact development at this site (Figure IX-3 and IX-4). Therefore, the proposed construction and operation of the site as the Jefferson Avenue Apartments Project will not create a significant hazard to the population or to the environment from their implementation. No impacts are anticipated. No mitigation is required.
- e. *No Impact* – The Project site is not located within two miles of an airport or private airstrip. The closest airport is the French Valley Airport, which is located approximately 4 miles east of the project site; the Jefferson Avenue Apartment Project is not located within the French Valley Airport land use plan, as shown on Figure IX-5, French Valley Airport Compatibility Map. No impacts are anticipated and no mitigation is required.
- f. *Less Than Significant Impact* – According to the City's General Plan, no evacuation routes have been identified, though effectively I-215 and I-15 could be considered evacuation routes within the City. The proposed Project will occur within the project site and is not anticipated to impact surrounding roadways. The project site is located a long Jefferson Avenue just northwest of the intersection of Jefferson Avenue and Murrieta Hot Springs Road. It is not anticipated that development of the project site would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the site activities will be confined within the proposed project site. The proposed onsite parking and circulation plans will be reviewed by the local Fire Department and City Engineering Department to ensure that the Project's ingress/egress are adequate for accommodating emergency vehicles. Therefore, there is no potential for the development of the Project to physically interfere with any adopted emergency response plans, or evacuation plans. No impacts are anticipated and no mitigation is required.
- g. *No Impact* – According to the City of Murrieta General Plan 2035 High Fire Hazard Zones map (Figure IX-6), the proposed Project is not located in a high fire hazard zone. Therefore, Project implementation would not result and a potential to expose people or structures to fire hazards. Potential Project-related impacts are less than significant; no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?; or,	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant With Mitigation Incorporated* – The proposed project is located within the planning area of the San Diego Regional Water Quality Control Board (RWQCB). The project would be supplied with water by Western Municipal Water District that uses a mix of groundwater and imported surface water to meet customer demand.

For a developed area, the only three sources of potential violation of water quality standards or waste discharge requirements are from generation of municipal wastewater, stormwater runoff, and potential discharges of pollutants, such as accidental spills. Municipal wastewater is delivered to the Santa Rosa Regional Resources Authority's (SRRRA or Authority) Santa Rosa Water Reclamation Facility (SRWRF), located at 6266 Washington Ave, Murrieta, CA 92562 about 0.7 mile west of the project site. The Authority is responsible for the collection, transmission, treatment, and disposal of wastewater from its member agencies, relating to flows to the SRWRF in Murrieta, California.

To address stormwater and accidental spills within this environment, any new project must ensure that site development implements an SWPPP and a National Pollutant Discharge Elimination System

(NPDES) to control potential sources of water pollution that could violate any standards or discharge requirements during construction and a Water Quality Management Plan (WQMP, Appendix 7) to ensure that project-related after development surface runoff meets discharge requirements over the short- and long-term. The WQMP would specify stormwater runoff permit BMPs requirements for capturing, retaining, and treating on site stormwater once the apartment units have been occupied. Because the project site consists of pervious surfaces, the Project has identified onsite drainage that will generally be directed to the onsite retention ponds that will be developed as part of the project. The SWPPP would specify the BMPs that the Project would be required to implement during construction activities to ensure that all potential water pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. With implementation of these mandatory Plans and their BMPs, as well as mitigation measure **HAZ-1** above, the development of Jefferson Avenue Apartment Project will not cause a violation of any water quality standards or waste discharge requirements.

- b. *Less Than Significant Impact* – Implementation of the proposed Project will not deplete groundwater supplies that would substantially affect the water availability for existing or planned land uses or biological resources. It is anticipated that, based on previous studies at the project site, the depth to groundwater is anticipated to be approximately 25 feet below the ground surface (bgs). Therefore, given that the project does not require extensive excavation, the potential to intercept groundwater during grading of both the project site and offsite roadways is considered to be less than significant. The groundwater basin would not be physically altered or impacted as a result of the proposed project. The design of the drainage and retention facilities of the proposed project would encourage groundwater recharge.

The Jefferson Avenue Apartments Project is a multi-family residential project that will consist of 160 dwelling units. The Project would be supplied with water by Western Municipal Water District (WMWD or Western) that uses imported surface water to meet primary customer demand. Using imported surface water helps prevent overdraft of local groundwater basins. The District's Urban Water Management Plan (2015)³ identifies sufficient water resources to meet demand in its service area. The total supply for Western in 2015 for retail customers, was 30,407 acre-feet per year (AFY), while the demand was 23,357 AFY. According to Western, multi-family uses accounted for 1% of the overall water demand in 2015, equal to 331 AFY. Based on data compiled by the Southern California Association of Governments (SCAG)⁴, in 2015 there were approximately 6,387 multi-family units, requiring 0.52 AFY per dwelling unit. Therefore, it can be assumed that this Project, which would contribute an additional 160 dwelling units, would demand about 8.29 AFY (0.52 AFY x 160 units = 8.29 AFY). Based on the projected water demand for Commercial uses—which includes Multi-Family Residential uses—within the WMWD retail service area for 2025, 6,250 AFY, and for 2040, 7,662 AFY, it is anticipated that the 8.29 AFY demand can be accommodated into the future, particularly given that the overall available water supply is anticipated to be 76,264 AFY in 2025, and 90,400 AFY in 2040. The anticipated available water supply within Western's retail service area is anticipated to be greater than the demand for water in the future, which indicates that Western has available capacity to serve the proposed Project without significant adverse impacts on area groundwater basins.

While the development of the Project may result in a slight reduction in the amount of surface runoff recharge associated with natural runoff, this reduction is expected to be off-set/replaced by infiltration from the two onsite bioretention basins and porous concretes, as well as the required onsite landscaping. The development of the Project will, therefore, not substantially interrupt the existing percolation of the site, or any flow of groundwater under the project site. No significant adverse impacts to groundwater resources are forecast to occur from implementing the proposed Project. No mitigation is required.

³ https://www.wmwd.com/DocumentCenter/View/3162/Western_2015-UWMP_Final_Body-Only?bidId=

⁴ <https://www.scag.ca.gov/Documents/Murrieta.pdf>

c. i. Result in substantial erosion or siltation onsite or offsite?

Less Than Significant Impact – The proposed Project is not anticipated to significantly change the volume of flows downstream of the project site, and would not be anticipated to change the amount of surface water in any water body in an amount that could initiate a new cycle of erosion or sedimentation downstream of the project site. The onsite drainage system will capture the incremental increase in runoff from the project site associated with Project development. Onsite flows will be pretreated through flow through planters and then captured in the proposed site biofiltration basins. These systems will be designed to capture the peak 100-year flow runoff from the project site or otherwise detain this flow on site. Treated surface runoff will be discharged in conformance with Riverside County and City of Murrieta requirements. The downstream drainage system will not be altered given the control of future surface runoff from the project site; thus, the potential for downstream erosion or sedimentation will be controlled to a less than significant impact level.

c. ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?

Less Than Significant Impact – The proposed Project will alter the existing drainage courses or patterns onsite but will maintain the existing offsite downstream drainage system through control of future discharges from the site through the bioretention basin, which would prevent flooding onsite or offsite from occurring. Onsite flows will be pretreated through flow through planters and then captured in the proposed site biofiltration basins. These systems will be designed to capture any excess runoff from the project site after development. Refer to the analysis in Appendix 7 for the quantitative verification of this finding. Thus, the implementation of onsite drainage improvements and applicable requirements included in the WQMP will ensure that stormwater runoff will not substantially increase the rate or volume of runoff in a manner that would result in substantial flooding on- or off-site. Impacts under this issue are considered less than significant with no mitigation required.

The runoff points from the site will remain the same and the outlets from the storm drain system will keep the peak flows within 10% of the existing peak flows. drainage will be captured via surface flow into onsite drop inlets and catch basins throughout the site. Drainage will then be directed via onsite storm drains to the biofiltration ponds throughout the site.

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

Less Than Significant With Mitigation Incorporated – The proposed Project will alter the site such that stormwater runoff within the site will be increased, but will maintain the existing off-site downstream drainage system through control of future discharges from the site. This would prevent the Project from exceeding the capacity of existing or planned stormwater drainage systems and from providing substantial additional sources of polluted runoff. The drainage throughout the project site will be captured and treated in the proposed biofiltration basins. Onsite flows will be pretreated through flow through planters and/or then captured in the proposed site biofiltration basins. These systems will be designed to capture the flows above the peak 100-year flow runoff from the project site without development or otherwise be detained on site and discharged in conformance with Riverside County requirements. The runoff points from the site will remain the same and the outlets from the storm drain system will keep the peak flows within 10% of the existing peak flows. This Project would discharge into the regional system that flows into Warm Springs Creek, Murrieta Creek, and eventually the Santa Margarita River. Varying amounts of urban pollutants, such as motor oil, antifreeze, gasoline, pesticides, detergents, trash, animal wastes, and fertilizers, could be introduced into downstream stormwater. However, the proposed Project is not anticipated to generate discharges that would require pollution controls beyond those already designed into the Project and/or required by the City as a standard operating procedure to meet water quality management requirements from the RWQCB. The proposed development would install onsite and offsite drainage

improvements, including the bioretention basins, and connect to existing the drainage system downstream. The Project is not anticipated to result in a significant adverse impact to water quality or flows downstream of the Project with implementation of mitigation outlined below.

The City and County have adopted stringent best management practices designed to control discharge of non-point source pollution that could result in a significant adverse impact to surface water quality. The City in particular has implemented a stringent non-point source water pollution control program. The City has identified BMPs that when implemented, can ensure that neither significant erosion and sedimentation, nor other water quality degrading impacts will occur as a result of developing the Project. Although BMPs are mandatory for the Project to comply with established pollutant discharge requirements, the following mitigation measure is designed to establish a performance standard to ensure that the degree of water quality control is adequate to ensure the Project does not contribute significantly to downstream water quality degradation.

HYD-1 The Project proponent will select best management practices from the range of practices identified by the City and reduce future non-point source pollution in surface water runoff discharges from the site to the maximum extent practicable, both during construction and following development. The Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) shall be submitted to the City for review and approval prior to ground disturbance and the identified BMPs installed in accordance with schedules contained in these documents.

Compliance will also be ensured through fulfilling the requirements of a SWPPP and WQMP monitored by the City and the RWQCB. The SWPPP must incorporate the BMPs that meet the performance standard established in **HYD-1** for both construction and occupancy stages of the Project. Thus, the implementation of onsite drainage improvements and applicable requirements will ensure that that drainage and stormwater will not create or contribute runoff that would exceed the capacity of existing or planned offsite stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts under this issue are considered less than significant with mitigation required.

c. iv. Impede or redirect flood flows?

Less Than Significant Impact –As shown on the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map (FIRM) #06065C2715G provided as Figure X-1, the project site is located within Zone X, which represents an area with minimal flood hazard. Furthermore, development of this site is not anticipated to redirect or impede flood flow at the project site, particularly given that surface flows on site will be directed to the onsite drainage features which will be capable of intercepting the peak 100-year flow rate from the project site or otherwise be detained on site and discharged in conformance with Riverside County requirements. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

- d. *Less Than Significant Impact* – Implementation of the Project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or other flood hazards. According to the City's General Plan (Figure 5.13-3), the proposed Project is not located in an area of dam inundation by any of the surrounding reservoirs. Additionally, given the approximately 10-mile distance between Lake Elsinore and the project site, seiche risk at the site is considered minimal. Furthermore, the Project is located about 25 miles from the Pacific Ocean, and is separated by the Peninsular Range from the Ocean. Therefore, the potential to expose people or structures to a significant risk of flood hazard due to dam inundation, tsunami, or seiche would be minimal. No mitigation is required.
- e. *Less Than Significant Impact* – Western states the following in regard to the Sustainable Groundwater Management Act, "In 2014, Governor Brown signed into law the Sustainable Groundwater Management Act, also known as SGMA. The Act took effect in 2015. It requires for the first time in

state history that groundwater resources be sustainably managed by local agencies through the formation of Groundwater Sustainability Agencies (GSAs) in basin that are deemed high-priority or medium-priority by the Department of Water Resources. In such basins, GSAs are required to develop and implement Groundwater Sustainability Plans.”⁵ The groundwater basin underlying the Project is not considered to be a basin that requires management under the Sustainable Groundwater Management Act. As such, the Project would not conflict with a sustainable groundwater management plan. Water consumption and effects in both basins indicates that the proposed Project’s water demand is considered to be minimal. By controlling water quality during construction and operations through implementation of both short- (SWPPP) and long- (WQMP) term best management practices at the site, no potential for conflict or obstruction of the Regional Board’s water quality control plan has been identified.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *No Impact* – Refer to the aerial photos provided as Figures 1 and 2, which depict the Project’s regional and site-specific location. The project site would be installed within a site zoned for high-density multi-family residential development. The Project is located within a vacant site, with commercial or multi-family residential development in all directions, except to the southeast. The project site is highly disturbed from past grading and other disturbances, and is essentially flat with a shallow slope from north to south. The development of a multi-family apartment complex at this location would be consistent with both the uses surrounding the Project and the surrounding land use designations and zoning classifications. Consequently, the development of the project site with the proposed use will not divide any established community in any manner. Therefore, no significant impacts under this issue are anticipated and no mitigation is necessary.
- b. *Less Than Significant Impact* – The project site encompasses about 9.18 acres, and it is zoned for Multi-Family 2 Residential (MF-2, 15.1-18 dwelling units per acre. The Project proposes a total of 160 units at a density of 17.43 dwelling units per acre with approval of the Development Permit application on this property, the proposed Jefferson Avenue Apartment Project will be fully consistent the General Plan Land Use Map, shown on Figures XI-1 and XI-2, which depict the City of Murrieta General Plan Land Use Designation Map and the City of Murrieta Zoning Map, respectively. A review of the Land Use Element Goals indicates that of the 26 goals, the proposed Project is consistent with Goals LU-1, LU-3, LU-4, LU-9, LU-10, and LU-27. All other Land Use Element Goals are not applicable to the proposed Project. Okay

A review of all other General Plan Element Goals (Economic Development, Circulation, Infrastructure, Healthy Community, Conservation, Recreation and Open Space, Air Quality, Noise, Safety, and Housing) indicates that the proposed Project is consistent with all applicable Goals, often with mitigation, as demonstrated by the findings in the pertinent sections of this Initial Study. The proposed Project can be implemented without significant effects on the circulation system; all infrastructure

⁵ <https://www.wmwd.com/461/Sustainable-Groundwater-Management-Act>

exists at or can be extended to the site to support the 160 apartment units; it can meet the City's urban design objectives and supports a safe and sustainable transportation system in the City; it can be developed with no conflicts with the Conservation Element issues (natural environment, watershed, cultural resources, and energy demands); it will provide the City with additional facilities to support human resident recreation needs; it will not generate significant air emissions or GHG emissions; it will meet noise design requirements with mitigation; it can meet all Safety Element requirements; and it implements the City's Housing Element, specifically Goals 1 and 5 which state:

- *Goal 1: Provide adequate housing opportunities*
- *Goal 5: Identify adequate sites to achieve housing variety*

Therefore, the implementation of this Project at this site is consistent with the City's plans and policies. Based on the preceding information, implementation of the Jefferson Avenue Apartment Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, zone classification, or the City's Municipal Code) adopted for the purpose of avoiding or mitigating an environmental effect. No adverse impacts are anticipated under this issue and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- a&b. *No Impact* – The proposed site for the Jefferson Avenue Apartment Project is highly disturbed as it currently consists of graded and mowed vacant land. The site is in an urbanized area surrounded by development to the south, west, and north within the City of Murrieta. According to the map prepared for the Murrieta General Plan depicting Mineral Resources, provided as Figure XII-1, the Project is not located on a site that contains known mineral resources of any type. Therefore, the development of the proposed Project will not cause any loss of mineral resource values to the region or residents of the state, nor would it result in the loss of any locally important mineral resources identified on the City of Murrieta General Plan. No impacts would occur under this issue. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION: A Noise Impact Analysis (NIA) was prepared for the proposed project, it is provided as Appendix 8 to this Initial Study, is titled "Jefferson Avenue Apartments, Final Noise Impact Analysis, City of Murrieta," prepared by Urban Crossroads dated May 27, 2020.

Background

Noise is generally described as unwanted sound. The proposed Jefferson Avenue Apartment Project will include 7 apartment buildings with 160 proposed apartment units. The site is located on Jefferson Avenue northwest of the intersection of Jefferson Avenue and Murrieta Hot Springs Road in the City of Murrieta. Please refer to the aerial photo in Figure 2. The existing noise environment is dominated by traffic noise from the adjacent roadway. The nearest receptor is an existing residential community approximately 133 feet/41 meters west of the Project site.

The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by over one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is therefore used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from around 500 to 2,000 cycles per second are factored more heavily into sound descriptions in a process called "A-weighting," written as "dBA."

Leq is a time-averaged sound level; a single-number value that expresses the time-varying sound level for the specified period as though it were a constant sound level with the same total sound energy as the time-varying level. Its unit is the decibel (dB). The most common averaging period for Leq is hourly.

Because community receptors are more sensitive to unwanted noise intrusion during more sensitive evening and nighttime hours, state law requires that an artificial dBA increment be added to quiet time noise levels. The State of California has established guidelines for acceptable community noise levels that are based on the Community Noise Equivalent Level (CNEL) rating scale (a 24-hour integrated noise measurement scale). The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. The State Guidelines, Land Use Compatibility for Community Noise Exposure, single-family homes are "normally acceptable" in exterior noise environments up to 60 dB CNEL and "conditionally acceptable" up to 70 dB CNEL based on this scale. Multiple family residential uses are "normally acceptable" up to 65 dB CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries and churches are "normally acceptable"

up to 70 dB CNEL, as are office buildings and business, commercial and professional uses with some structural noise attenuation.

- a. *Less Than Significant With Mitigation Incorporated* – The proposed project is located in an area of mostly commercial development, with residential uses to the northwest of the project site. A Multi-family residential complex is located to the west of the project site along Jefferson Avenue, while commercial complexes are located to the north and south of the project site. The area east of the project site is vacant. Short-term noise levels associated with project construction activities have a potential to adversely impact sensitive receptors to the west of the project site that are presently exposed to noise from the adjacent roadways.

Short-Term Noise

Section 16.30.130 of the City of Murrieta Noise Ordinance regulates construction noise. The Noise Ordinance prohibits noise generated by construction activities between the hours of 7:00 PM and 7:00 AM and on Sundays and holidays. The City of Murrieta Construction Noise standards are as follows:

**Table XIII-1
CITY OF MURRIETA CONSTRUCTION NOISE STANDARDS**

	Single Family Residential	Multi-Family Residential	Commercial
Mobile Equipment			
Daily, except Sundays and holidays, 7:00 AM to 8:00 PM	75 dBA	80 dBA	85 dBA
Daily, except Sundays and holidays, 8:00 PM to 7:00 AM	60 dBA	64 dBA	70 dBA
Stationary Equipment			
Daily, except Sundays and holidays, 7:00 AM to 8:00 PM	60 dBA	65 dBA	70 dBA
Daily, except Sundays and holidays, 8:00 PM to 7:00 AM	50 dBA	55 dBA	60 dBA

The City of Murrieta Municipal Code prohibits the operation of tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 PM and 7:00 AM, or at any time on Sundays or holidays. Further, noise associated with mobile equipment at the property line of commercial land uses is not allowed to exceed 85 dBA Leq between the hours of 7:00 AM and 8:00 PM or exceed 70 dBA Leq between the hours of 8:00 PM and 7:00 AM. Noise associated with mobile equipment at the property line of single-family residential land uses is not allowed to exceed 75 dBA Leq between the hours of 7:00 AM and 8:00 PM or exceed 60 dBA Leq between the hours of 8:00 PM and 7:00 AM.

On-Site Traffic Noise

It is expected that the primary source of noise impacts to the Project site will be traffic noise from Jefferson Avenue. The Project will also experience some background traffic noise impacts from the Project's internal local streets, however, due to the distance, topography and low traffic volume/speed, traffic noise from these roads will not make a significant contribution to the noise environment.

Table XIII-2 presents a summary of future exterior noise levels in the first-floor patios within the Project site. The onsite traffic noise level analysis indicates that the residential homes adjacent to Jefferson Avenue will experience exterior noise levels ranging from 61.6 to 63.5 dBA CNEL.

No exterior noise mitigation is required to satisfy the City of Murrieta General Plan Noise Element exterior land use/noise level compatibility criteria for residential uses. Adjacent Jefferson Avenue,

Project residential uses are shown to experience conditionally acceptable exterior noise levels of 61.6 to 63.5 dBA CNEL. For normally acceptable exterior noise levels the Noise Element compatibility states that Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements. To demonstrate that the Project satisfies these requirements, additional interior noise analysis is provided in the noise study (Appendix 8) to satisfy the General Plan Noise Element interior noise level standards.

**Table VIII-2
EXTERIOR NOISE LEVELS (CNEL)**

Unit	Roadway	Unmitigated Exterior Noise Level (dBA CNEL)	Noise Element Land Use Compatibility ¹	Resulting Requirements
Bldg. 6	Jefferson Avenue	63.5	<i>Normally Acceptable</i>	Windows closed with a means of mechanical ventilation (e.g. air conditioning)
Bldg. 7	Jefferson Avenue	61.6	<i>Normally Acceptable</i>	

¹Based on the Table 11-2 compatibility criteria of the City of Murrieta General Plan Noise Element, shown on Exhibit 3-A of this noise study.

On-Site Interior Noise

Tables VIII-3 and VIII-4 show that the residential units adjacent to Jefferson Avenue require a windows-closed condition and a means of mechanical ventilation (e.g. air conditioning). Table VIII-4 shows that the future unmitigated noise levels at the first-floor building façade are expected to range from 61.6 to 63.5 dBA CNEL. The first-floor interior noise level analysis shows that the City of Murrieta 45 dBA CNEL with windows-closed interior noise standards can be satisfied using standard windows with a minimum STC rating of 27 for all units, based on the minimum calculated interior noise reduction for all rooms previously shown on Table VIII-3.

Table VIII-4 shows the future unmitigated noise levels at the second-floor building façade are expected to range from 61.6 to 63.5 dBA CNEL. The second-floor interior noise level analysis shows that the City of Murrieta 45 dBA CNEL with windows closed interior noise standards can be satisfied using standard windows with a minimum STC rating of 27 for all units, based on the minimum calculated interior noise reduction for all rooms previously shown on Table VIII-4.

The interior noise analysis shows that with the recommended interior noise abatement measures described in the Executive Summary the Project will satisfy the City of Murrieta 45 dBA CNEL windows closed interior noise level standards for residential development.

**Table VIII-3
FIRST FLOOR INTERIOR NOISE LEVELS (CNEL)**

Unit	Noise Level at Façade ¹	Required Interior Noise Reduction ³	Estimated Interior Noise Reduction ¹	Upgraded Windows	Interior Noise Level
Bldg. 6	63.5	18.5	25.0	No	38.5
Bldg. 7	61.6	16.6	25.0	No	36.6

¹Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).

²Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.

³Minimum calculated interior noise reduction by floor plan and floor.

⁴Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?

⁵Estimated interior noise level with minimum STC rating for all windows.

Table VIII-4
SECOND FLOOR INTERIOR NOISE LEVELS (CNEL)

Unit	Noise Level at Façade ¹	Required Interior Noise Reduction ³	Estimated Interior Noise Reduction ¹	Upgraded Windows	Interior Noise Level
Bldg. 6	63.5	18.5	25.0	No	38.5
Bldg. 7	61.6	16.6	25.0	No	36.6

¹Exterior noise level at the façade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).

²Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.

³Minimum calculated interior noise reduction by floor plan and floor.

⁴Does the required interior noise reduction trigger upgraded windows with a minimum STC rating of greater than 27?

⁵Estimated interior noise level with minimum STC rating for all windows.

To satisfy the City of Murrieta 45 dBA CNEL interior noise level criteria, lots adjacent to Jefferson Avenue will require a Noise Reduction (NR) of up to 18.5 dBA and a windows-closed condition requiring a means of mechanical ventilation (e.g. air conditioning). To meet the City of Murrieta 45 dBA CNEL interior noise standards for residential land use the Project shall provide the following or equivalent noise abatement measures:

NOI-1 Windows & Glass Doors: All units require windows and glass doors with well-fitted, well-weather- stripped assemblies and shall have minimum sound transmission class (STC) ratings of 27.

NOI-2 Exterior Doors: All exterior doors shall be well weather-stripped and have minimum STC ratings of 27. Well-sealed perimeter gaps around the doors are essential to achieve the optimal STC rating.

NOI-3 Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.

NOI-4 Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well- sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.

NOI-5 Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided which satisfies the requirements of the California Uniform Building Code.

With the interior noise abatement measures provided above, the proposed Project is expected to satisfy the City of Murrieta 45 dBA CNEL interior noise level standards for residential development. As such, these measures will minimize the potential for the project to result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies to below significance thresholds.

- b. *Less Than Significant Impact* – Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by vibration of room surfaces is called structure borne noises. Sources of groundborne vibrations include natural phenomena (e.g. earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g. explosions, machinery, traffic, trains, construction

equipment). Vibration sources may be continuous or transient. Vibration is often described in units of velocity (inches per second), and discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts related to human development are generally associated with activities such as train operations, construction, and heavy truck movements.

The FTA Assessment states that in contrast to airborne noise, ground-borne vibration is not a common environmental problem. Although the motion of the ground may be noticeable to people outside structures, without the effects associated with the shaking of a structure, the motion does not provoke the same adverse human reaction to people outside. Within structures, the effects of ground-borne vibration include noticeable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. FTA Assessment further states that it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. However, some common sources of vibration are trains, trucks on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment. The Federal Transit Association (FTA) guidelines identify a level of 80 VdB for sensitive land uses. This threshold provides a basis for determining the relative significance of potential Project related vibration impacts.

Construction equipment is anticipated to be located at a distance of at least 130 feet or more from any receptor; therefore, temporary vibration levels associated with project construction would be less than significant. Furthermore, annoyance-related impacts would be short-term and would only occur during site grading and construction activities. Due to the large size of the project site, and the lack of any sensitive receptors within a reasonable distance of the project site, the proposed project will not expose people to generation of excessive groundborne vibration or groundborne noise levels. During construction some construction activities have some potential to create vibration, but due to the size of the site and lack of sensitive receptors, any impacts are considered less than significant. Because the rubber tires and suspension systems of heavy trucks and other on-road vehicles provide vibration isolation and reduced noise, it is unusual for on-road vehicles to cause noticeable groundborne noise or vibration impact. Most problems with on-road vehicle-related noise and vibration can be directly related to a pothole, bump, expansion joint, or other discontinuity in the road surface. Smoothing a bump or filling a pothole will usually solve the problem. The proposed project would be constructed with smooth pavement throughout the project and would not result in significant groundborne noise or vibration impacts from vehicular traffic. Thus, any impacts under this issue are considered less than significant and no mitigation is required.

- c. *No Impact* – According to page 5.7-17 (Noise of the GP EIR), there is one source of air traffic affecting noise levels within the City of Murrieta; the French Valley Airport, located outside the City's sphere of influence. Aircraft flyovers are heard occasionally in the City; however, the aircraft do not contribute a significant amount of routine noise in the City. Based on this information, the project site is not located within an airport land use plan (Figure IX-5) or within the vicinity of a private airstrip (Figure XIII-1). As such, the Project would not expose people residing in the project area to excessive noise levels. Therefore, no impacts are anticipated.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The proposed Jefferson Avenue Apartments would convert vacant land located within the City of Murrieta within the City’s multi-family residential land use designation. The Project will develop 7 apartment buildings containing 160 dwelling units. The Southern California Association of Government (SCAG) 2019 Local Profile for the City of Murrieta indicates that the 2018 population was 113,541.⁶ The 2016-2040 RTP/SCS Adopted Growth Forecast projects an estimated City population of 129,800 by the year 2040.⁷ The SCAG 2019 Local Profile for the City of Murrieta indicates that the average household size is 3.3 persons. As such, the development of 160 multi-family housing units is anticipated to house 528 persons. Given that the current population of Murrieta is over 16,000 persons less than the projected 2040 population, and about 20,000 persons less than the City of Murrieta General Plan building population projection of 133,452 persons, the potential for an additional 528 residents within the City of Murrieta is considered less than significant as the Project represents only about 2.7% of the potential growth anticipated between the present population and the City’s projected build-out population.

Additionally, the 2016-2040 RTP/SCS Adopted Growth Forecast projects that the total number of households within the City by 2040 will be 43,500, while the SCAG 2019 Local Profile for the City indicates that the total number of households within the City is 34,498, while the City’s General Plan EIR indicates that the buildout population is anticipated to require 44,484 households. As such, the addition of 160 residential units would be well within the projected number of households that would be developed in the next 20 years. These units would contribute to the housing needs within the City, which, as determined by the SCAG Regional Housing Needs Assessment Final Allocation Plan 1/1/14-10/1/21,⁸ was determined to be 1,573 units.⁹ Given the above, the proposed Project would not induce population growth beyond that which has been planned for in the City General Plan or SCAG planning documents, or that can be accommodated by the Project and the City. Therefore, impacts would be less than significant. No mitigation is required.

- b. *No Impact* – No occupied residences homes are located on the vacant project site; therefore, implementation of the proposed Project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. No impacts will occur; therefore, no mitigation is required.

⁶ <https://www.scag.ca.gov/Documents/Murrieta.pdf>

⁷ http://scagrtpscsc.net/Documents/2016/draft/d2016RTPSCS_DemographicsGrowthForecast.pdf

⁸ According to SCAG, “the RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate growth, so that collectively the region and subregion can grow in ways that enhance quality of life, improve access to jobs, promotes transportation mobility, and addresses social equity, fair share housing needs.”; The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

⁹ <http://www.scag.ca.gov/Documents/5thCyclePFinalRHNAplan.pdf>;

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. PUBLIC SERVICES: 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:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The proposed project site is served by City of Murrieta Fire & Rescue. The closest station to the proposed project site is Station 1, which also serves as the Fire & Rescue Administration Building, and is located on 41825 Juniper St, Murrieta, CA 92562, approximately one-half mile west/northwest of the project site. According to the City General Plan EIR, fire protection for the City at buildout should be feasible based on the existing fire stations, with perhaps some additional equipment.

The General Plan EIR finding is based on continuing to be able to meet 90% of urban calls within a 6.5-minute target response time. The project site is clearly within a distance (approximately 1 mile) where any future calls can be responded to within 6.5 minutes. Further, the City Fire Department must review this Project to ensure that adequate fire flow will occur at the project site, especially given that 160 new residences will be developed.

The proposed Project will incrementally add to the existing demand for fire protection services. Cumulative impacts are mitigated through the payment of the Development Impact Fee (DIF), which contains a Fire Facilities component. There is no identified near term need to expand facilities in a manner that could have adverse impacts on the environment. The City's General Fund covers operational expenses, and the proposed Project will contribute both sales taxes and property taxes to the general fund to offset this incremental demand for fire protection services. Any impacts are considered less than significant and no mitigation is required.

- b. *Less Than Significant Impact* – The proposed Project would have law enforcement services available from the City of Murrieta Police Department and the California Highway Patrol. According to the City General Plan EIR, law enforcement protection for the City at buildout should be feasible based on incremental expansion of the number of officers, with perhaps some additional office space at the police station at One Town Square. The project site is located within existing patrol routes and future calls can be responded to within the identified priority call target response times. The City seeks to respond to Priority 1 calls within six minutes; Priority 2 calls with 15 minutes and Priority 3 calls within 35 minutes. The City performs slightly below the objectives, but not by much.

The proposed Project will incrementally add to the existing demand for police protection services. These incremental impacts are mitigated through the payment of the DIF, which contains a Law Enforcement component. The City's General Fund covers operational expenses. The Project will contribute property

and sales taxes to the General Fund to offset this incremental demand for police protection services. Any impacts are considered less than significant and no additional mitigation is required.

- c. *Less Than Significant Impact* – The proposed Project would develop 160 market rate apartment units, and would likely generate a new demand for school services within the area. The estimated school generation rates for the Project are as follows based on the generation rates included in the City's General Plan EIR:

- The Project would generate between 33.6 to 189 K-5 students
- The Project would generate between 31.9 to 63 Middle School students
- The Project would generate between 33.6 to 127 High School students

The Murrieta Valley Unified School District (MVUSD) currently requires a mitigation payment per square foot of residential development. The development impact fee mitigation program of the MVUSD adequately provides for mitigating the impacts of the proposed Project in accordance with current state law. Furthermore, the MVUSD Director of Facilities and Planning indicated that the MVUSD would be able to accommodate the student growth that would correspond the overall growth identified in the City's DEIR—which indicated that an additional 10,734 dwelling units may be developed by City buildout. No other mitigation is identified or needed. Since this is a mandatory requirement, no additional mitigation measures are required to reduce school impacts of the proposed Project to a less than significant level.

- d. *Less Than Significant Impact* – The proposed Project would develop 160 market rate apartment units, and would likely generate a new demand for parks and recreation. However, the Project does include the following park/recreation related and other amenities: club house, exercise room, BBQ area at the swimming pool; swimming pool with spa; children's play area with playground equipment; dog park; and, open play area. The potential increase in population related to the Jefferson Avenue Apartments Project is about 528 persons. The City has an adopted standard of 5 acres of parkland for every 1,000 persons, as such the Project would require an additional 2.64 acres of parkland to accommodate the Project. The addition of parkland within the City relies on funds generated by the Quimby Act, which the proposed Project will be subject to. Given that the General Plan EIR deems the use of Quimby Act fees as appropriate mitigation for parkland, it is anticipated that, through payment of any necessary Quimby Act fees, which is considered a standard condition, the proposed Project will have a less than significant impact to parks and recreation facilities.
- e. *Less Than Significant Impact* – As stated above, the proposed Project will install amenities, some of which may be considered other public facilities that will accommodate many of the Project residents' needs. The proposed Project will incrementally add to the existing demand for library services. These incremental impacts are mitigated through the payment of the DIF, which contains a Library component. Payment of DIF is deemed adequate mitigation for the proposed Project as it will offset future demand generated by potential new residents. Any impacts are considered less than significant and no additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – As addressed in the discussion under XIV, Population and Housing, and XV(d) above, the proposed Project would develop 160 market rate apartments, and as such may induce population, though not substantially. As stated in the discussion under Population and Housing, an estimated 528 persons may reside at the new Jefferson Avenue Apartments. The Apartments include park- and recreation-like amenities that would support some of the new residents' park and recreation needs. These onsite amenities include: a club house with a tree covered patio (Building 9), a gym for residents (Building 10), BBQ area at the swimming pool; swimming pool with spa; children's play area with playground equipment; dog park; and, family BBQ area. In addition, there are three parks within one mile of the project site, Hunt Park, Murrieta Elementary School Park, and Town Square Park are all located less than one mile to the northwest of the project site and provide a full range of park and recreation amenities. Additionally, the proposed Project will be required to comply with the payment of any required Quimby Act fees to enhance park and recreation facilities within the City. Thus, with the above provisions, the proposed Project will not generate a substantial increase in residents of the City who would increase the use of existing recreational facilities. Therefore, any impacts under this issue are considered less than significant. No mitigation is required.
- b. *Less Than Significant Impact* – The proposed Project consists of the 160 market rate apartments in the City of Murrieta. The Project will not include any recreational facilities beyond those installed for resident and resident guest use only. The site is mostly vacant with no existing recreational facilities on or near the project site and is designated for multi-family residential use. As described throughout this Initial Study, the construction of the proposed Jefferson Avenue Apartments Project would not cause a significant adverse physical effect on the environment under any issue. As a result, no recreational facilities beyond the minor facilities proposed to be provided for resident use only are required to serve the Project, thus any impacts under this issue are considered less than significant. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRANSPORTATION: Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: The following section is based on the “Tentative Parcel Map No. 30394 Focused Traffic Impact Analysis City of Murrieta” (TIA) prepared by Urban Crossroads dated September 2, 2020. The TIA is provided as Appendix 9a. Additionally, Urban Crossroads prepared the “Jefferson Residential Vehicle Miles Traveled (VMT) Analysis,” dated May 8, 2020 and provided as Appendix 9b. Finally, at the direction of the City, the VMT analysis was updated to address the City’s recently adopted VMT analysis methodology. This report was published on September 28, 2020 and is provided herein as Appendix 9c.

- a. *Less Than Significant With Mitigation Incorporated* – The Project consists of 160 market rate apartments. It is anticipated that the Project would be developed in a single phase with an anticipated Opening Year of 2023. Assuming 2023 as the opening year for occupancy results in a more conservative traffic study because it incorporates an additional year of background traffic growth. For the purpose of this analysis, the following driveways will be assumed to provide access to the Project site:
- Driveway 1 on Jefferson Avenue – Right-in/Right-out Access Only
 - Driveway 2 on Jefferson Avenue – Full Access

Regional access to the Project site is available from the I-15 Freeway via Murrieta Hot Springs Road.

Background Information from the TIA

The potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2020)
- Existing Plus Ambient Growth Plus Project (EAP) (2023)
- Existing Plus Ambient Growth Plus Project Plus Cumulative Projects (EAPC) (2023)

Existing (2020) Conditions

Information for Existing (2020) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

Existing Plus Ambient Growth Plus Project (2023) Conditions

The EAP (2023) conditions analysis determines the traffic deficiencies based on a comparison of the EAP (2023) traffic conditions to Existing conditions. To account for background traffic growth, an ambient growth factor from Existing (2020) conditions of 6.12% (2 percent per year, compounded over 3 years) is included for EAP (2023) traffic conditions.

Existing Plus Ambient Growth Plus Project Plus Cumulative (2023) Conditions

The EAPC (2023) traffic conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for background traffic growth, an ambient growth factor of 6.12%

from Existing conditions are included for EAPC traffic conditions (2 percent per year, compounded over 3 years). Conservatively, the TIA estimates of area traffic growth then add traffic generated by other known or probable related projects. These related projects are at least in part already accounted for in the assumed 6.12% total ambient growth in traffic noted above; some of these related projects would likely not be implemented and operational within the 2023 Opening Year time frame assumed for the Project. The resulting traffic growth rate utilized in the TIA (6.12 percent ambient growth + traffic generated by related projects) would therefore tend to overstate rather than understate background cumulative traffic deficiencies under 2023 conditions. The list of cumulative projects is comprised of projects from the City of Murrieta, the City of Wildomar, and City of Lake Elsinore.








Analysis Findings Traffic Conditions

A summary of level of service (LOS) results for all analysis scenarios is presented on Table XVII-1.






Existing (2020) Conditions

The existing intersection of Jefferson Avenue and Murrieta Hot Springs Road is currently operating at an acceptable LOS during the peak hours for Existing (2020) traffic conditions. Similarly, the study area roadway segment of Jefferson Road, north of Murrieta Hot Springs Road is currently operating at an acceptable LOS (i.e., LOS C or better).

**Table XVII-1
SUMMARY OF DEFICIENT INTERSECTIONS BY ANALYSIS SCENARIO**

#	Intersection	Existing (2020)	EAP (2021)	EAPC (2021)
1	Jefferson Av. & Dwy. 1	NA		
2	Jefferson Av. & Dwy. 2	NA		
3	Jefferson Av. & Muerrita Hot Springs Rd.			

LEGEND:

-  = AM PEAK HOUR
-  = PM PEAK HOUR
-  = LOS A-D
-  = LOS E
-  = LOS F
- NA = NOT AN ANALYSIS LOCATION FOR THIS SCENARIO

EAP (2023) Conditions

All study area intersections are anticipated to operate at an acceptable LOS under EAP (2023) traffic conditions. The study area roadway segment is also anticipated to continue to operate at acceptable LOS under EAP (2023) traffic conditions.

EAPC (2023) Conditions

All study area intersections and the study area roadway segment are anticipated to operate at an acceptable LOS under EAPC (2023) traffic conditions.

Recommendations

The following recommendations identify improvements necessary to facilitate site access:

TRAN-1 Prior to the issuance of building permits, the Project Applicant shall participate in the City's DIF and County's TUMF programs by paying the requisite DIF and TUMF fees.

TRAN-2 Jefferson Avenue & Driveway 1 (#1) – The Applicant shall install following improvements to accommodate site access:

- **Project to install a stop control on the westbound approach and construct a westbound right turn lane. The Project is to install a raised median or construct a raised, pork-chop island in order to prohibit left turns into and out of Driveway 1, restricting access to right-in/right-out only.**

TRAN-3 Jefferson Avenue & Driveway 2 (#2) – The Applicant shall install following improvements to accommodate site access:

- **Install a stop control on the westbound approach and construct a westbound shared left-right turn lane and accommodate a southbound left turn lane within the existing painted two-way-left- turn lane.**

TRAN-4 Jefferson Avenue is constructed to its ultimate half-section width as an Arterial Highway (110-foot right-of-way) between the Project's northern and southern boundaries. However, the Project shall construct curb, gutter, sidewalk, and landscaping improvements along the Project's frontage and implement improvements needed to accommodate site access.

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections shall be constructed to be consistent with the identified roadway classifications and respective cross-sections in the City of Murrieta General Plan Circulation Element.

On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the Project site.

Project Trip Generation Summary

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. Trip generation rates used to estimate Project traffic are shown in Table XVII-2. The trip generation rates used for this analysis are based upon information collected by the ITE as provided in their Trip Generation Manual, 10th Edition, 2017, for Multifamily Housing (ITE Land Use Code 220). As shown in Table XVII-2, the proposed Project is anticipated to generate a net total of 1,172 trip-ends per day with 74 AM peak hour trips and 90 PM peak hour trips.

**Table XVII-2
PROJECT TRIP GENERATION SUMMARY**

Land Use	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Trip Generation Rates ¹									
Multifamily Housing (Low-Rise) (2-floors)	DU	220	0.11	0.35	0.46	0.35	0.21	0.56	7.32

Land Use	Quantity	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Trip Generation Summary									
Jefferson Residential	160	DU	17	57	74	56	33	90	1,172

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), *Trip Generation Manual*, Tenth Edition (2017).

² DU = Dwelling Units

Analysis Findings EAPC (2023) Traffic Conditions: Intersection Operations, Roadway Segment Operations and Traffic Signal Warrant Analyses

Traffic Volume

This scenario—the only scenario included in this Initial Study as it reflects the worst-case scenario—utilizes existing traffic volumes plus an ambient growth factor of 6.12% in conjunction with the addition of cumulative project development and the addition of Project traffic.

Intersection Operations Analysis

EAPC (2023) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 Methodologies of this TIA. The intersection analysis results are summarized in Table XVII-3, which indicates that the study area intersections are anticipated to operate at an acceptable LOS under EAPC (2023) traffic conditions.

**Table XVII-3
INTERSECTION ANALYSIS FOR EAPC (2023) CONDITIONS**

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service		
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM	
			L	T	R	L	T	R	L	T	R	L	T	R					
1	Jefferson Av. & Driveway 1	CSS	0	2	0	0	2	0	0	0	0	0	0	0	1	9.7	15.4	A	C
2	Jefferson Av. & Driveway 2	CSS	0	2	0	1	2	0	0	0	0	0	0	1	0	15.0	30.9	C	D
3	Jefferson Av. & Murrieta Hot Springs Rd.	TS	0	3	1>	2	2	0	0	0	0	2	0	1	29.3	49.4	C	D	

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1 = Improvement

² Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-street Stop; TS = Traffic Signal; CSS = Improvement

Roadway Segment Analysis

The roadway segment capacities utilized for the purposes of this analysis are approximate figures only and are used at the General Plan level to assist in determining the roadway functional classification (number of through lanes) needed to meet traffic demand. Table XVII-4 provides a summary of the EAPC (2023) traffic conditions roadway segment capacity analysis based on the applicable roadway segment capacity. As shown in Table XVII-4, the study area roadway segment is anticipated to operate at an acceptable LOS under EAPC (2023) traffic conditions.

**Table XVII-4
ROADWAY SEGMENT CAPACITY ANALYSIS FOR EAPC (2023) CONDITIONS**

#	Roadway	Segment Limits	Roadway Section	LOS Capacity ¹	EAPC (2023)	V/c ²	LOS ³	Acceptable LOS	General Plan Classification
1	Jefferson Av.	North of Murrieta Hot Springs Rd	5D	44,875	23,300	0.52	A	C	Arterial

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

¹ These maximum roadway capacities have been extracted from the following source: City of Murrieta General Plan 2035 Update (Table 4.2-2).

² V/c = Volume to Capacity ratio

³ LOS = Level of Service

⁴ There is no roadway capacity for a 5-lane divided roadway. As such, capacity has been estimated by dividing the capacity for a 4-lane Major Arterial by number of lanes and adding the capacity to the capacity for a 4-lane roadway.

Traffic Signal Warrants Analysis

There are no traffic signals anticipated to meet planning level (daily volume) based traffic signal warrants with the addition of Project traffic for EAPC (2023) traffic conditions.

Conclusion

The study area intersections and roadway segments are anticipated to operate at an acceptable LOS for EAPC (2023) traffic conditions, as such, no improvements have been recommended.

Alternative Modes of Transportation

Existing Conditions

Figure XVII-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls. Figure XVII-2 shows the City of Murrieta General Plan Circulation Element.

Bicycle & Pedestrian Facilities

Figure XVII-3 illustrates the City of Murrieta General Plan trails and bikeways. There are Class II bike lanes that currently exist along Jefferson Avenue and proposed Class II bike lanes along Murrieta Hot Springs Road. Class II bike lanes are striped on-street bike lanes. Existing pedestrian facilities within the study area are shown on Figure XVII-4.

Transit Service

The study area is currently served by Riverside Transit Authority (RTA), a public transit agency serving various jurisdictions within Riverside County. The existing bus routes provided within the area by RTA are shown on Figure XVII-5. The study area is currently served by RTA Route 205/206, which operates along Madison Avenue, Murrieta Hot Springs Road and the I-15 Freeway. There are currently no existing bus routes adjacent to the Project along Jefferson Avenue. Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

Impact Conclusion

Based on the discussion above and the analysis provided in the TIA (Appendix 9), no further mitigation is required to minimize project impacts to circulation in the area. With the implementation of the mitigation measures identified above, the Project would have a less than significant potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

- b. *Less Than Significant Impact* – Senate Bill 743 mandates that California Environmental Quality Act (CEQA) guidelines be amended to provide an alternative to Level of Service for evaluating transportation impacts. The amended CEQA guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Traveled (VMT) for transportation impact evaluation. For the purposes of this analysis the recommended VMT analysis methodology and thresholds identified within the Technical Advisory and the City's new analysis methodology have been used.

The Technical Advisory provides for the following recommended threshold for residential projects:

"A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the Sustainable Communities Strategy (SCS) for that city, and should be consistent with the SCS."

Consistent with OPR's Technical Advisory, projects that meet certain screening thresholds based on their location and project type may be presumed to result in a less-than-significant transportation impact. For example, projects located within a Transit Priority Area (TPA) or a low VMT generating traffic analysis zone (TAZ) (subject to some secondary screening criteria) and absent substantial evidence to the contrary are anticipated to result in a less-than-significant impact. Based on available

data, the Project is not located within a TPA. The Project is not located in a low VMT generating TAZ based on Total VMT per Service Population (SP); it is, however, located in a low VMT generating TAZ based on Home-Based VMT per capita. The following summary of findings includes both the original VMT analysis and an update to include the City's recently adopted VMT methodology. Both studies concluded that VMT impacts would be less than significant.

Project VMT

The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. The Riverside Transportation Analysis Model (RIVTAM) is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households and employment. The WRCOG Guidelines identifies RIVTAM as the appropriate tool for conducting VMT analysis for land use projects in Riverside County.

Project VMT has been calculated using the most current version of RIVTAM. Adjustments in socio-economic data (SED) (i.e., residential) have been made to the appropriate traffic analysis zone (TAZ) within the RIVTAM model to reflect the Project's proposed land uses (i.e., residential). Table XVII-5 summarizes the population estimates for the Project.

**Table XVII-5
POPULATION ESTIMATES**

Land Use	Quantity (in dwelling units)	Estimated Population ¹
Residential	160	534

¹Urban Crossroads, Inc. used the population factor of 3.34 persons per household based on California's Department of Finance (DOF) Report E-5 for Cities, Counties, and the State for Murrieta in 2019.

Adjustments to population for the Project's TAZ were made to both the RIVTAM base year model (2012) and the cumulative year model (2040). Project-generated total and home-based (HB) 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) Total and HB VMT. The Total and HB VMT is then normalized by dividing by the number of Project service population. Since the Project does not include an employment component, the service population consists entirely of residents. As shown in Table XVII-6, the Project baseline (2020) Total VMT per SP is 24.76 and HB VMT per capita is 11.10.

**Table XVII-6
PROJECT GENERATED VMT**

	Project
Population	534
Total VMT	13,222
Total VMT / Service Population	24.76
HB VMT	5,927
HB VMT / Capita	11.10

Regional VMT

WRCOG provides VMT calculations for base model year (2012) and cumulative model year (2040) for each of its member agencies and for the WRCOG region. Urban Crossroads has obtained these data from WRCOG and has used linear interpolation to calculate the WRCOG regionwide baseline (2020) Total VMT per SP is 30.81 and HB VMT per capita is 14.58.

VMT Analysis

Project Level VMT Assessment

Table XVII-7 illustrates the comparison between Project-generated Total VMT per SP and HB VMT per capita to the existing (2020) regional (WRCOG) Total VMT per SP and HB VMT per capita. As shown, the Project would be 15% below the current regional (WRCOG) Total VMT per SP by 5.46% and HB VMT per capita by 10.41%. As such, the Project's impact based on VMT is less-than-significant.

**Table XVII-7
POPULATION COMPARISON**

	Total VMT/SP	HB VMT/Capita
Project	24.76	11.10
15% below regional VMT per capita ¹	26.19	12.39
Difference	-1.43	-1.29
Percent Change	-5.46%	-10.41%

¹15% below the regional (WRCOG) Total VMT/SP threshold of 30.81 and HB VMT/Capita threshold of 14.58 VMT/Capita.

Project's Cumulative Effect on VMT

The Project as proposed is consistent with the City of Murrieta General Plan; which results in the Project being consistent with assumptions in the current Southern California Association of Governments (SCAG) Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). The Technical Advisory recommends that projects consistent with the regional RTP/SCS result in a less than significant impact on transportation.

Utilizing the City's recently adopted methodology, "the Project does not meet project type screening criteria; however, the Project's land use and development intensity is the same or less than the land use assumed in the City's General Plan. As such, the Project's VMT impact is less than significant; no additional VMT analysis is required.

Conclusion

In summary, the Project's Total VMT per SP and HB VMT per capita is below the regional (WRCOG) threshold of 15% below existing Total VMT per SP and HB VMT per capita. As such, the Project VMT impact is considered less-than-significant. However, after discussions with the City, the following mitigation measure shall be implemented.

TRAN-5 The developer will explore the possibility of installing a pedestrian connection to Madison Avenue from the project site. This will require consent of property owners to the north and an evaluation of technical and safety feasibility. Prior to initiation of grading permits, this feasibility study shall be submitted for review and approval by the City. If determined feasible, the pedestrian connection shall be installed as part of the project.

- c. ***Less Than Significant Impact*** – Design of driveways, internal roadways, and intersections will be based on City Code, which sets the standard for such design. As such the Project will construct the project access driveways in accordance with designs shown in Figure XVII-1. Based on these direct project design improvements in the circulation system, it is not anticipated that traffic hazards will increase. As such, the Project development would have a less than significant potential to increase hazards due to geometric design features or incompatible uses.
- d. ***Less Than Significant Impact*** – Project access will be designed in accordance with all applicable design and safety standards required by adopted fire codes, safety codes, and building codes

established by the City's Engineering and Fire Departments. The parking lots and site layouts will be designed to meet requirements to allow emergency vehicles adequate access. The design of the proposed project will be reviewed by the City and Fire & Rescue to ensure that adequate emergency access is provided. Therefore, the proposed Project will have a less than significant potential to result in inadequate emergency access.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial change in the significance of tribal cultural resources, 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 the California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

The project site consists of an undeveloped but highly disturbed property that is directly adjacent Jefferson Avenue and just north of Murrieta Hot Springs Road. Based on the site-specific cultural resource evaluations of the project site, it does not contain any surface historical or archaeological resources. Based on contacts with the Native American Heritage Commission (NAHC), the site does not contain any known resource sites of significance to Native Americans. However, based on the consultation with the Pechanga Band of Luiseno Indians, initiated by the City in conformance with AB 52 consultation requirements, the Tribe has requested that the project developer enter into an agreement to allow Native Americans to monitor ground disturbing activities during construction of the proposed project. The objective is to ensure that if any subsurface cultural resources are accidentally unearthed they will be properly managed by the Band or other appropriate stakeholder agency.

- a. *Less Than Significant With Mitigation Incorporated* – The cultural resource surveys of the site determined that no historical or archaeological resources occur on the ground surface of the project site. Therefore, the potential to encounter any cultural resource that would qualify for listing in the California Register of Historical resources is considered negligible. However, in an abundance of caution a mitigation measure (CUL-1) has been included to address the accidental exposure of subsurface cultural resources. This measure shall be implemented by the proposed project if it is approved.
- b. *Less Than Significant With Mitigation Incorporated* – As indicated in the cultural resource technical studies (Appendices 4a), the project site does not contain any historical or archaeological resources

on the surface of the project site. However, in accordance with the input from the Pechanga Band in response to the AB 52 consultation, the following mitigation measures will be implemented to ensure that no resources considered significant to the Band will experience an unavoidable significant adverse impact.

TCR-1 *The project permittee/owner shall retain a Riverside County-certified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown cultural resources. Prior to grading, the project permittee/owner shall provide to the City verification that a certified archaeological monitor has been retained. Any newly discovered cultural resource deposits shall be subject to a cultural resources evaluation.*

TCR-2 *Archaeological Monitoring: At least 30-days prior to grading permit issuance and before any grading, excavation, and/or ground-disturbing activities on the site take place, the project permittee/owner shall retain a Riverside County-certified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.*

1. *The Project Archaeologist, in consultation with consulting tribes, the permittee/owner, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:*
 - a. *Project grading and development scheduling;*
 - b. *The development of a schedule in coordination with the permittee/owner and the Project Archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground-disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists; and,*
 - c. *The protocols and stipulations that the permittee/owner, City, tribes, and Project Archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resource evaluation.*
2. *A final report documenting the monitoring activity and disposition of any recovered cultural resources shall be submitted to the City of Murrieta, Eastern Information Center and the consulting tribe within 60 days of completion of monitoring.*

TCR-3 *Native American Monitoring: Native American Tribal monitors shall also participate in monitoring of ground-disturbing activity. At least 30 days prior to issuance of grading permits, agreements between the permittee/owner and a Native American Monitor shall be developed regarding prehistoric cultural resources and shall identify any monitoring requirements and treatment of Tribal Cultural Resources so as to meet the requirements of CEQA. The monitoring agreement shall address the treatment of known Tribal Cultural Resources; the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation, and ground-disturbing activities; project grading and development scheduling.*

TCR-4 *Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, one or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be submitted to the City of Murrieta Planning Department:*

- 1. Preservation-in-place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resource.*
- 2. On-site reburial of the discovered items as detailed in the Monitoring Plan required pursuant to Mitigation Measure CUL-2. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments*
- 3. The permittee/owner 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 cultural resources, and adhere to the following:*
 - a. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 Code of Federal Regulations 800 Part 79 and therefore would be 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; and,*
 - b. At the completion of grading, excavation, and ground disturbing activities on-site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the Project Archaeologist and Native American Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Murrieta, Eastern Information Center and Consulting tribes.*

TCR-5 *Human remains: If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American*

Heritage Commission must then immediately identify the "most likely descendants(s)" for purposes of receiving notification of discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

a. Water

Less Than Significant Impact – Water will be provided by the Western Municipal Water District (Western or WMWD). Water service is available through a connection located adjacent to the project site. The Project would be supplied with water by Western Municipal Water District that uses imported surface water to meet customer demand. As previously stated under Section X, Hydrology and Water Quality, the District's Urban Water Management Plan (2015) identifies sufficient water resources to meet demand in its surface area. Western's retail service area is primarily residential. The anticipated demand of water supply within Western's retail service area is anticipated to be greater than the demand for water in the future, which indicates that Western has available capacity to serve the proposed Project. Therefore, development of the Jefferson Avenue Apartments would not result in a significant environmental effect related to the relocation or construction of new or expanded water facilities. Impacts are less than significant.

Wastewater

Less Than Significant Impact – Wastewater collection will be provided by Western Municipal Water District and the Project will connect to the sewer main adjacent to the project site. The Santa Rosa Regional Resources Authority (SRRRA) is a Joint Powers Authority formed by Elsinore Valley Municipal Water District (Elsinore), Rancho California Water District (Rancho), and Western Municipal Water District (Western) on November 12, 2015 to be responsible for the collection, transmission, treatment and disposal of wastewater from its member agencies relating to flows to the Santa Rosa Water Reclamation Facility (SRWRF) in Murrieta, California.¹⁰ As such, the Project would connect to Western's existing wastewater collection system within the adjacent roadway, and would

¹⁰ <https://srrra-jpa.org/64/About-Us>

install an internal wastewater collection system to treat sewage generated by residents of the Jefferson Avenue Apartments, the development of which is not anticipated to cause a significant impact. Therefore, development of the Jefferson Avenue Apartment Project would not result in a significant environmental effect related to the relocation or construction of new or expanded wastewater facilities. Impacts are less than significant.

Stormwater

Less Than Significant Impact – The surface runoff from the site, nonpoint source storm water runoff, will be managed in accordance with the WQMP as discussed in the Hydrology and Water Quality Section (Section X) of this Initial Study. Onsite flows will be collected at the southeast corner of the project site within a retention basin. This system will be designed to capture the peak 100-year flow runoff from the project site or otherwise be detained on site and discharged in conformance with Riverside County requirements. Therefore, surface water will be adequately managed on site and as such, development of the Jefferson Avenue Apartment Project would not result in a significant environmental effect related to the relocation or construction of new or expanded stormwater facilities. Impacts are less than significant.

Electric Power

Less Than Significant Impact – Southern California Edison (SCE) will provide electricity to the site and the power distribution system located adjacent to the site will be able to supply sufficient electricity. The effort to connect to the existing electrical system, and to install electricity connections within the project site to serve future residents of the Jefferson Avenue Apartments with electricity is not anticipated to result in significant impacts, as evidenced by the discussions in preceding sections. Therefore, development of the Jefferson Avenue Apartment Project would not result in a significant environmental effect related to the relocation or construction of new or expanded electric power facilities. Impacts are less than significant.

Natural Gas

Less Than Significant Impact – Natural gas will be supplied by Southern California Gas. The site will connect to the existing natural gas line adjacent to the project site. The effort to connect to the existing gas line within the adjacent roadway, and to install natural gas lines within the project site to serve future residents of the Jefferson Avenue Apartment with natural gas is not anticipated to result in significant impacts, as evidenced by the discussions in preceding sections. Therefore, development of the Jefferson Avenue Apartment Project would not result in a significant environmental effect related to the relocation or construction of new or expanded natural gas facilities. Impacts are less than significant.

Telecommunications

Less Than Significant Impact – Development of the Jefferson Avenue Apartment Project would require a connection to telecommunication services, such as wireless internet service and phone service. This can be accomplished through connection to existing services that are available to the developer at the project site. Therefore, development of the Jefferson Avenue Apartment Project would not result in a significant environmental effect related to the relocation or construction of new or expanded telecommunications facilities. Impacts are less than significant.

- b. *Less Than Significant Impact* – Please refer to the discussion under Hydrology, Section X(b) above. The Jefferson Avenue Apartments Project is a multi-family residential project that will consist of 160 dwelling units, and is anticipated to demand about 8.29 AFY of water from WMWD. The anticipated available water supply within Western's retail service area is anticipated to be greater than the demand for water in the future, which indicates that Western has available capacity to serve the proposed Project. As such, given that Western's 2015 Urban Water Management Plan indicates that the water district anticipates ample water supply will be available to serve the Project's daily/annual demand. Therefore, the Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. Impacts under this issue are considered less than significant.

- c. *Less Than Significant Impact* – The SRWRF uses a biological treatment process followed by chemical clarification, filtration, and disinfection to prepare the water for reuse. On average, the plant treats approximately 1 billion gallons of wastewater annually or 2,739,726 GPD average. The treatment plant is a sequencing batch reactor treatment facility with a secondary treatment capacity of 5 MGD and a tertiary treatment capacity of 5 MGD. Given the available capacities, it is anticipated that the facility has available capacity to accommodate the anticipated wastewater generated from the hotel facility, which will vary depending on the occupancy rate of the project site. It is estimated that a 160-apartment unit would house approximately 528 persons, as discussed under Population and Housing above, and as such would generate 100 gallons of wastewater per person per day, according to the City of Murrieta General Plan EIR. The Project, therefore, would generate about 52,800 gallons of wastewater per day (GPD) or 0.0528 MGD. The generation of 0.0528 MGD of wastewater is equivalent to 2.34% of the available 2,260,274 GDP average capacity at the SRWRF. As such, it is anticipated that there will be available capacity to accommodate the demand generated by the proposed Project. Impacts under this issue are less than significant.
- d&e. *Less Than Significant Impact* – The proposed Project will generate demand for solid waste service system capacity and has a potential to contribute to potentially significant cumulative demand impacts on the solid waste system. Solid waste generation rates included in the City of Murrieta General Plan EIR state that residential uses such as that which this Project proposes can produce 12.3 pounds of refuse per dwelling unit per day. It is estimated that 160 market rate apartment units would generate about 1,968 pounds per day or 359.16 tons per year ($12.3 \times 160 \times 365 = 718,320$ pounds per year / $2,000 = 359.16$ tons per year). Solid waste capacity has been expanded to provide adequate disposal capacity for cumulative demand over at least the next five years. Combined with the City's mandatory source reduction and recycling program, the proposed Project is not forecast to cause a significant adverse impact to the waste disposal system due to the available capacities at nearby landfills.

According to the Integrated Waste Management Board Jurisdiction Diversion and Disposal Profile for City of Murrieta, the following disposal facilities were used by the City of Murrieta in 2005 (the most recent year for which data was found): Bakersfield Sanitary Landfill (Kern), Badlands Disposal Site (Riverside), Colton Refuse Disposal Site (San Bernardino), El Sobrante Sanitary Landfill (Riverside), Fontana Refuse Disposal Site (San Bernardino), Lamb Canyon Disposal Site (Riverside), and Puente Hills Landfill #6 (Los Angeles). More than 50% of waste produced within Riverside County is also disposed of within the County. Descriptions of the primary disposal facilities and their capacity are summarized below.

El Sobrante Sanitary Landfill is located at 10910 Dawson Canyon Road east of Interstate 15 in the Gavilan Hills. According to the State of California's Solid Waste Information System, the landfill is active and permitted with a projected closure date of January 1, 2051. The site is currently permitted to a capacity of 209,910,000 cubic yards with a remaining capacity of 143,977,170 cubic yards and permitted throughput of 16,054 tons per day.

Badlands disposal site is located at 31125 Ironwood Ave, Moreno Valley 92373. According to the State of California's Solid Waste Information System, the landfill is active and permitted with a projected closure date of January 1, 2022. The site is currently permitted to a capacity of 34,400,000 cubic yards with a remaining capacity of 15,748,799 cubic yards and permitted throughput of 4,800 tons per day.

Lamb Canyon disposal site is located on Lamb Canyon Road three miles south of Beaumont 92223. According to the State of California's Solid Waste Information System, the landfill is active and permitted with a projected closure date of April 1, 2029. The site is currently permitted to a capacity of 38,935,653 cubic yards with a remaining capacity of 19,242,950 cubic yards and permitted throughput of 5,000 tons per day.

Several of the referenced landfills will be permitted to contain greater volumes of waste in the near future. Any hazardous materials collected on the project site during either construction or operation

of the Project will be transported and disposed of by a permitted and licensed hazardous materials service provider. Therefore, the Project is expected to comply with all regulations related to solid waste under federal, state, and local statutes and be served by a landfill(s) with sufficient permitted capacity to accommodate the Project's solid waste disposal needs. No further mitigation is necessary.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XX. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The proposed Project is not located within a Very High Fire Hazard Severity Zone in a Local Responsibility Area (LRA), shown on Figure XX-1. Please review the discussion under Subchapter IX(g), Hazards and Hazardous Materials. The Project is located within a mixed-use area with commercial and multi-family uses adjacent to the project site. Vacant land is located southeast of the project site. The proposed project site is not located in a Wildland Fire Protection Agreement Area and it does not contain a heavy fuel load at present because the site has been graded and vegetation has been managed through periodically blading the site. The City of Murrieta reviews all proposed projects and provides conditions of approval for setbacks; building and fire sprinkler requirements; roofing design and material and construction requirements, fuel modification; and other measures as appropriate to reduce the risk to the development and surrounding uses to fire hazards. Furthermore, given the urban setting within which the Project is located and the local roadways, it is not anticipated that the development of the Jefferson Avenue Apartment Project within the project site would substantially impair an adopted emergency response or evacuation plan. Furthermore, the Project would improve surrounding roadways to provide access to the project site, which would enhance emergency access in the project area.
- b. *Less Than Significant Impact* – The proposed Project is characterized by essentially flat topography that has been disturbed by past grading activities. The site is characterized by non-native grasses and other weedy species that are managed through periodic blading. The potential for significant exposure of site occupants to pollutant concentrations from a wildfire would be minimal. The Project site itself is not anticipated to be exposed to wildfire, particularly once developed because the site will be cleared, which will minimize fire risk. Based on the site location, and the condition of the site and surrounding area, the Project will have a less than significant potential to exacerbate wildfire

risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire. No mitigation is required.

- c. *Less Than Significant Impact* – The Project will require associated infrastructure in support of the Jefferson Avenue Apartment Project operations/occupancy as follows: the Project will require a potable water connection to the Western Municipal Water District's service area; the Project will require a wastewater connection to the sewer main on Jefferson Avenue; electricity provided by SCE will require the power lines in front of the property along Jefferson Avenue to be installed underground; the site will connect to the existing natural gas line in Jefferson Avenue. This portion of Murrieta is developed but includes this 9.18-acre undeveloped site, which is surrounded by development in all directions except for a vacant site directly adjacent to the project site to the south. Therefore, the Project would not have a significant potential to exacerbate wildfire risk or to result in temporary or ongoing impacts to the environment. Impacts under this issue are considered less than significant.
- d. *Less Than Significant Impact* – The discussion under Section VII, Geology and Soils, concluded that the Project would not have a significant potential to experience landslides or slope instability. Once constructed, the project site will remain essentially flat, and the drainage will be managed in an efficient manner that would not expose people or structures to significant risk. Furthermore, as discussed under Section X, Hydrology and Water Quality, the Project is not located in an area containing a flood hazard, and the project site is anticipated to remain stable should a wildfire occur at or near the project site. As discussed above, the Project is not anticipated to be exposed to substantial fire risk because of the lack of fuel to spread wildfire surrounding the site. Therefore, the development of the Jefferson Avenue Apartment Project at this site is anticipated to have a less than significant potential to 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 mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XXI. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulatively considerable unavoidable significant adverse environmental impacts. Mitigation is required to control potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis of the Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized following this section.

- a. *Less Than Significant With Mitigation Incorporated* – The Project has no potential to cause a significant impact to any biological or cultural resources, with implementation of mitigation measures. The Project has been identified as having a less than significant potential to degrade the quality of the natural environment, substantially reduce 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 reduce the number or restrict the range of a rare or endangered plant or animal. The Project requires mitigation to prevent significant impacts from occurring as a result of implementation of the Project. Based on the historic disturbance of the site, and its current disturbed condition, the potential for impacting cultural resources is low. However, mitigation is required to ensure that the Applicant confers with the Murrieta Valley Historical Society regarding the spring cooling structure on site, which, while not considered a significant historic resource, may be of interest to be restored off-site. The Cultural Resources Report determined that no significant archaeological or historical resources of importance were found at the Project site, so it is not anticipated that any resources could be affected by the Project because no significant cultural resources exist. However, because it is not known what could be unearthed upon any excavation activities, contingency mitigation measures are provided to ensure that, in the unlikely event that any resources are found, they are protected from any potential impacts. Please see biological and cultural sections of this Initial Study.
- b. *Less Than Significant With Mitigation Incorporated* – The Project has 8 potential impact categories that are individually limited, but may be cumulatively considerable. These are: Aesthetics, Biological Resources, Cultural Resources, Geology & Soils, Hazards & Hazardous Materials, Hydrology &

Water Quality, Noise, Transportation, and Tribal Cultural Resources. Cumulative traffic, air quality, greenhouse gas, etc. impacts are considered as part of the analysis contained under the related impact category. These above issues require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively considerable. All other environmental issues were found to have no significant impacts without implementation of mitigation. The potential cumulative environmental effects of implementing the proposed project have been determined to be less than considerable and thus, less than significant impacts.

- c. *Less Than Significant With Mitigation Incorporated* – The proposed Project includes activities that have a potential to cause direct substantial adverse effects on humans. The issues of Geology and Soils, Hazards & Hazardous Materials, and Noise require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed Project have been determined to be less than significant.

Conclusion

This document evaluated all CEQA issues contained in the latest Initial Study Checklist form. The evaluation determined that either no impact or less than significant impacts would be associated with the issues of Agriculture and Forestry Resources, Air Quality, Energy, Greenhouse Gases, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Utilities & Service Systems, and Wildfire. The issues of Aesthetics, Biological Resources, Cultural Resources, Geology & Soils, Hazards & Hazardous Materials, Hydrology & Water Quality, Noise, Transportation, and Tribal Cultural Resources, require the implementation of mitigation measures to reduce Project specific and cumulative impacts to a less than significant level. The required mitigation has been proposed in this Initial Study to reduce impacts for these issues to a less than significant impact level.

Based on the evidence and findings in this Initial Study, the City of Murrieta proposes to adopt a Mitigated Negative Declaration for the Jefferson Avenue Apartment Project. A Notice of Intent to Adopt a Mitigation Negative Declaration (NOI) will be issued for this project by the City. The Initial Study and NOI will be circulated for 30 days of public comment. At the end of the 30-day review period, a final MND package will be prepared and it will be reviewed by the City for possible adoption at a future Planning Commission meeting, the date for which has yet to be determined. If you or your agency comments on the MND/NOI for this Project, you will be notified about the meeting date in accordance with the requirements in Section 21092.5 of CEQA (statute).

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Revised 2019

Authority: Public Resources Code sections 21083 and 21083.09

Reference: Public Resources Code sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3/ 21084.2 and 21084.3

SUMMARY OF MITIGATION MEASURES

Aesthetics

- AES-1 For future development located in or immediately adjacent to residential zoned properties, construction documents shall include language that requires all construction contractors to strictly control the staging of construction equipment and the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. Construction equipment shall be parked and staged within the project site, as distant from the residential use, as reasonably possible. Staging areas shall be screened from view from residential properties.
- AES-2 Construction documents shall include language requiring that construction vehicles be kept clean and free of mud and dust prior to leaving the development site. Streets surrounding the development site shall be swept daily and maintained free of dirt and debris.
- AES-3 Construction worker parking may be located off-site with prior approval by the City. On-street parking of construction worker vehicles on residential streets shall be prohibited.
- AES-4 Prior to approval of the Final Design, an analysis of potential glare from sunlight or exterior lighting to impact vehicles traveling on adjacent roadways shall be submitted to the City for review and approval. This analysis shall demonstrate that due to building orientation or exterior treatment, no significant glare may be caused that could negatively impact drivers on the local roadways or impact adjacent land uses. If potential glare impacts are identified, the building orientation, use of non-glare reflective materials or other design solutions acceptable to the City of Murrieta shall be implemented to eliminate glare impacts.

Biological Resources

- BIO-1 The Applicant shall be required to obtain another BUOW protocol survey if the site has not been disturbed prior to April 2021 to determine the persisting absence of BUOW onsite. Because BUOW are protected by applicable State and/or federal laws, including but not limited to the California Fish and Game Code (FGC) and Migratory Bird Treaty Act of 1918 (MBTA), if BUOW are found onsite during work activities, all activities likely to affect the animal(s) shall cease immediately and regulatory agencies shall be contacted to determine appropriate management actions.
- BIO-2 The State of California prohibits the “take” of active bird nests. To avoid impacts to nesting birds (common and special status) during the nesting season (generally between February 1 to August 31), a qualified Avian Biologist shall conduct pre-construction nesting bird survey prior to Project-related disturbance to identify any active nests. If no active nests are found, no further action would be required. If an active nest is found, the biologist shall set appropriate no-work buffers around the nest, which would be determined based on the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

Cultural Resources

- CUL-1 The Applicant has initiated consultation with the Murrieta Valley Historical Society (MVHS) to explore the possibility of salvaging the spring structure and relocating it to an off-site location. The Applicant shall provide MVHS an opportunity for the salvaging of the spring building at a location off-site, if desired by the MVHS. The Applicant shall not be required to

retain the structure within the project site. The Applicant shall assist the MVHS with the relocation effort if requested. Further, the Applicant shall discuss placing a historical marker placard at the project site to commemorate the spring structure's historical significance to the community.

- CUL-2 Should any subsurface or other cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the City's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

Geology and Soils

- GEO-1 Based upon the geotechnical investigation (Appendix 5 of this document), all of the recommended seismic design parameters identified in Appendix 5 (beginning on Page 5) shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including seismic soil stability on future project-related structures.
- GEO-2 Based upon the geotechnical investigation (Appendix 5 of this document), all of the recommended design parameters identified in Appendix 5 (beginning on Page 10 at "Grading Recommendations") shall be implemented by the Applicant. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site, including remediation to address liquefaction.
- GEO-3 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. If covering is not feasible, then measures such as the use of straw bales or sandbags shall be used to capture and hold eroded material on the Project site for future cleanup.
- GEO-4 All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Jefferson Avenue Apartments being constructed.
- GEO-5 Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the City's onsite inspector. The paleontological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

Hazards and Hazardous Materials

- HAZ-1 All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure will be incorporated into the SWPPP prepared for the Project development.

Hydrology and Water Quality

- HYD-1 The Project proponent will select best management practices from the range of practices identified by the City and reduce future non-point source pollution in surface water runoff

discharges from the site to the maximum extent practicable, both during construction and following development. The Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) shall be submitted to the City for review and approval prior to ground disturbance and the identified BMPs installed in accordance with schedules contained in these documents.

Noise

- NOI-1 Windows & Glass Doors: All units require windows and glass doors with well-fitted, well-weather-stripped assemblies and shall have minimum sound transmission class (STC) ratings of 27.
- NOI-2 Exterior Doors: All exterior doors shall be well weather-stripped and have minimum STC ratings of 27. Well-sealed perimeter gaps around the doors are essential to achieve the optimal STC rating.
- NOI-3 Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.
- NOI-4 Roof: Roof sheathing of wood construction shall be per manufacturer's specification or caulked plywood of at least one-half inch thick. Ceilings shall be per manufacturer's specification or well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- NOI-5 Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g. air conditioning) or active ventilation system (e.g. fresh air supply) shall be provided which satisfies the requirements of the California Uniform Building Code.

Transportation

- TRAN-1 Prior to the issuance of building permits, the Project Applicant shall participate in the City's DIF and County's TUMF programs by paying the requisite DIF and TUMF fees.
- TRAN-2 Jefferson Avenue & Driveway 1 (#1) – The Applicant shall install following improvements to accommodate site access:
- Project to install a stop control on the westbound approach and construct a westbound right turn lane. The Project is to install a raised median or construct a raised, pork-chop island in order to prohibit left turns into and out of Driveway 1, restricting access to right-in/right-out only.
- TRAN-3 Jefferson Avenue & Driveway 2 (#2) – The Applicant shall install following improvements to accommodate site access:
- Install a stop control on the westbound approach and construct a westbound shared left-right turn lane and accommodate a southbound left turn lane within the existing painted two-way-left- turn lane.
- TRAN-4 Jefferson Avenue is constructed to its ultimate half-section width as an Arterial Highway (110-foot right-of-way) between the Project's northern and southern boundaries. However, the Project shall construct curb, gutter, sidewalk, and landscaping improvements along the Project's frontage and implement improvements needed to accommodate site access.

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections shall be constructed to be consistent with the identified roadway classifications and respective cross-sections in the City of Murrieta General Plan Circulation Element.

On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the Project site.

- TRAN-5 The developer will explore the possibility of installing a pedestrian connection to Madison Avenue from the project site. This will require consent of property owners to the north and an evaluation of technical and safety feasibility. Prior to initiation of grading permits, this feasibility study shall be submitted for review and approval by the City. If determined feasible, the pedestrian connection shall be installed as part of the project.

Tribal Cultural Resources

- TCR-1 The project permittee/owner shall retain a Riverside County-certified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown cultural resources. Prior to grading, the project permittee/owner shall provide to the City verification that a certified archaeological monitor has been retained. Any newly discovered cultural resource deposits shall be subject to a cultural resources evaluation.
- TCR-2 Archaeological Monitoring: At least 30-days prior to grading permit issuance and before any grading, excavation, and/or ground-disturbing activities on the site take place, the project permittee/owner shall retain a Riverside County-certified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.
1. The Project Archaeologist, in consultation with consulting tribes, the permittee/owner, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:
 - a. Project grading and development scheduling;
 - b. The development of a schedule in coordination with the permittee/owner and the Project Archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground-disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists; and,
 - c. The protocols and stipulations that the permittee/owner, City, tribes, and Project Archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resource evaluation.
 2. A final report documenting the monitoring activity and disposition of any recovered cultural resources shall be submitted to the City of Murrieta, Eastern Information Center and the consulting tribe within 60 days of completion of monitoring.
- TCR-3 Native American Monitoring: Native American Tribal monitors shall also participate in monitoring of ground-disturbing activity. At least 30 days prior to issuance of grading permits, agreements between the permittee/owner and a Native American Monitor shall be developed regarding prehistoric cultural resources and shall identify any monitoring requirements and treatment of Tribal Cultural Resources so as to meet the requirements of CEQA. The monitoring agreement shall address the treatment of known Tribal Cultural Resources; the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation, and ground-disturbing activities; project grading and development scheduling.

- TCR-4 Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, one or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be submitted to the City of Murrieta Planning Department:
1. Preservation-in-place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resource.
 2. On-site reburial of the discovered items as detailed in the Monitoring Plan required pursuant to Mitigation Measure CUL-2. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments
 3. The permittee/owner 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 cultural resources, and adhere to the following:
 - a. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 Code of Federal Regulations 800 Part 79 and therefore would be 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; and,
 - b. At the completion of grading, excavation, and ground disturbing activities on-site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the Project Archaeologist and Native American Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Murrieta, Eastern Information Center and Consulting tribes.
- TCR-5 Human remains: If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately identify the "most likely descendants(s)" for purposes of receiving notification of discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

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City of Murrieta General Plan 2035, 2011

City of Murrieta General Plan 2035 EIR, 2011

City of Murrieta Municipal Code

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Urban Crossroads, *Jefferson Residential Vehicle Miles Traveled (VMT) Analysis*, updated September 28, 2020

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Urban Crossroads, *Jefferson Avenue Apartments, Energy Analysis, City of Murrieta*, May 22, 2020

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<https://www.scag.ca.gov/Documents/Murrieta.pdf>

http://scagrtppscs.net/Documents/2016/draft/d2016RTPSCS_DemographicsGrowthForecast.pdf

<https://srrra-jpa.org/64/About-Us>

https://www.wmwd.com/DocumentCenter/View/3162/Western_2015-UWMP_Final_Body-Only?bidId=

<https://www.wmwd.com/461/Sustainable-Groundwater-Management-Act>

FIGURES

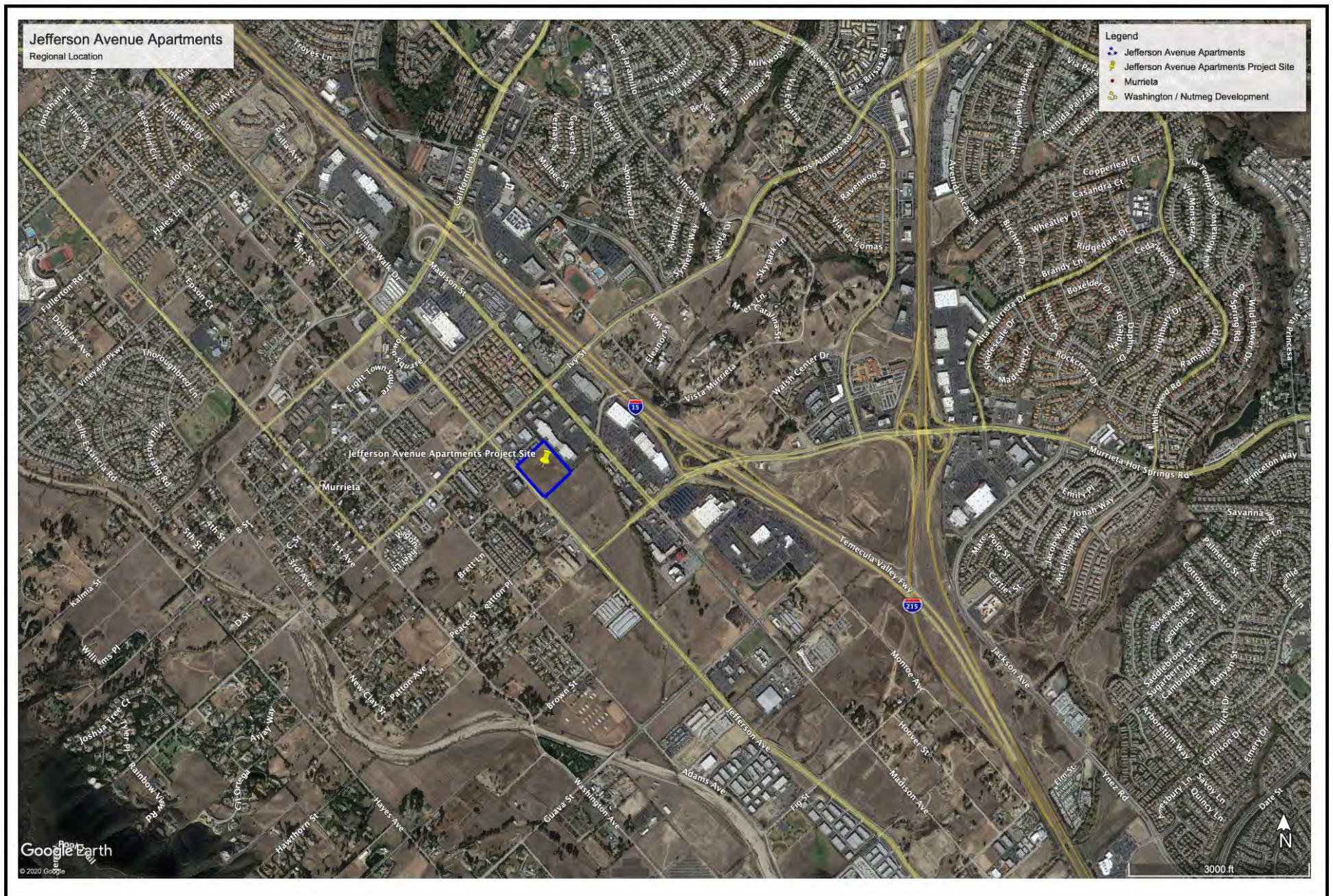


FIGURE 1



FIGURE 2

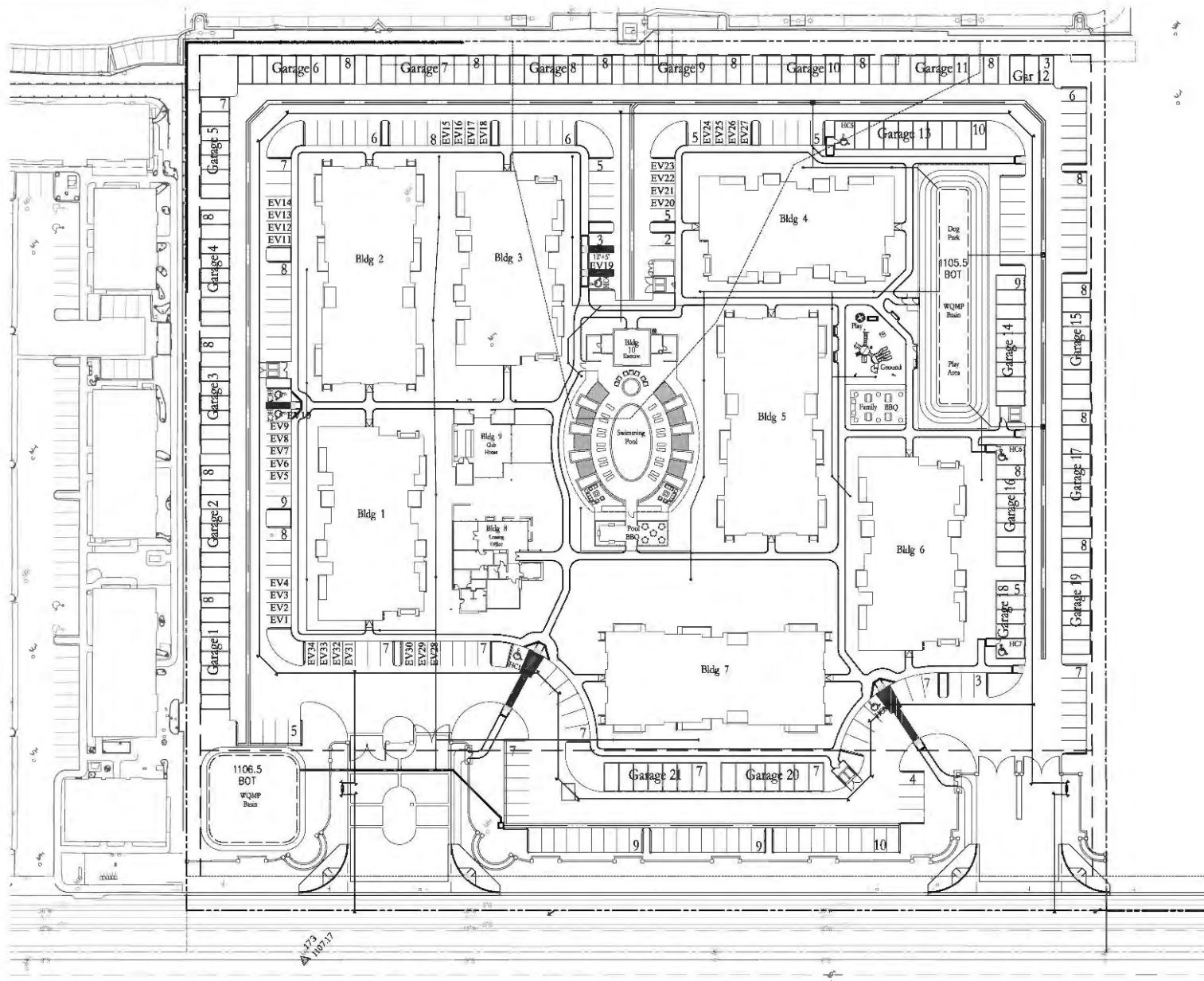


FIGURE 3

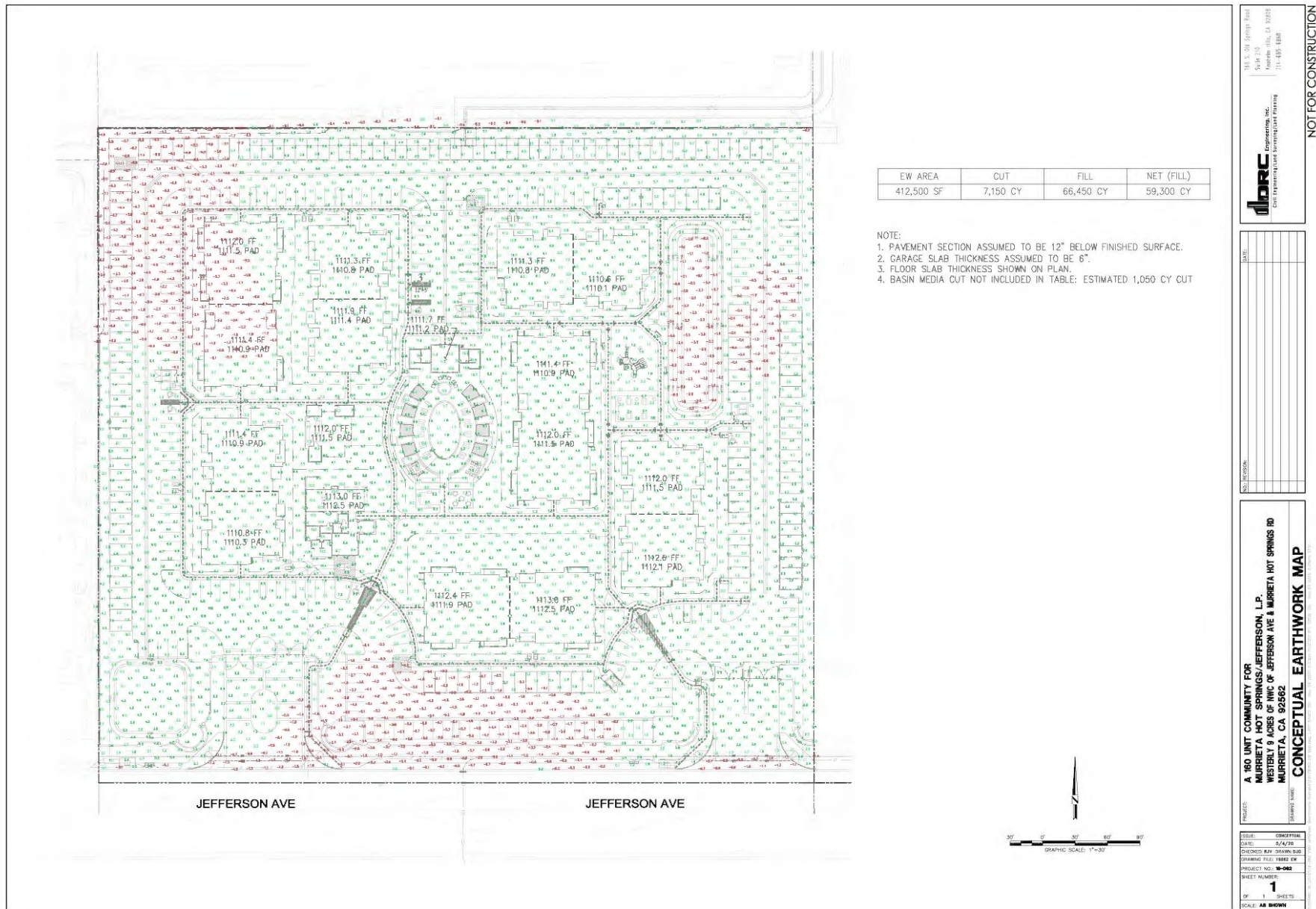


FIGURE 4

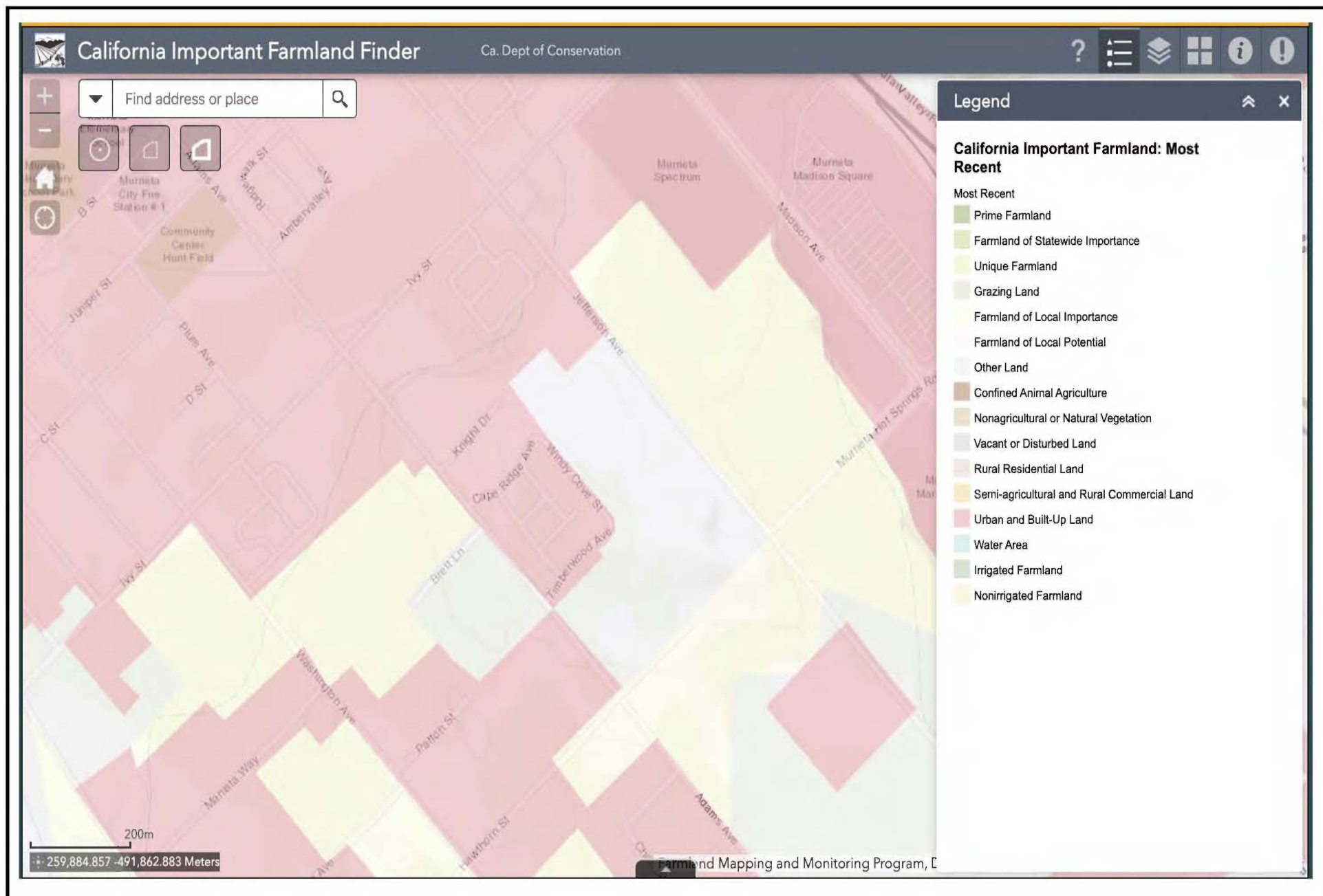
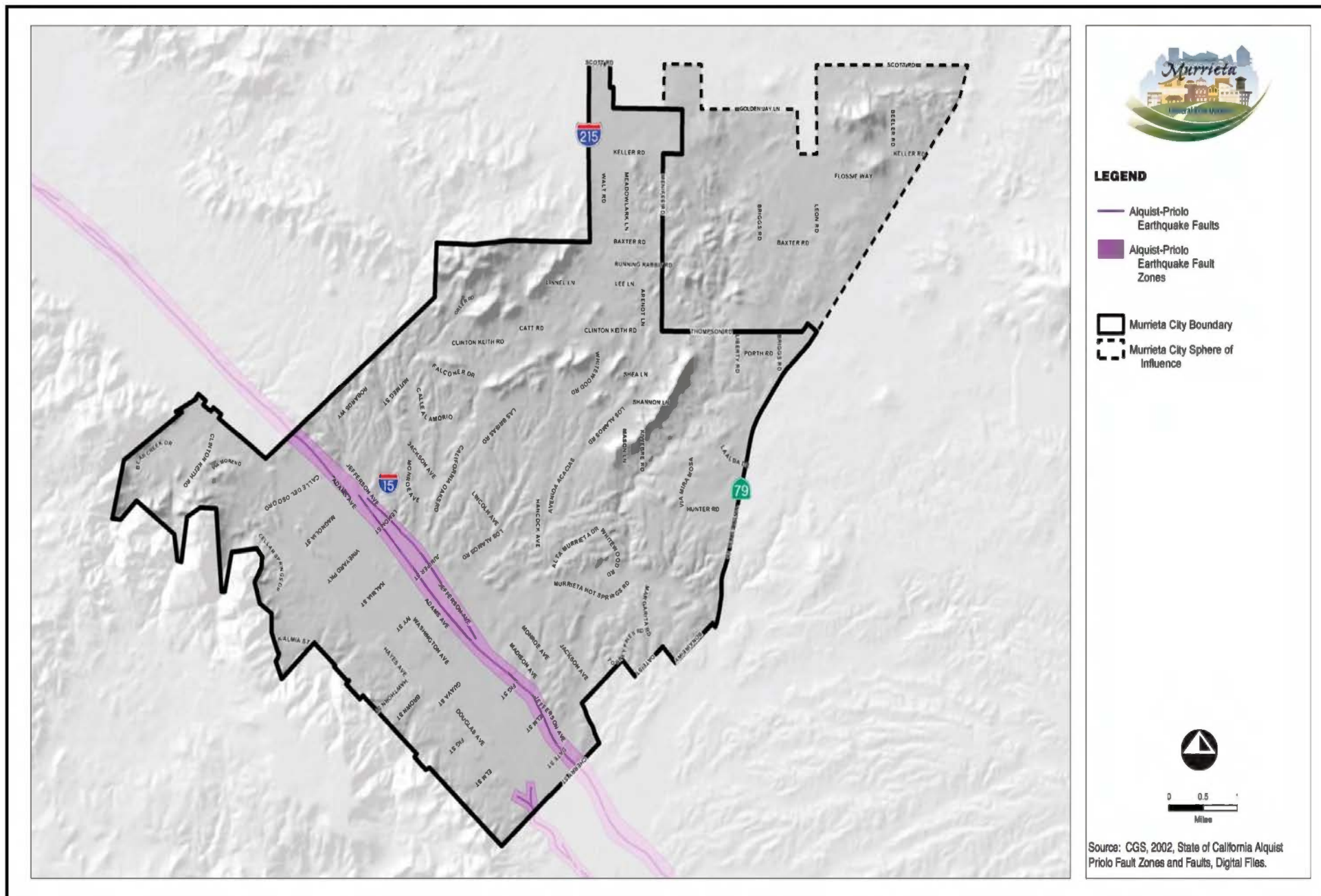


FIGURE II-1



SOURCE: Murrieta General Plan Update EIR, July 2011

FIGURE VII-1

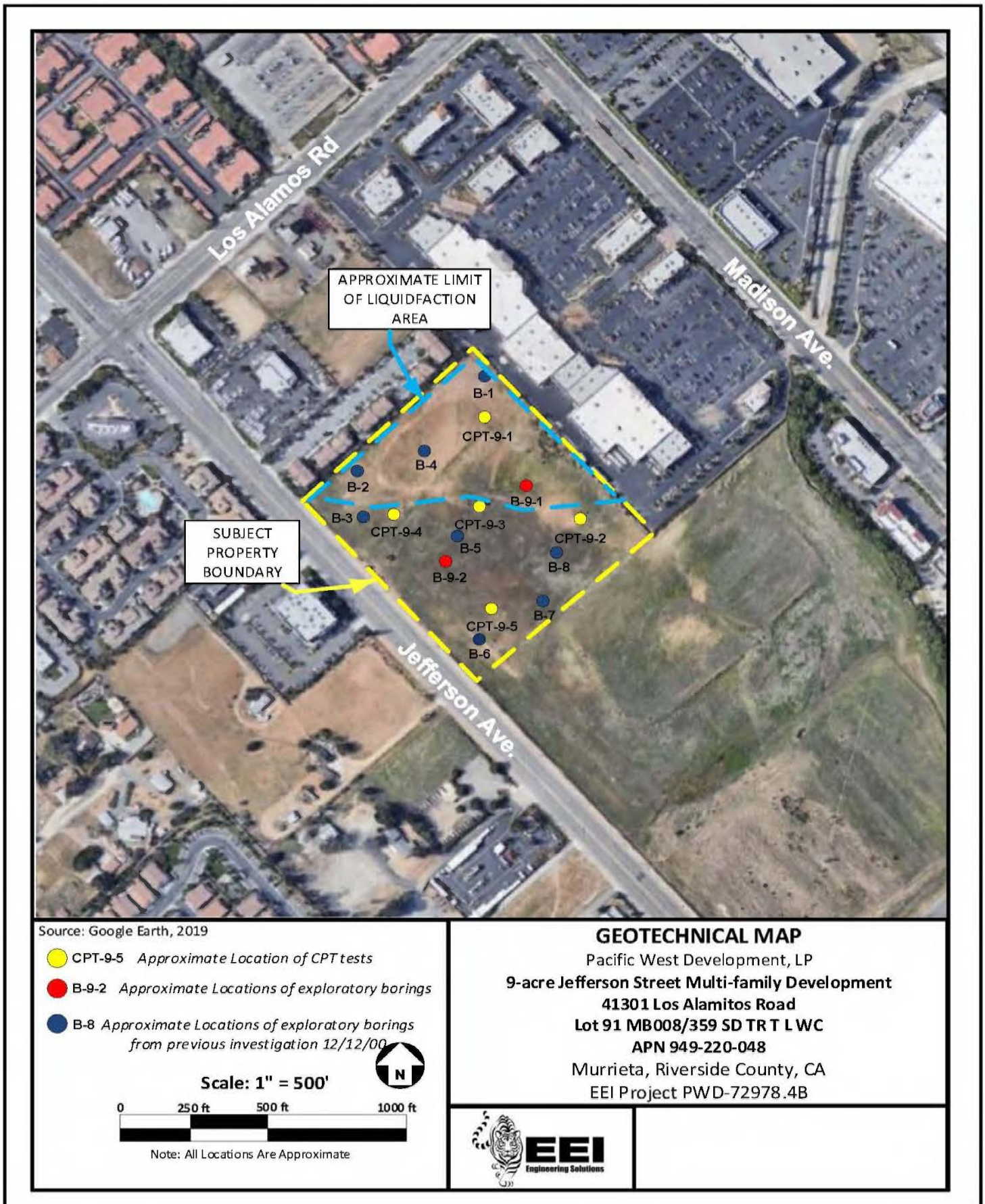
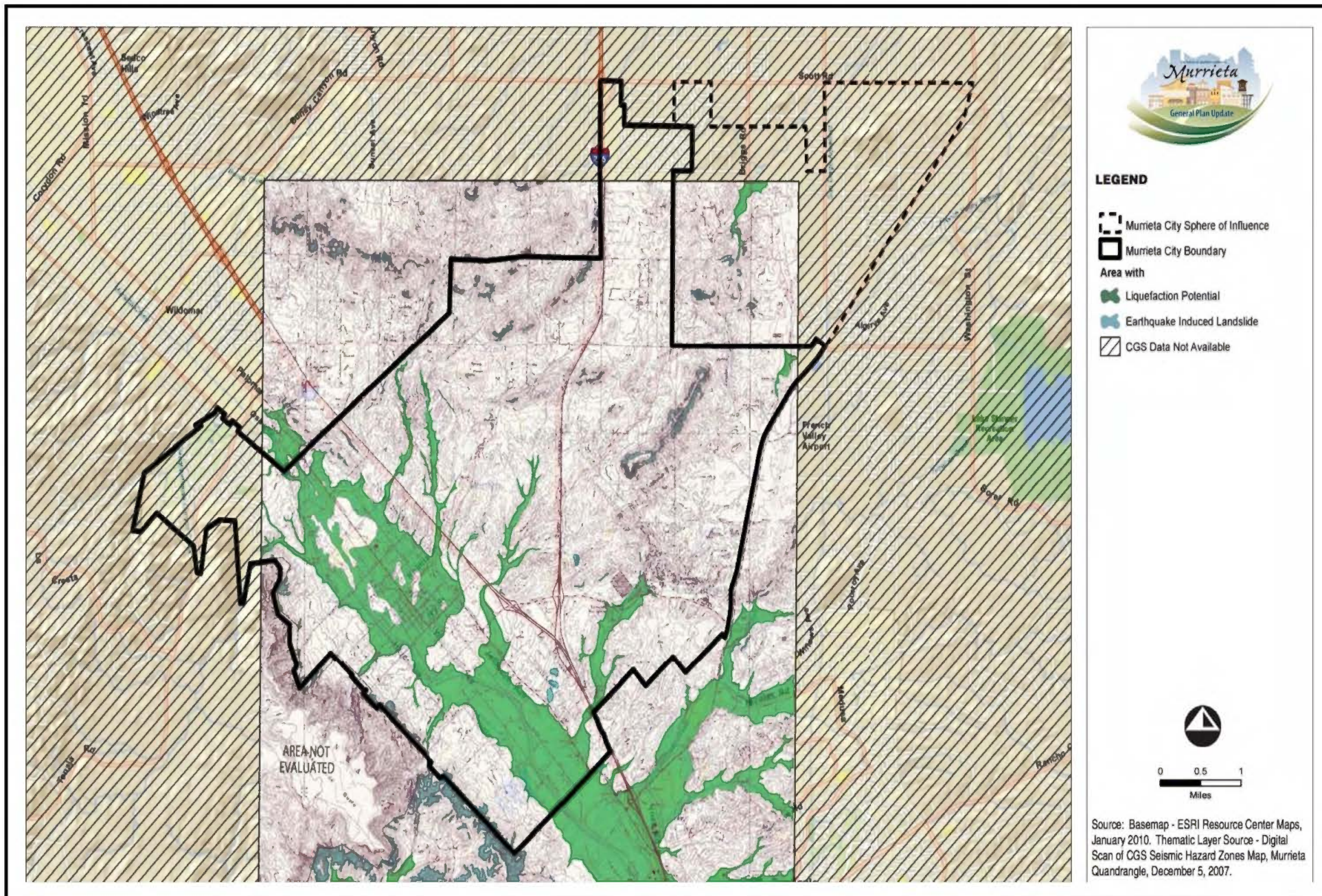


FIGURE VII-2



SOURCE: Murrieta General Plan Update, July 2011

FIGURE VII-3

**1 District Support Center**

41870 McAlby Court, 92562
(951) 696-1600

**2 Alta Murrieta Elementary**

39475 Whitewood Rd, 92563
951/696-1403 FAX 951/304-1766

3 Antelope Hills Elementary

36105 Murrieta Oaks Ave, 92563
951/445-4110 FAX 951/304-1871

4 Avaxat Elementary

24300 Las Brisas Rd, 92562
951/696-1402 FAX 951/304-1627

5 Buchanan Elementary

40121 Torrey Pines Rd, 92563
951/696-1428 FAX 951/304-1851

6 Cole Canyon Elementary

23750 Via Alisol, 92562
951/696-1421 FAX 951/304-1861

7 Creekside Alternative High

24150 Hayes Ave, 92562
951/696-1409 FAX 951/304-1665

8 Dorothy McElhinney Middle

35125 Briggs Rd, 92563
951/304-1885 FAX 951/304-1889

9 E. Hale Curran Elementary

40855 Chaco Canyon Rd, 92562
951/696-1405 FAX 951/304-1726

10 Lisa J. Mails Elementary

35185 Briggs Rd, 92563
951/304-1880 FAX 951/304-1881

11 Monte Vista Elementary

37420 Via Mira Mosa, 92563
951/894-5085 FAX 951/304-1842

12 Murrieta Elementary

24725 Adams Ave, 92562
951/696-1401 FAX 951/304-1705

13 Murrieta Mesa High

24801 Monroe Ave, 92562
951/304-1890 FAX 951/304-1895

14 Murrieta Valley High

42200 Nighthawk Wy, 92562
951/696-1408 FAX 951/304-1803

15 Rail Ranch Elementary

25030 Via Santee, 92563
951/696-1404 FAX 951/304-1745

16 Shivela Middle

24515 Lincoln Ave, 92562
951/696-1406 FAX 951/304-1642

17 Sykes Elementary

39138 Oakville Ave, 92562

*On Hold***18 Thompson Middle**

24040 Hayes Ave, 92562
951/696-1410 FAX 951/304-1691

19 Tovashal Elementary

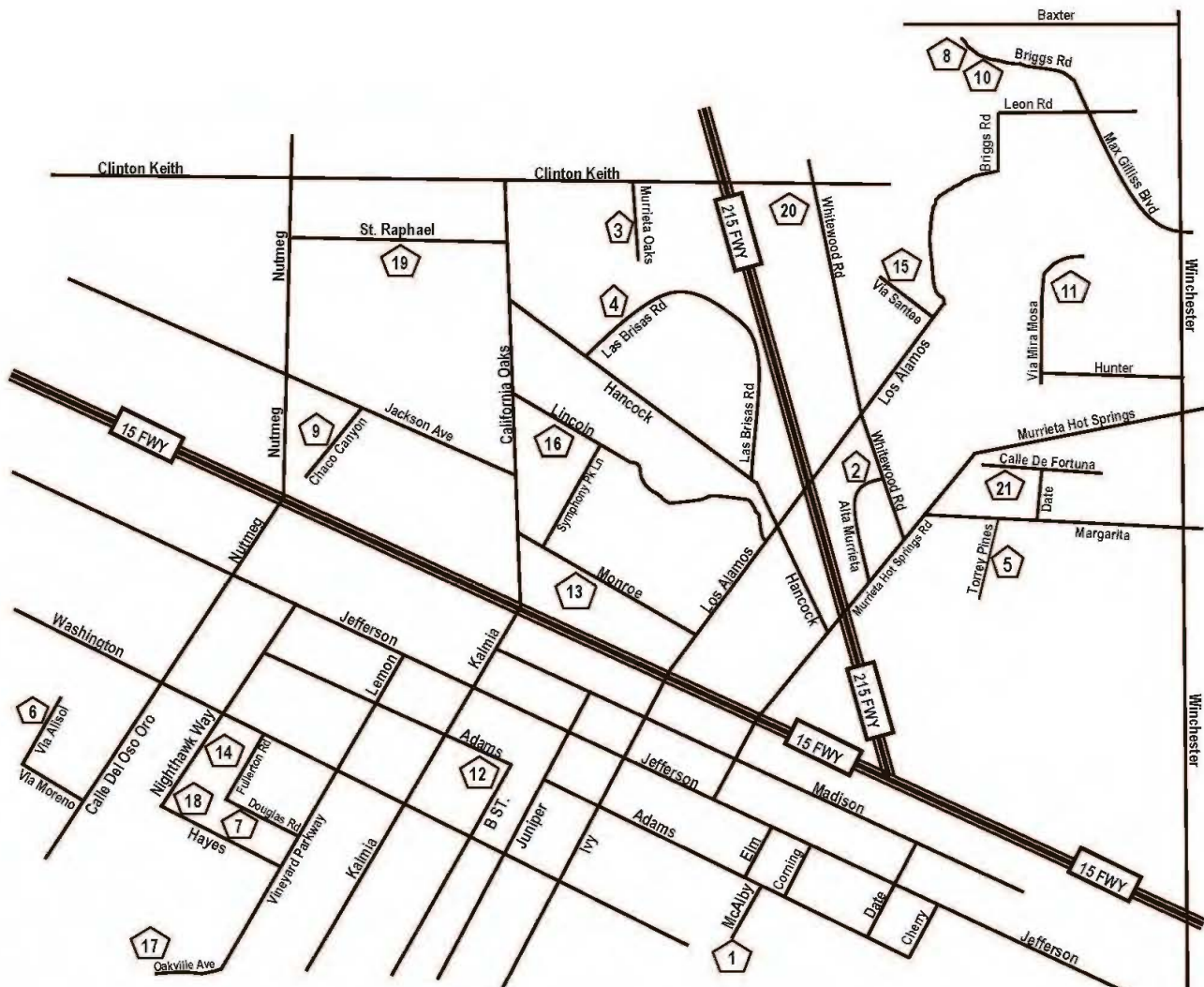
23801 St Raphael, 92562
951/696-1411 FAX 951/304-1782

20 Vista Murrieta High

28251 Clinton Keith Rd, 92563
951/894-5750 FAX 951/304-1832

21 Warm Springs Middle

39245 Calle Fortuna, 92563
951/696-3503 FAX 951/304-1611

**FIGURE IX-1**

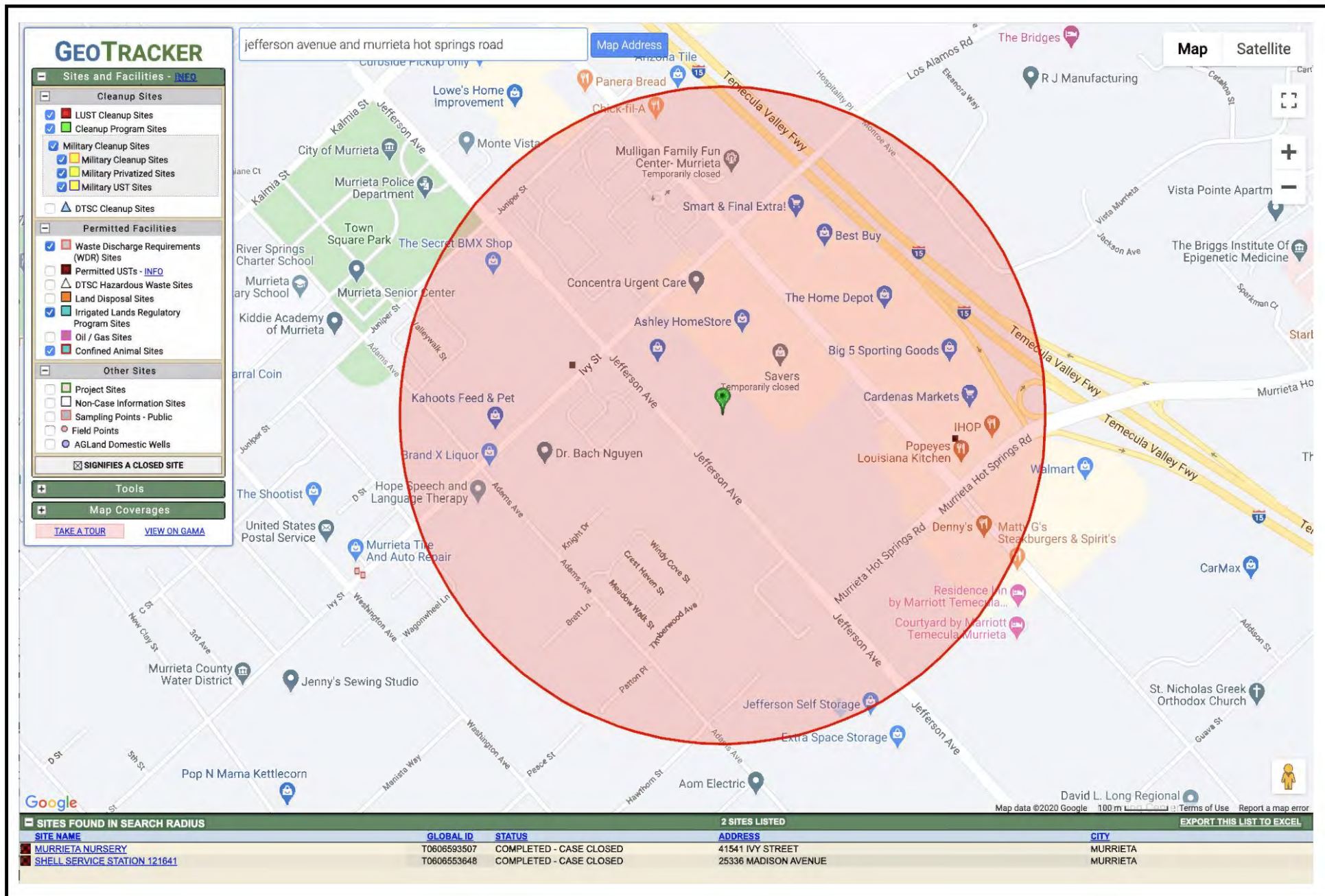


FIGURE IX-2



STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER



Tools

Reports

UST Case Closures

Information



MURRIETA NURSERY (T0606593507) - ([MAP](#))

[SIGN UP FOR EMAIL ALERTS](#)

41541 IVY STREET
MURRIETA, CA 92562
RIVERSIDE COUNTY
LUST CLEANUP SITE ([INFO](#))
[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES

SAN DIEGO RWQCB (REGION 9) (**LEAD**) - CASE #: 9UT4175
RIVERSIDE COUNTY LOP - CASE #: 200622769

[Summary](#) [Case Reviews](#) [Cleanup Action Report](#) [Regulatory Activities](#) [Environmental Data \(ESI\)](#) [Site Maps / Documents](#) [Community Involvement](#) [Related Cases](#)

Regulatory Profile

[PRINTABLE CASE SUMMARY](#)

CLEANUP STATUS - [DEFINITIONS](#)

COMPLETED - CASE CLOSED AS OF 10/10/2013 - [CLEANUP STATUS HISTORY](#)

POTENTIAL CONTAMINANTS OF CONCERN

GASOLINE

FILE LOCATION

REGIONAL BOARD

DWR GROUNDWATER SUB-BASIN NAME

Temecula Valley (9-005)

GROUNDWATER MONITORING FREQUENCY

OF WELLS MONITORED - SEMI-ANNUALLY : 8

POTENTIAL MEDIA OF CONCERN

UNDER INVESTIGATION

DESIGNATED GROUNDWATER BENEFICIAL USE(S) - [DEFINITIONS](#)

MUN, AGR, IND, PROC

CALWATER WATERSHED NAME

Santa Margarita - Murrieta (902.32)

Site History

The property is located on the northwestern corner of Ivy Street and Jefferson Avenue in Murrieta, California. A Chevron service station occupied the property from the 1940s until the early 1970s. The property was then vacant for nearly ten years until a nursery was developed on the site in the early 1980s. The Albaum Trust purchased the property in 1967. USTs associated with the former service station were located near the Ivy Street entrance to the current nursery. No structures, including the USTs, associated with the former service station operations remain at the site.

FIGURE IX-3



STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER



Tools

Reports

UST Case Closures

Information



SHELL SERVICE STATION 121641 (T0606553648) - ([MAP](#))

[SIGN UP FOR EMAIL ALERTS](#)

25336 MADISON AVENUE
MURRIETA, CA 92562
RIVERSIDE COUNTY
[LUST CLEANUP SITE \(INFO\)](#)
[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES

SAN DIEGO RWQCB (REGION 9) ([LEAD](#)) - CASE #: 9UT4190
RIVERSIDE COUNTY LOP

[Summary](#) [Case Reviews](#) [Cleanup Action Report](#) [Regulatory Activities](#) [Environmental Data \(ESI\)](#) [Site Maps / Documents](#) [Community Involvement](#) [Related Cases](#)

Regulatory Profile

[PRINTABLE CASE SUMMARY](#)

CLEANUP STATUS - DEFINITIONS

COMPLETED - CASE CLOSED AS OF 3/11/2010 - [CLEANUP STATUS HISTORY](#)

POTENTIAL CONTAMINANTS OF CONCERN

GASOLINE

FILE LOCATION

REGIONAL BOARD

DWR GROUNDWATER SUB-BASIN NAME

Temecula Valley (9-005)

GROUNDWATER MONITORING FREQUENCY

OF WELLS MONITORED - ANNUALLY : 4

POTENTIAL MEDIA OF CONCERN

AQUIFER USED FOR DRINKING WATER SUPPLY

DESIGNATED GROUNDWATER BENEFICIAL USE(S) - DEFINITIONS

MUN, AGR, IND, PROC

CALWATER WATERSHED NAME

Santa Margarita - Murrieta (902.32)

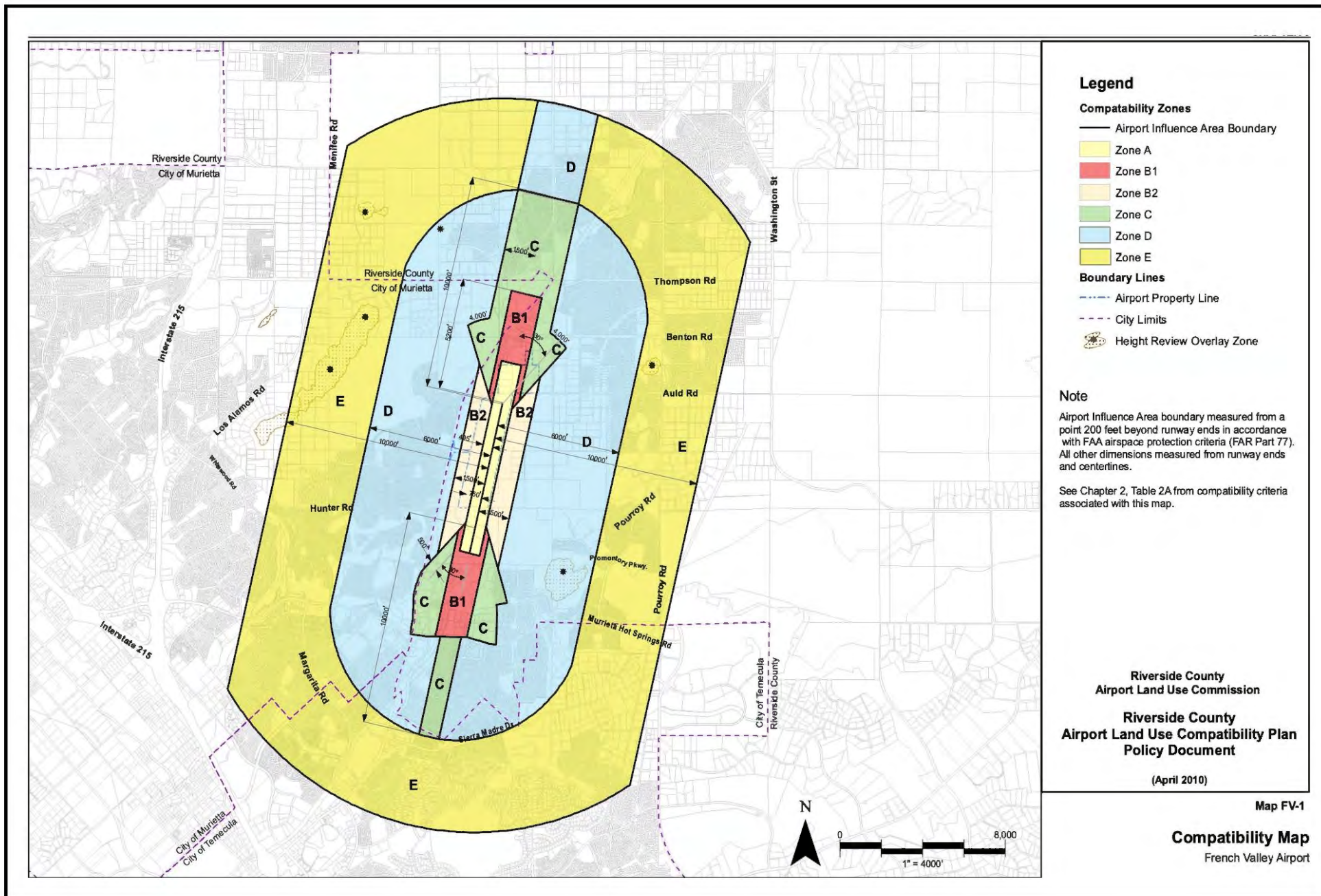
Future Land Use Reported at Closure

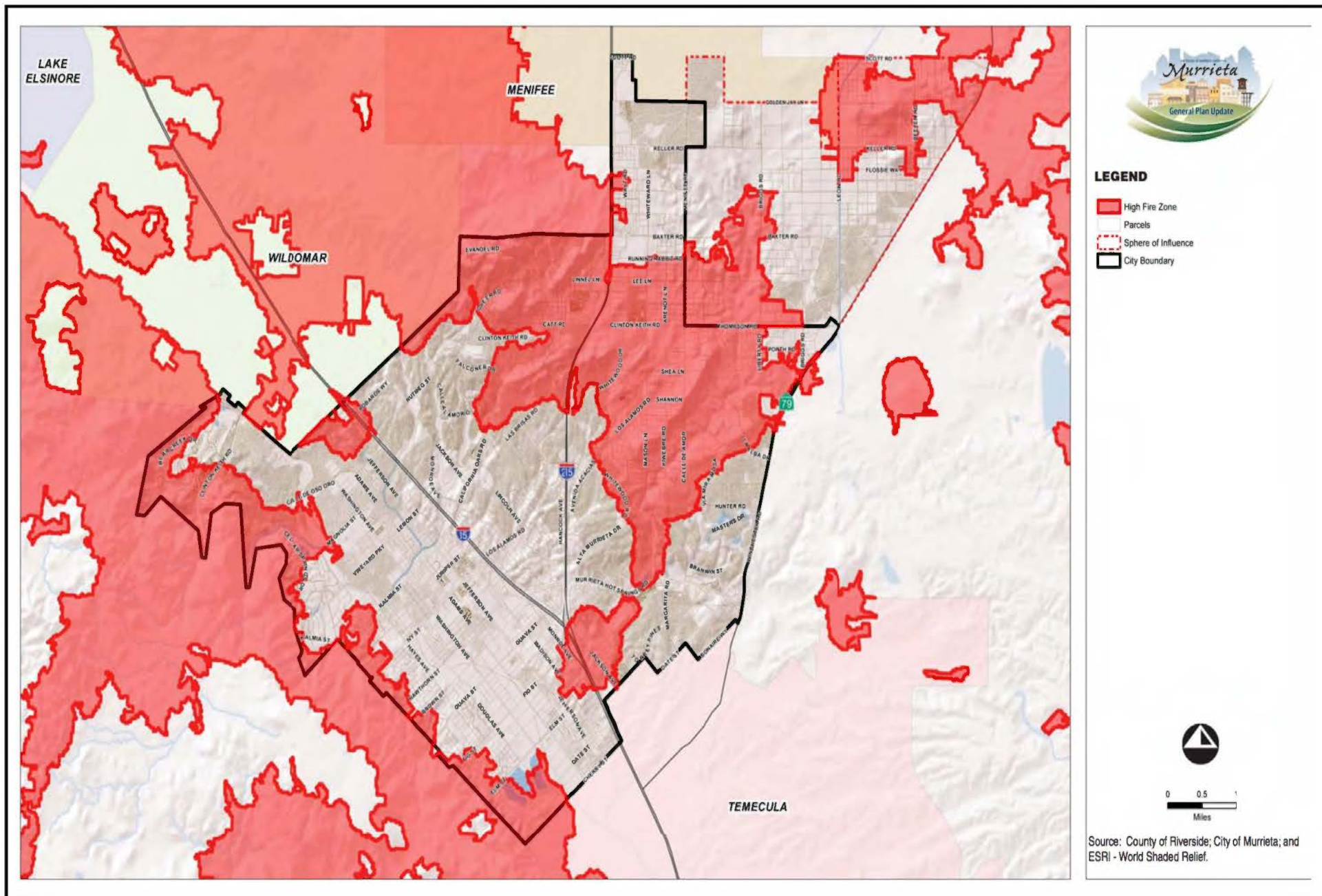
COMMERCIAL

Site History

No site history available

FIGURE IX-4





SOURCE: Murrieta General Plan Update EIR, July 2011

FIGURE IX-6

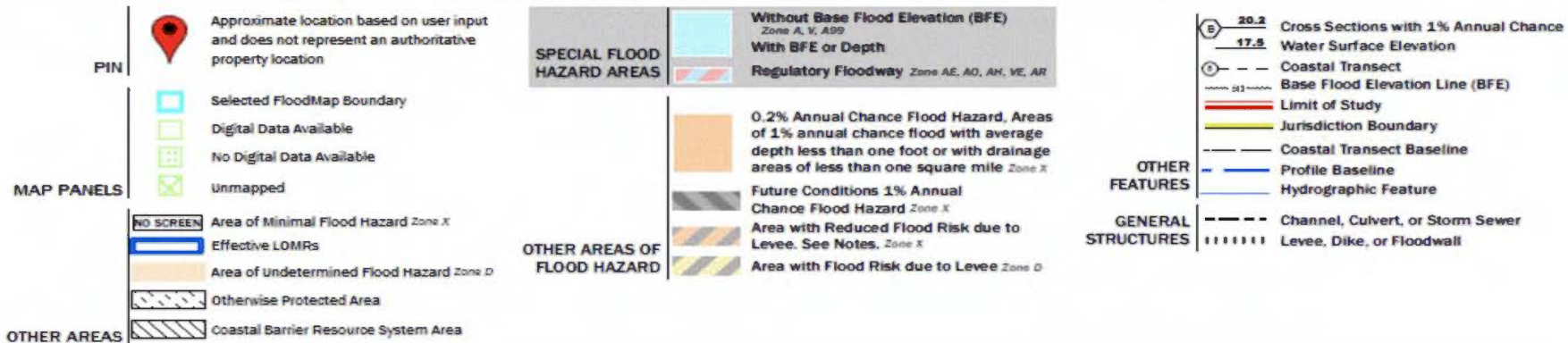


FIGURE X-1



LEGEND

RESIDENTIAL LAND USE

- LARGE LOT RESIDENTIAL (LLR)
BASE DENSITY
0.1 - 1.0 du/ac
- SINGLE-FAMILY RESIDENTIAL (SFR)
BASE DENSITY
1.1 - 10.0 du/ac
- MULTIPLE-FAMILY RESIDENTIAL (MFR)
BASE DENSITY
10.1 - 30 du/ac

NON-RESIDENTIAL LAND USE

- COMMERCIAL (C)
0.25 - 0.75 FLOOR AREA RATIO
- OFFICE AND RESEARCH PARK (ORP)
0.6 - 2.5 FLOOR AREA RATIO
- BUSINESS PARK (BP)
0.4 - 0.8 FLOOR AREA RATIO
- INDUSTRIAL (I)
0.4 - 0.5 FLOOR AREA RATIO
- CIVIC/INSTITUTIONAL (C/I)
0.5 - 1.6 FLOOR AREA RATIO

OTHER LAND USE

- MIXED USE (MU)
1.0 FLOOR AREA RATIO OR
BASE DENSITY
30 du/ac
- PARKS AND OPEN SPACE (POS)

ADDITIONAL FEATURES LEGEND

- City Limits Line
- Sphere of Influence Boundary
- Creeks

SURROUNDING MUNICIPALITIES

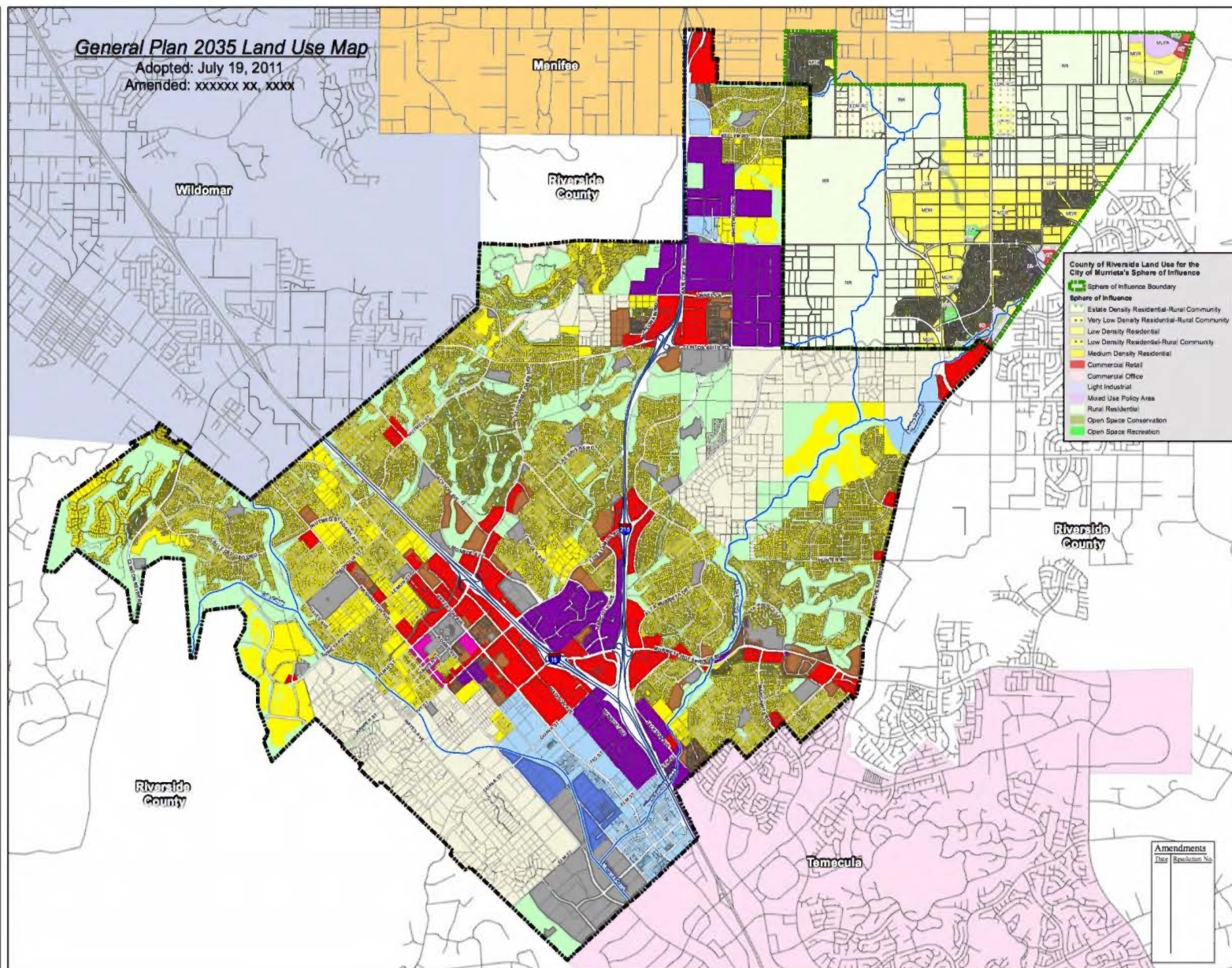
- Menifee
- Temecula
- Wildomar
- Riverside County

This map is a public resource of general information. The feature data provided on this map represents the most accurate zoning and parcel information available at the most recent date of revision. In the event of a conflict between the zoning information on this map and an adopted City Resolution or ordinance, the Resolution or ordinance shall govern. The City of Murrieta and Riverside County makes no warranty, representation or guaranty as to the content, accuracy, or completeness of any information provided herein. City of Murrieta shall assume no liability for any errors, omissions, or inaccuracies in the information provided and is not responsible for any claims, losses or damages resulting from the use of map.

General Plan 2035 Land Use Map

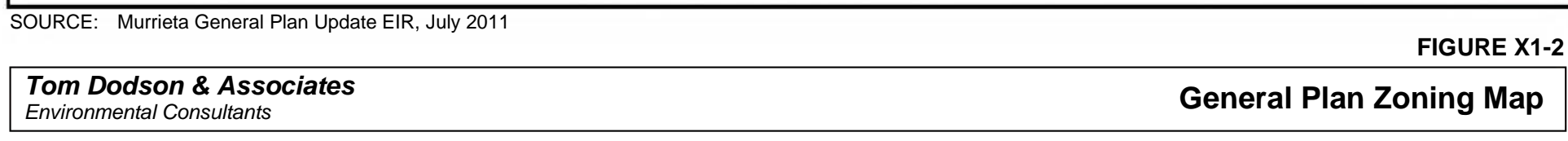
Adopted: July 19, 2011

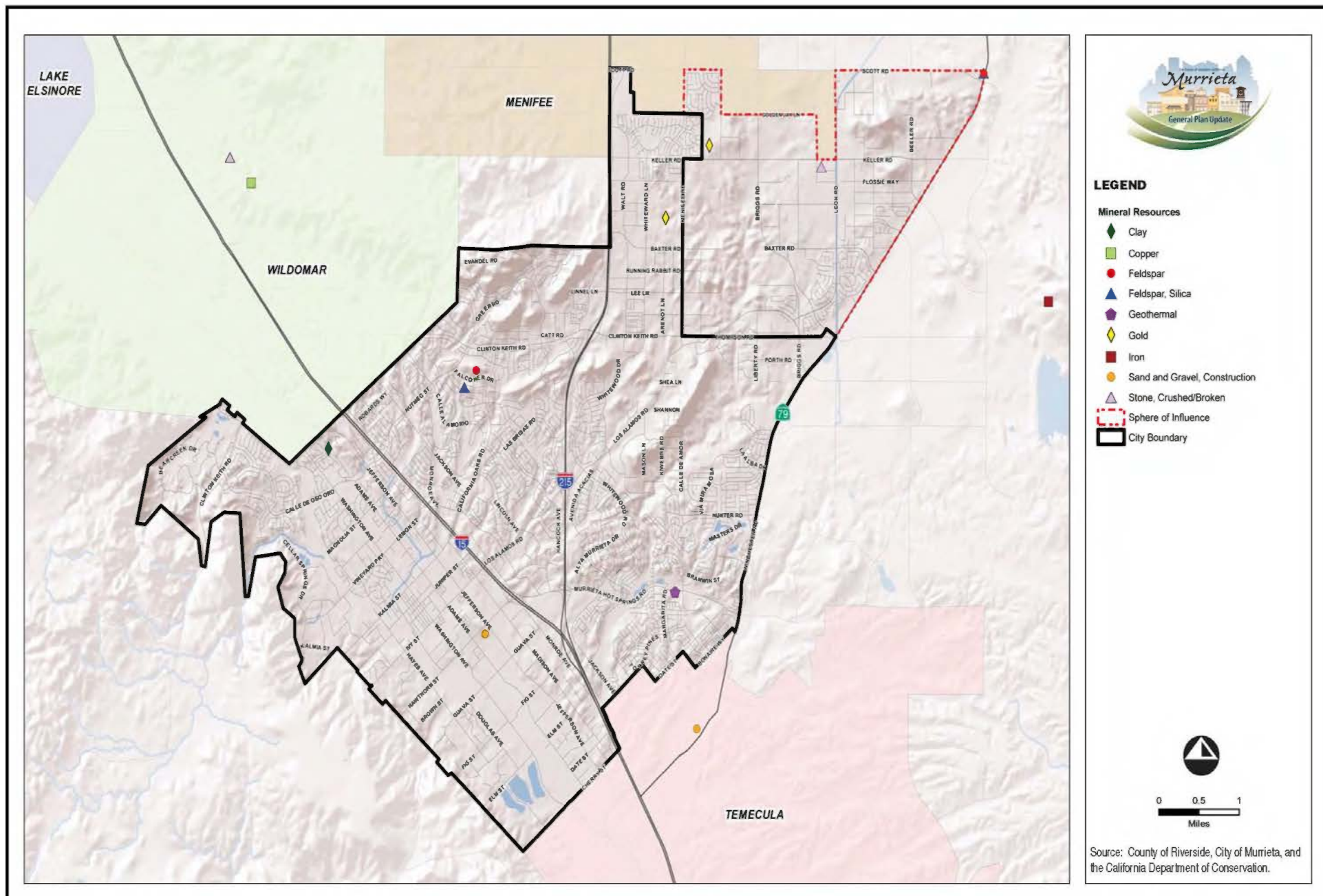
Amended: xxxxxx xx, xxxx



SOURCE: Murrieta General Plan Update EIR, July 2011

FIGURE XI-1





SOURCE: Murrieta General Plan Update EIR, July 2011

FIGURE XII-1

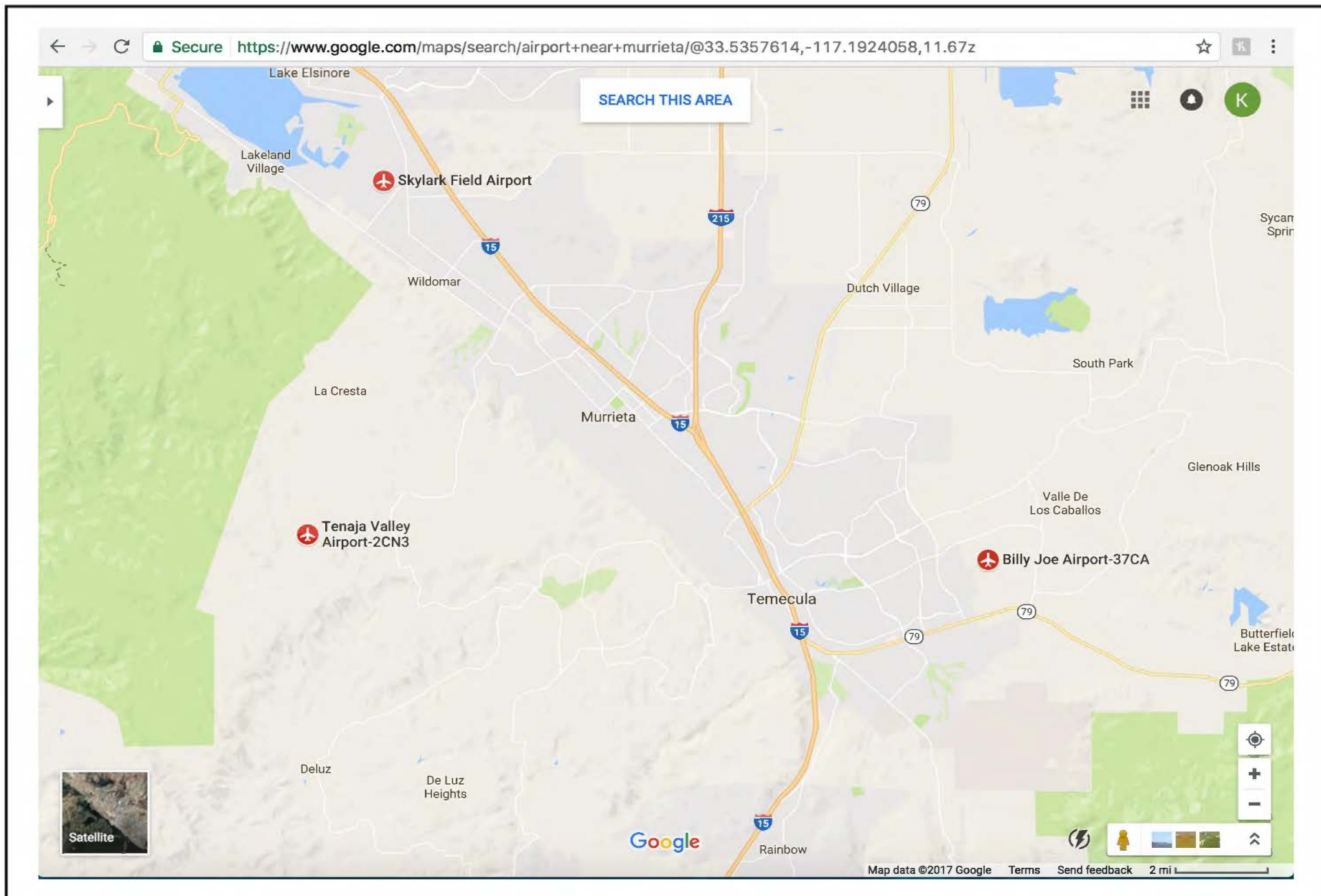
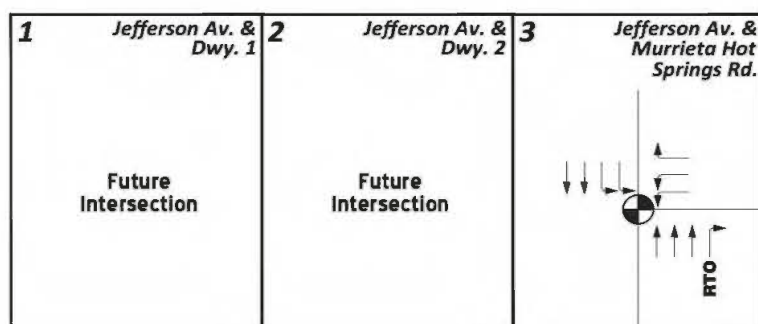
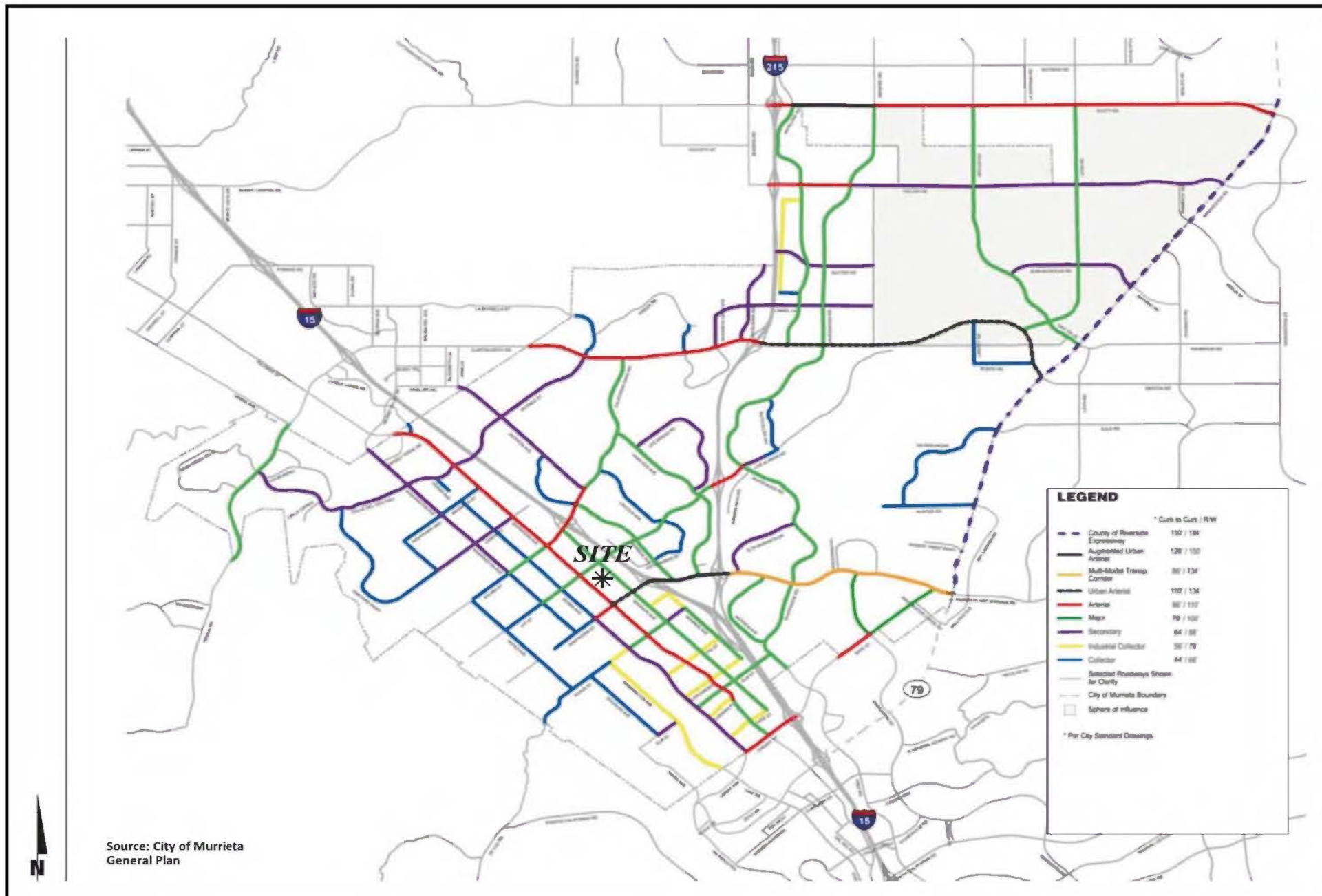


FIGURE XIII-1



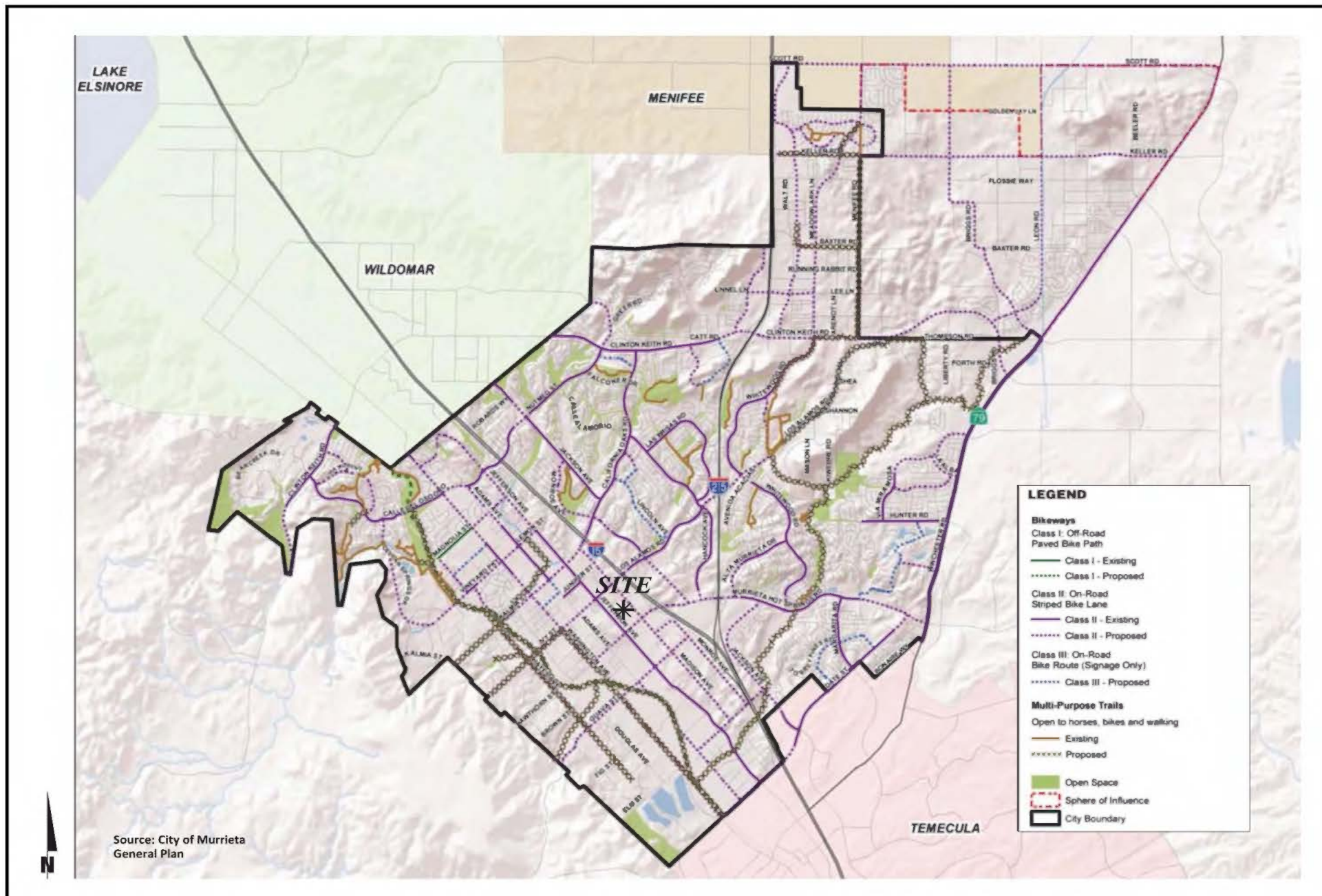
-  = TRAFFIC SIGNAL
- 4** = NUMBER OF LANES
- D** = DIVIDED
- U** = UNDIVIDED
- RTO** = RIGHT TURN OVERLAP
-  = SPEED LIMIT (MPH)

Existing Numbers of Through Lanes and Intersection Controls



SOURCE: TIA prepared by Urban Crossroads, September 2020

FIGURE XVII-2



SOURCE: TIA prepared by Urban Crossroads, September 2020

FIGURE XVII-3





SOURCE: TIA prepared by Urban Crossroads, September 2020

FIGURE XVII-4



LEGEND:

-  = RTA ROUTE 23
-  = RTA ROUTE 205/206



SOURCE: TIA prepared by Urban Crossroads, September 2020

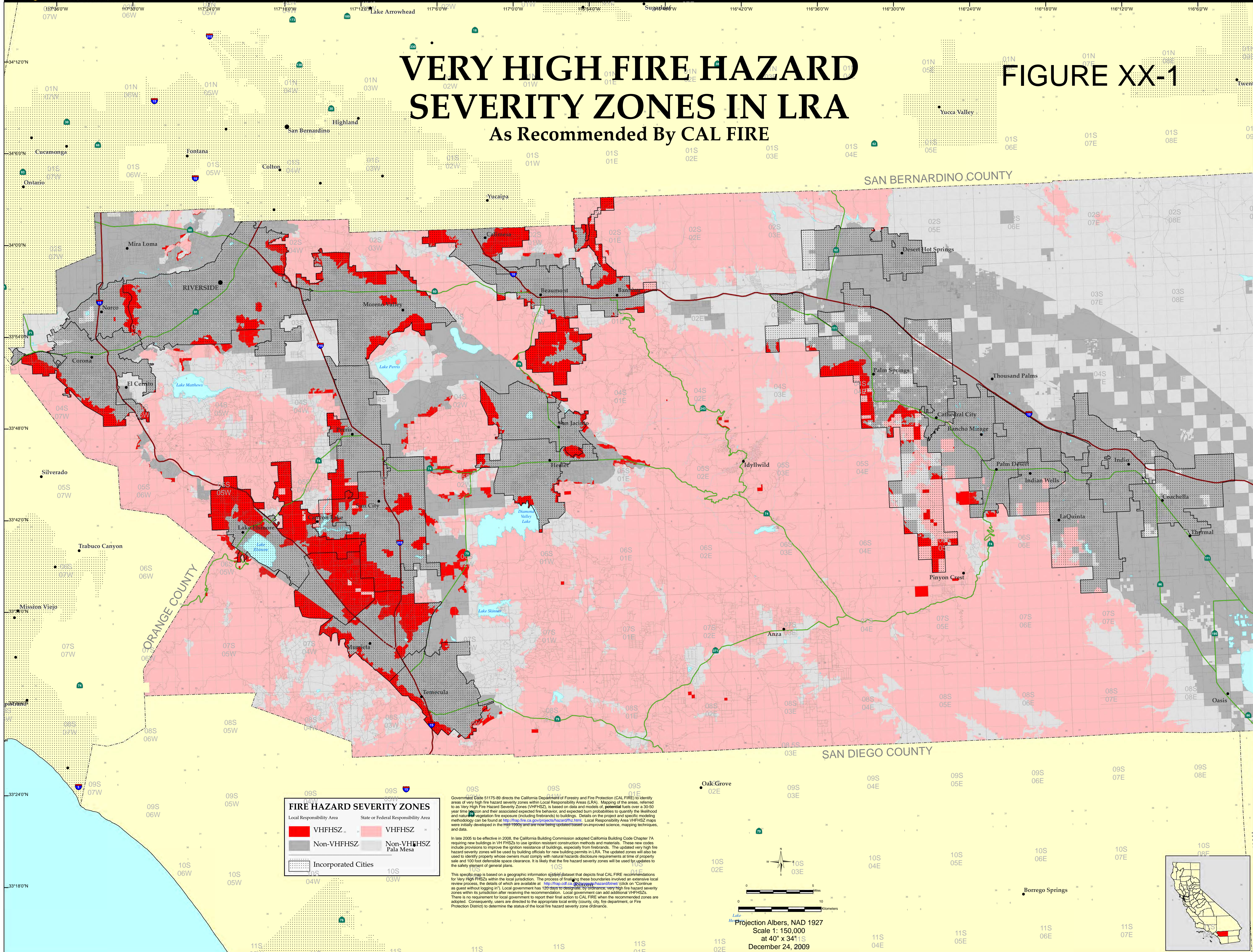
FIGURE XVII-5



VERY HIGH FIRE HAZARD SEVERITY ZONES IN LRA

As Recommended By CAL FIRE

FIGURE XX-1



FIRE HAZARD SEVERITY ZONES

Local Responsibility Area		State or Federal Responsibility Area	
	VHFHSZ		VHFHSZ
	Non-VHFHSZ		Non-VHFHSZ
	Incorporated Cities		

Government Code 51179-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of potential fuels over a 30-50 year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and natural vegetation fire exposure (including firebrands) to buildings. Details on the project and specific modeling methodology can be found at <http://frap.fire.ca.gov/projects/hazard/frp.html>. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005 to be effective in 2008, the California Building Commission adopted California Building Code Chapter 7A requiring new buildings in VHFHSZs to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands. The updated very high fire hazard severity zones will be used by building officials for new building permits in LRA. The updated zones will also be used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and 100 foot defensible space clearance. It is likely that the fire hazard severity zones will be used for updates to the safety element of general plans.

This specific map is based on a geographic information system dataset that depicts final CAL FIRE recommendations for Very High Fire Hazard Severity Zones within the local jurisdiction. The process of finalizing these boundaries involved an extensive local review process, the details of which are available at <http://frap.fire.ca.gov/projects/hazard/frp.html>. Local government has 120 days to designate, by ordinance, very high fire hazard severity zones within its jurisdiction after receiving the recommendation. Local government can add additional VHFHSZs. There is no requirement for local government to report their final action to CAL FIRE when the recommended zones are adopted. Consequently, users are directed to the appropriate local entity (county, city, fire department, or Fire Protection District) to determine the status of the local fire hazard severity zone ordinance.

Projection: Albers, NAD 1927
Scale: 1:150,000
at 40° x 34' 15"
December 24, 2009



The State of California and the Department of Forestry and Fire Protection make no representations or warranties regarding the accuracy of data or maps. Neither the State nor the Department shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of, or arising from, the use of data or maps.

Obtain FRAP maps, data, metadata and publications on the Internet at <http://frap.cdf.ca.gov>
For more information, contact CAL FIRE-FRAP, PO Box 944246, Sacramento, CA 94244-2460, (916) 327-3939.

Arnold Schwarzenegger, Governor,
State of California
Mike Chrisman, Secretary for Resources,
The Natural Resources Agency
Del Walters, Director,
Department of Forestry and Fire Protection

MAP ID: FHSZL_MAP
DATA SOURCES
CAL FIRE Fire Hazard Severity Zones (FHSZL06_3)
CAL FIRE State Responsibility Areas (SRA05_5)
CAL FIRE Incorporated Cities (Incorp07_3)
PLSS (1:100,000 USGS, Land Grants with CAL FIRE grid)