Murrieta Hot Springs at Jefferson Residences

Initial Study and Mitigated Negative Declaration

DP 2022-2605

Prepared for	City of Murrieta 1 Town Square Murrieta, California 92562
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Date	August 2023

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1.0 INTRODUCTION

1.1 Purpose and Scope of the Initial Study

Pursuant to State CEQA Guidelines Section 15367, the City of Murrieta (City) is the Lead Agency for the project. The Lead Agency is the public agency that has the principal responsibility for carrying out or approving a project. The City has the authority for environmental review in accordance with CEQA and certification of the environmental documentation.

This Initial Study has been prepared for the City to evaluate the potential environmental effects associated with construction and operation of the proposed Murrieta Hot Springs at Jefferson Residences Project (proposed project or project). This Initial Study has prepared this document in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] §21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, §15000 et seq). Pursuant to CEQA requirements, this Initial Study includes a description of the proposed project; an evaluation of the project's potential environmental impacts; the findings of the environmental analyses; and recommended standard conditions and mitigation measures to avoid or lessen the project's significant adverse environmental impacts.

This Initial Study evaluates each of the environmental issue areas contained in the Environmental Checklist Form provided in Section 3.0. It provides decision-makers and the public with information concerning the potential environmental effects associated with the project's construction and ongoing operations, and ways to avoid or reduce potential environmental impacts. The City will use this Initial Study as a resource when considering and taking action on the proposed project. Any responsible agency may elect to use this environmental analysis for discretionary actions associated with project implementation.

1.2 Summary of Findings

Based on the Environmental Checklist Form completed for the proposed project and supporting environmental analyses, the project would result in no impact or a less than significant impact on the majority of the environmental issues analyzed in this Initial Study. The following environmental issue areas would have no impact or a less than significant impact: aesthetics, agriculture and forestry, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, wildfires. The project's impacts on the following issue areas would be less than significant with mitigation incorporated: biological resources, cultural resources, geology and soils, tribal cultural resources. All impacts would be less than significant after mitigation.

As set forth in the State CEQA Guidelines Section 15070 (Decision to Prepare a Negative or Mitigated Negative Declaration), a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

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

(b) The initial study identifies potentially significant effects, but:

    (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would

avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

1.3 Initial Study Public Review Process

The City has provided the Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) to the Riverside County Clerk-Recorder and mailed the NOI to responsible agencies, nearby property owners, and others who expressed interest in receiving the NOI. In conjunction with the NOI, the City has released the IS/MND for a 30-day public review period in accordance with State CEQA Guidelines Section 15073. During the public review period, the IS/MND, including the technical appendices, can be accessed on the City's website and is available for review at the location listed below. Please contact the Planning Division at (951) 461-6061 to verify Public Counter hours.

Public Notices | Murrieta, CA (murrietaca.gov)

City of Murrieta
Planning Division
1 Town Square
Murrieta, CA 92562

In reviewing the IS/MND, affected public agencies and interested members of the public should focus on the adequacy of the document in identifying and analyzing the project's potential environmental impacts and the ways in which the potentially significant impacts can be avoided or mitigated. If public agencies or any members of the public have comments on the IS/MND, they can be sent to:

Aaron Rintamaki, Associate Planner
City of Murrieta
1 Town Square
Murrieta, CA 92562
(951) 461-6069
ARintamaki@MurrietaCA.gov

Comments sent via email should include the project title in the subject line and a valid mailing address.

Following receipt and evaluation of comments from agencies, organizations, and/or individuals, the City will determine whether these comments raise any substantial new environmental issues. If so, further documentation may be required. If not or if the issues raised do not provide substantial evidence that the project would have a significant effect on the environment, the IS/MND and the project will be considered for adoption and approval, respectively.

1.4 Report Organization

This document includes the following sections:

Section 1.0 – Introduction. This section provides an introduction and overview describing the Initial Study conclusions.

Section 2.0 – Project Description. This section identifies the project location, objectives, and key characteristics and includes a list of anticipated discretionary actions.

Section 3.0 – Environmental Checklist. The Environmental Checklist Form provides an overview of the potential impacts that may or may not result from project implementation.

Section 4.0 – Environmental Evaluation. This section contains an analysis of environmental impacts for each resource area identified in the Environmental Checklist.

Section 5.0 – References. The section identifies resources used to prepare the Initial Study.

2.0 PROJECT DESCRIPTION

2.1 Project Location and Setting

The approximately 18-gross-acre project site is located at the southeast corner of the Murrieta Hot Springs Road at Jefferson Avenue intersection (Assessor Parcel Number [APN] 910-410-011), in the City Murrieta, Riverside County, California. The City encompasses approximately 33.61 square miles in western Riverside County. The project site is in southwest Murrieta and is bordered by vacant land and urban development. The project site is adjacent to Murrieta Hot Springs Road to the northwest; the Madison Marketplace commercial center to the northeast; hotels to the east (Residence Inn by Marriot and Courtyard by Marriot Hotel); vacant land to southeast; and Jefferson Avenue to the southwest. The project site is approximately 0.75 mile west from the Interstate 15 (I-15) and Interstate 215 (I-215) interchange. Specifically, I-15 provides regional access to the site from the northeast while I-215 provides regional access from the southeast. Both freeways provide access to Murrieta Hot Springs Road which lead to the project site. Local access to the project site is from Murrieta Hot Springs Road and Jefferson Avenue. **Exhibit 1: Regional Vicinity Map** and **Exhibit 2: Site Vicinity Map** show the project site in a regional and local context, respectively.

The project site is relatively flat, with elevations ranging from approximately 1,074 to 1,100 feet above mean sea level. The site is vacant and bisected by a jurisdictional watercourse in a north-south direction toward the eastern half of the site. Development is proposed on 13 net acres with the remaining 5 acres retained as undisturbed open space. The project site contains rudimentary shrubs, mature trees and plant species line the wetland area. In addition, a guy-wire pole and flared culvert outlet are within the project site, along eastbound Murrieta Hot Springs Road. Outside the project site boundaries, there are overhead power poles along Jefferson Avenue and several utility infrastructures, including fire hydrant, metered underground service pedestal, and traffic signals near the Murrieta Hot Springs Road at Jefferson Avenue intersection. No sidewalks exist within the project site frontage on adjacent roads, only a dirt path.

Table 2-1: Existing Land Use summarizes the land uses on and adjacent to the project site.

Table 2-1: Existing Land Use

Direction	Existing Land Uses
On the Site	Vacant land with jurisdictional watercourse
North	Madison Marketplace Commercial Center,
Northeast	Vacant land beyond the jurisdictional watercourse
East	Courtyard by Marriot Hotel (25419 Madison Avenue), Residence Inn by Marriot Hotel (25407 Madison Avenue)
South	Jefferson Avenue; southwest of Jefferson Avenue: Jefferson self-storage (25435 Jefferson Avenue), Jefferson Retail Center (25425 Jefferson Avenue), and ExtraSpace Storage (25485 Jefferson Avenue)
West	Murrieta Hot Springs Road (northeast to southwest); vacant land north of Murrieta Hot Springs Road

2.2 Existing Land Use Designation and Zoning

The City's General Plan Land Use Plan Map depicts the City's land use designations and indicates that the project site has a Commercial (0.25-0.75 Floor Area Ratio (FAR)) designation. The Commercial land use

designation is intended to provide for a broad mix of commercial retail, service, and office uses that serve the local and regional consumer. Typical uses include retail stores, personal services, restaurants, motor fuels, business offices, and lodging intended to meet the needs of city residents, travelers, and the daily employment population.

The City of Murrieta Zoning Map indicates the project site is zoned community commercial (CC) with a Transit Oriented Development (TOD) Overlay District. The CC zoning district permits destination centers, supermarkets, and smaller single-lot, commercial activities. Financial, office and restaurant activities are also allowed. The CC zoning district is consistent with the commercial land use designation of the General Plan. The TOD Overlay District allows a mix of residential and non-residential land uses that are in close proximity to transit to encourage mixed land uses for enhanced transit and pedestrian activity. As described under Murrieta Municipal Code Section 16.16.040.C, all uses in the applicable underlying zoning district are allowed, in addition to multi-family residential and mixed-use developments with densities of at least 30 dwelling units per acre (du/ac).

The proposed project is a multi-family residential development and is permitted under the TOD Overlay District. In addition, the project proposes a density of 30 du/ac, and therefore is consistent with both General Plan land use designation and zoning. As addressed later in this Initial Study, no General Plan Amendment or change of zone would be required to implement the proposed project.

2.3 Project Characteristics

Site Development

The site plan for the project is provided as **Exhibit 3: Site Plan**. Project implementation would require the removal of all existing vegetation on the 13 net acres (existing trees and vegetation along the jurisdictional watercourse on the 5 acres would remain), the overhead power pole, and culvert to allow for the construction of a 389 multi-family dwelling unit residential development. The Project would also widen Murrieta Springs Road and implement frontage improvements along Jefferson Avenue. The 389 multi-family dwelling units would be grouped in 15, three-story residential buildings. Each building would have between 18 to 30 units. Dwellings would range in size from 700 square feet (sf) for 1-bedroom units to 1,414 sf for 3-bedroom units. **Table 2-2: Residential Unit Summary** summarizes the proposed apartments by dwelling unit type.

Table 2-2: Residential Unit Summary

Dwelling Unit Type	Bedrooms	Bathrooms	Net Square Feet (sf)	Total Units
A1	1 Bedroom	1 Bath	700	114
A2	1 Bedroom	1 Bath	825	88
B1	2 Bedrooms	2 Bath	1,053	120
B2	2 Bedrooms	2 Bath	1,061	44
C1	3 Bedrooms	2 Bath	1,414	9
C2	3 Bedrooms	3 Bath	1,309	2
C3	3 Bedrooms	3 Bath	1,385	12
Total				**389**

Source: AO, 2022.

Open Space and Amenities

Murrieta Municipal Code Section 16.16.040.D specifies that new land uses and structures within the TOD Overlay District must conform with the requirements of the base zoning district, with some exceptions including open space requirements. Specifically, private open space requirements for multi-family residential uses within the TOD Overlay District is 50 sf per unit and the common open space requirements is 150 sf per unit. Private open space is defined in the Murrieta Municipal Code as open space accessible directly from the living area of the residential unit, in the form of a fenced yard or patio, a deck, or balcony. Common open space must be conveniently located and accessible to all residential units on the site, and includes landscaping, pedestrian paths, and recreational facilities. Based on the Murrieta Municipal Code requirements, the project requires 19,450 sf of private open space and 58,350 sf of common open space.

The proposed project would provide 22,784 sf of private open space and 67,251 sf of common open space, thereby exceeding Murrieta Municipal Code requirements. Private open space would be provided in patios for ground floor units, and balconies on second and third story units. Common open space would include common landscaped areas and a central recreation area. The recreation area is proposed to include a swimming pool, pool deck, spa, fitness room, and view terraces and lawns with lounge seating, shade trellis, barbeque counters, and dining areas. The pool deck and spa would include day beds, cabanas, and other lounge furnishings. A dog park is proposed at the southern portion of the site and is a part of the common open space. The dog park would include a dog wash station, synthetic turf, and shade trees.

Architecture, Landscaping, and Lighting

Exhibit 4: Conceptual Exterior Elevations, depicts the project's proposed architectural features. The proposed contemporary Spanish design would incorporate a mix of building materials in neutral, muted colors, with faux wood corbels, faux clay gable pipes, and colored porcelain tiles for wall accents. Rooftops would be finished in a barrel roof concrete tiles to complement the Spanish architecture. The buildings would have varying rooflines, façade articulation, awnings, and enhanced building materials to vary building massing**.**

Exhibit 5: Conceptual Landscape Plan, depicts the proposed landscaping plan. The project proposes 427 trees, throughout the project site. Common area landscaping would be provided throughout the project site including the recreation area and amenity areas described above. Landscaping in the common recreation area would include fruitless olive trees, Saratoga Laurel trees, medjool date palms, maverick thornless honey mesquite, and Italian cypress. The dog park would have coastal live oak, fruitless olive, and maverick thornless honey mesquite. Along Murrieta Hot Springs Road, the project site frontage would be landscaped with aristocrat callery pear trees. Along Jefferson Avenue, the project site frontage be landscaped with sawleaf zelkova trees, African sumac, coastal oak, Arizona sycamore, and eastern redbuds. All landscaping would comply with Murrieta Municipal Code Section 16.28 which contains landscaping standards and water efficient landscaping requirements.

Murrieta Municipal Code Section 16.34.070 contains development standards for off-street parking. Multi-family developments with over 50 parking spaces are required to landscape at least 10 percent of the total parking area[1] and 50 percent of parking spaces are required to be shaded.[2] The proposed project would include 107,600 sf of landscaping throughout the site, or approximately 18.5 percent of the site. The project includes 788 parking stalls, of which 253 would be in attached garages, 152 in carports, and

[1] Murrieta Municipal Code Section 16.34.070, Table 3-8 – Parking Lot Landscaping
[2] Murrieta Municipal Code Section 16.34.070, Table 3-9 – Percent of Parking Area To Be Shaded

73 standard stalls that would shaded by landscaped trees. Therefore, the project meets the landscape parking lot requirements and shaded parking requirements.

The project would widen Murrieta Hot Springs Road and implement frontage improvements along Jefferson Avenue, which would include parkway improvements, including sidewalk, street lights.

Exhibit 6: Conceptual Wall Plan depicts the proposed wall and fence plan. The project site boundaries along Murrieta Hot Springs Road and Jefferson Avenue would have a 6-foot-high concrete masonry unit wall as well as tubular steel fencing. The remaining portion of the project boundary along the undisturbed open space wetland would have 5-foot-high tubular steel fencing.

Exhibit 7: Conceptual Lighting Plan depicts the proposed lighting plan**.** Street pole lights would be provided throughout internal drive aisles and driveway entrances. Pedestrian walkways would have bollard lighting to illuminate paths of travel. The attached garages would have a wall mounted sconce above the garage doors and carports would have downlights for security and wayfinding purposes. The common recreation area would have pendant decorative lighting with Spanish theme pole lighting in the shared open space areas. All project lighting would be oriented inward and be shielded to prevent light spillage. The project's southeast boundary bordering the biologically sensitive area would have minimal lighting.

Circulation and Parking

Regional Circulation. The project site is located along Murrieta Hot Springs Road and Jefferson Avenue, which is classified as an Urban Arterial and Arterial, respectively, as shown on the City of Murrieta Circulation Element Exhibit 5-10. Near the project site, Murrieta Hot Springs Road runs in a northeast to southwest direction and provides access to other major streets in the City as well as freeway access to both I-15 and I-215. Jefferson Avenue runs in a northwest to southeast direction and provides access from western portion of the City to the southern border with the City of Temecula.

Project Access. There is not current vehicular access to the project site. Project implementation would include access to the site from one driveway on Jefferson Avenue and one on Murrieta Hot Springs Road. The driveway on Jefferson Avenue would be accessed through a new deceleration right-turn lane along Jefferson Avenue. Both driveway entrances would be 28-foot-wide, with 26- or 28-foot-wide private drive aisles within the site. Additional internal drive aisles would branch from the main drive aisle to provide access to the garages, carports, and surface parking. All drive aisles would accommodate standard fire lane turning radiuses and hammerhead turnaround maneuvers for emergency vehicles and fire services. Project implementation would also include an exit-only access aisle along Jefferson Avenue, south of the driveway entrance.

Parking. The City's parking standard are in Murrieta Municipal Code Section 16.34.040 – Number of Parking Spaces Required. Multi-family dwellings require 1.5 spaces for studio and one-bedroom units; two spaces per unit for two-bedroom units, plus 0.5 additional space for each bedroom over 2, with 1 space for each unit in a fully enclosed garage, plus guest parking equal to 25 percent of the total number of units. **Table 2-3: Residential Parking Requirements** identifies the number of parking spaces by unit type.

Table 2-3: Residential Parking Requirements			
Unit Type	**Number of Dwelling Units**	**Minimum Parking Spaces Per Dwelling Unit**	**Parking Required by Code**
1	202	1.5	303
2	164	2	328
3	23	2.5	58
		Residential Total	689
Guest	25 percent of residential parking requirement		98
		Total Parking Required by Code	**787**
Murrieta Municipal Code 16.34.040 - Two bedrooms or more: 2 spaces for each unit, plus 0.5 additional spaces for each bedroom over 2, with one space for each unit in a fully enclosed garage Source: AO 2022.			

As identified in **Table 2-4: Residential Parking Requirements**, the project would provide 788 parking spaces, which would exceed the City's parking code requirements. Parking would be provided in a combination of garages, covered carports, and surface parking. All residential parking would be provided in garages. Guest parking would be provided in carports and open surface parking.

Table 2-4: Project Parking Plan		
Location/Type	**Quantity**	**Number of Accessible Spaces**
Garage	253	5
Open Surface Parking	285	6
Carport	152	3
Residential Total	690	14
Guest Parking	98	5
Total Parking Provided	**788**	**19**
Source: AO 2022.		

Pedestrian Facilities, Bike Lanes, and Transit. There are no improved pedestrian facilities adjacent to the project site; there are dirt pathways along Murrieta Hot Springs Road and Jefferson Avenue. Project implementation would construct pedestrian sidewalks along the east side of Murrieta Hot Springs Road, and the north side of Jefferson Avenue. Additionally, the intersection at Murrieta Hot Springs Road and Jefferson Avenue would be brough up to current Americans with Disabilities Act (ADA) standards with a new curb ramp. Project implementation would add 1,300 feet of sidewalk and parkway along Jefferson Avenue between Murrieta Hot Springs Road, 640 feet of new five-foot-wide sidewalk along the north side of Jefferson Avenue, and approximately 1,300 feet of new five-foot-wide sidewalk along the north side of Jefferson Avenue.

The Murrieta General Plan Circulation Element identifies an existing Class II bicycle lane on northbound and southbound Jefferson Avenue. Class II facilities are defined as on-road striped bike lanes. Murrieta Hot Springs Road is planned for a future Class II bicycle lane. The Riverside Transit Agency (RTA) provides public transit service throughout Riverside County, including the City of Murrieta. There are several transit stops in the project vicinity, specifically along Madison Avenue which is northeast of the project site. The nearest transit stop is the RTA Route 23 bus stop located at the existing Walmart at 41200 Murrieta Hot

Springs Road, approximately 0.2 mile north of the project site. Route 23 provides service between the cities of Wildomar and Temecula, with stops along Murrieta Hot Springs Road and Madison Avenue.

Utility Infrastructure

Project implementation would require construction of new on-site utility infrastructure to serve the residences and associated project amenities. The project would connect these proposed utilities to existing utility infrastructure in adjacent roadways, with the final sizing and design of on-site facilities occurring during final building design and plan check.

Water and Sewer. Western Municipal Water District (WMWD) provides water, wastewater (sewer), and recycled water services to nearly 1 million people, both wholesale and retail customers, across 527 square miles in western Riverside County. WMWD merged with Murrieta's water utility agency and began providing services to a 6.5-square-mile section of western Murrieta. The project site is not in WMWD boundary but it is within the service area and is a WMWD customer. Project implementation would require the annexation of the project site into the WMWD boundary for water service. The proposed project would connect to the existing WMWD infrastructure on Murrieta Hot Springs Road and Jefferson Avenue. Specifically, the project would connect to the existing water main in Murrieta Hot Springs Road via installation of an 8-inch water line and laterals. An 8-inch water line for fire would also be installed to serve the site. A proposed 8-inch sewer line would connect to the existing sewer main in Jefferson Avenue. The project would also install a 42-inch reinforced concrete storm drain pipe and associated improvements. See **Exhibit 8: Utility Plan**.

Drainage and Water Quality. Exhibit 9: Water Quality Plan depicts the project's proposed drainage and water quality features. Proposed drainage improvements include installation of permeable pavement and underground detention basins throughout the project site. Within the internal streets, catch basins would capture storm runoff and route flows toward proposed detention basins along the project site's southern boundary. Flows would be detained on site and eventually outfall into the existing exit basin located adjacent to the project's southern boundary along Jefferson Avenue.

Dry Utilities and Solid Waste Management. Southern California Edison (SCE) provides electrical service to the project area. There are existing SCE pole transformers along Jefferson Avenue. The project would underground the existing transformers. The Southern California Gas Company (SoCalGas) provides natural gas to the area. The proposed project would connect to existing utility lines, with new utility lines placed underground. Waste Management provides solid waste collection and services to the City. The project would include several shared screened trash enclosures throughout the site near parking areas.

2.4 Construction Activities

The applicant anticipates that building construction would take approximately 32 months beginning in winter 2023 and ending Fall 2026.[3] It is envisioned that leasing would begin as the project finishes construction of remaining units.

- Site preparation commencing winter 2023

[3] At the time when air quality and greenhouse gas emissions modeling was conducted, the project was anticipated to begin construction in summer 2023. The project is now slated to begin construction at the end of 2023. However, for purposes of air quality analysis, emission factors for construction would decrease over time as emissions regulations become more stringent. As construction is anticipated to commence at a later date than what was assumed in the model, the original construction schedule emissions analysis presented in Section 4.3 herein is conservative. It should also be noted that the overall construction schedule (approximately 32 months) nor the scope of construction would change.

- Grading – Site grading will require approximately 14,900 cubic yards (cy) of cut and 19,300 cy of fill, for net import of 4,600 cy. The project would install all infrastructure (i.e., storm drains, water, wastewater, dry utilities, and street improvements) during grading. Phase to occur over approximately four months.
- Building construction over approximately 27 months, with paving and architectural coating overlapping as buildings and other components of the project are constructed

2.5 Discretionary and Ministerial Approvals

The following discretionary and ministerial actions and/or approvals are required for the proposed project:

- **Adoption of the Initial Study/Mitigated Negative Declaration.** The proposed project requires CEQA compliance through the adoption of an IS/MND prior to project approval. This Initial Study and the proposed MND would serve as the primary environmental document for all actions associated with approval of the Murrieta Hot Springs at Jefferson Residences Project. In addition, this is the primary reference document for the formulation and implementation of a mitigation monitoring and reporting program for the proposed project.
- **Development Plan 2022-2605.** An application for Land Use and Development to allow for the proposed project improvements at the site, such as site buildings and landscaping.
- **Grading and building permits.**
- **Water District Annexation.** Annexation of project site into WMWD boundary for water service (to be completed by WMWD)
- **Other.** Any other permit or approval required by an agency with jurisdiction over the project.

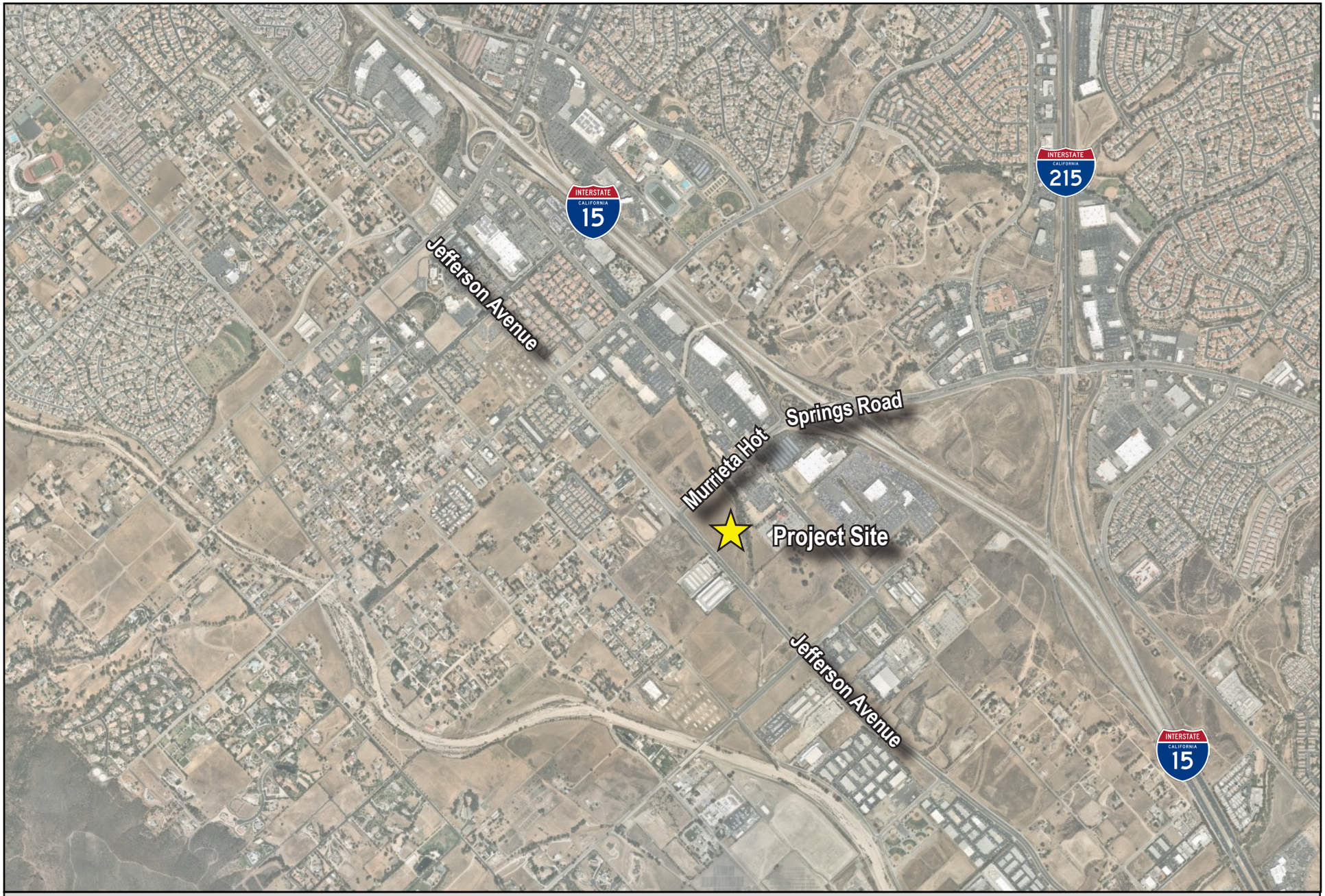


EXHIBIT 1: Regional Vicinity Map
Murrieta Hot Springs at Jefferson Residences Project

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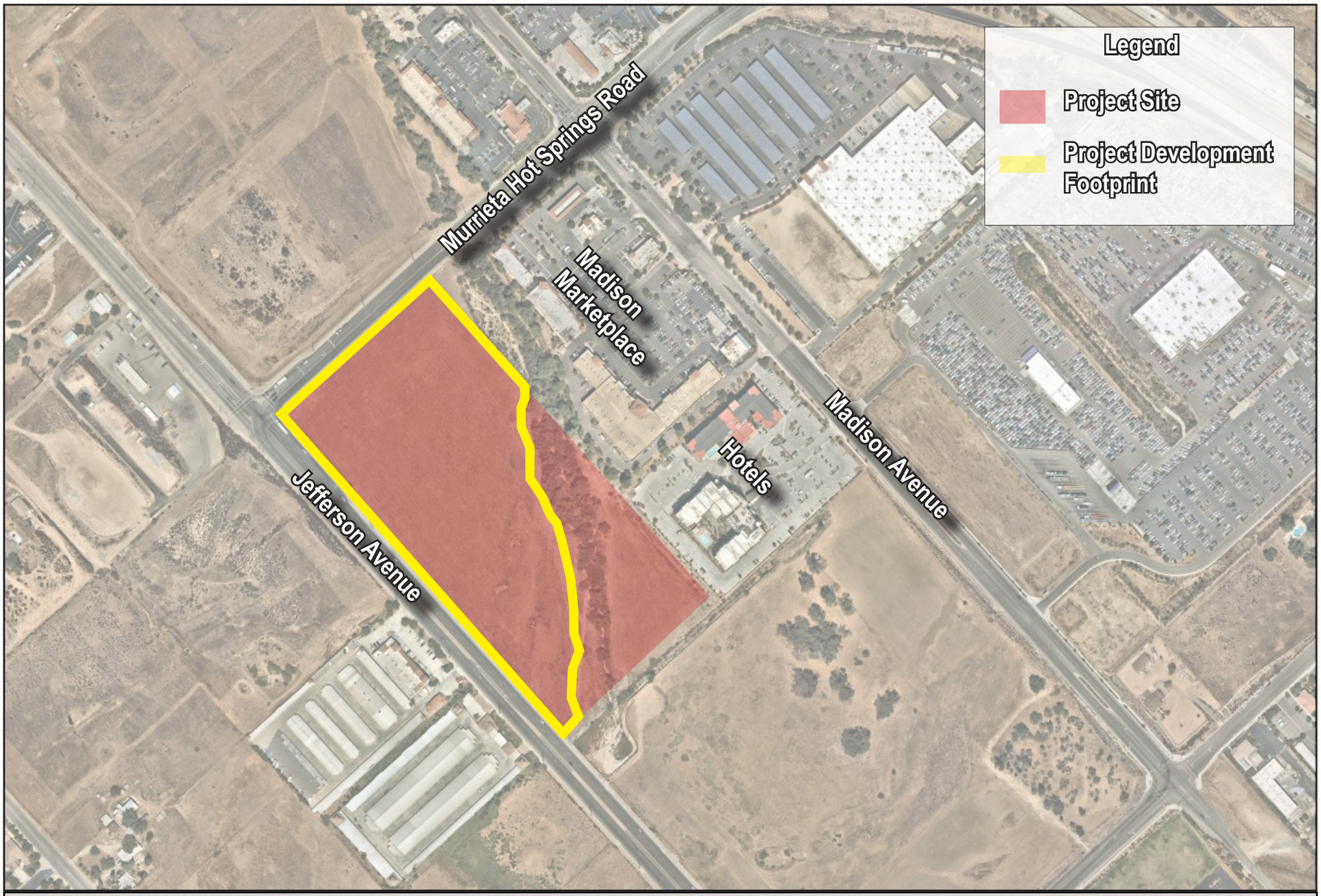


EXHIBIT 2: Local Vicinity Map
Murrieta Hot Springs at Jefferson Residences Project

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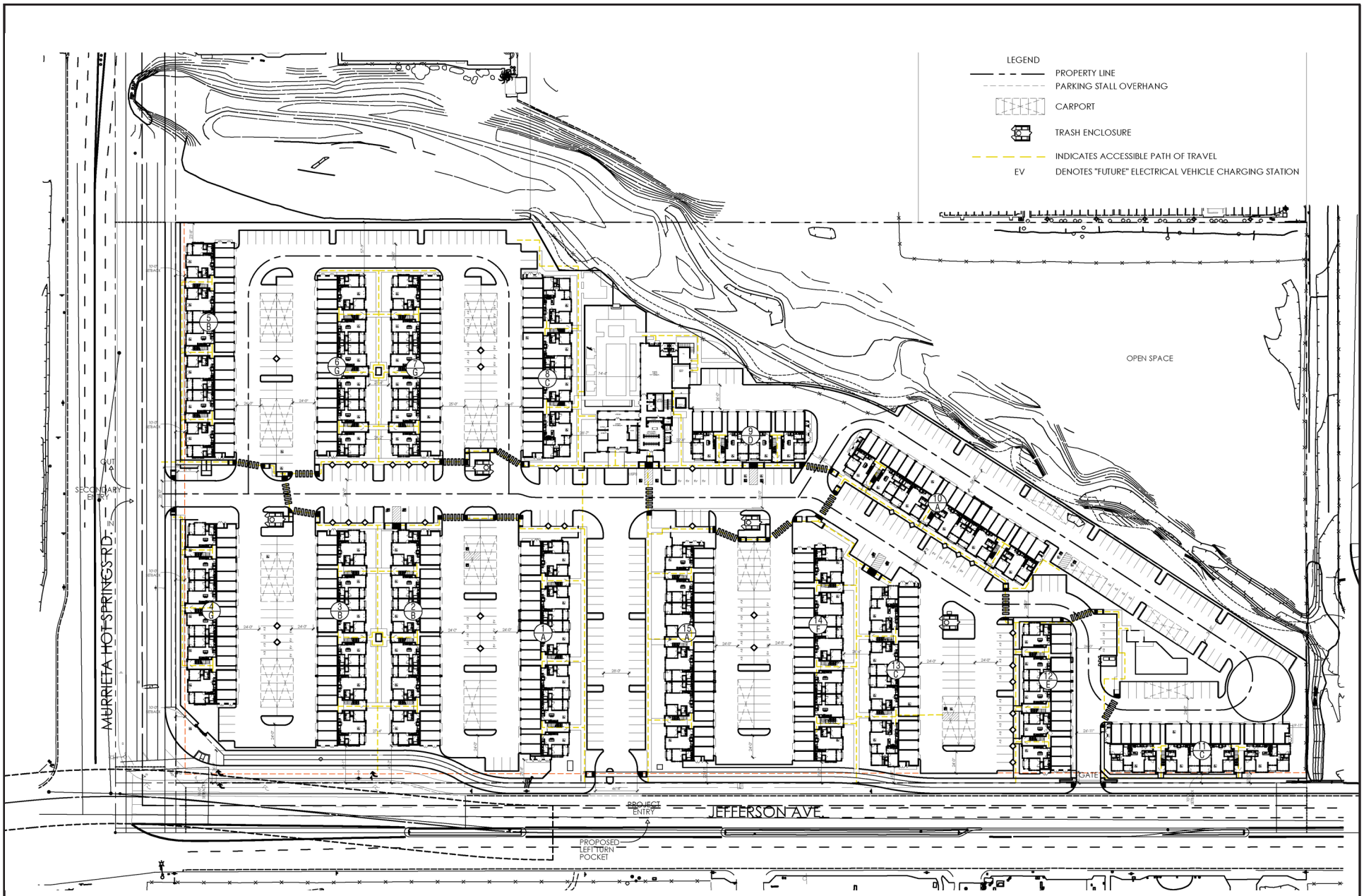


EXHIBIT 3: Site Plan

Murrieta Hot Springs at Jefferson Residences Project

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FRONT ELEVATION 2



LEFT ELEVATION 2



RIGHT ELEVATION 4



REAR ELEVATION 3

EXHIBIT 4: Conceptual Exterior Elevations
Murrieta Hot Springs at Jefferson Residences Project

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EXHIBIT 5: Conceptual Landscaping Plan

Murrieta Hot Springs at Jefferson Residences Project

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EXHIBIT 6: Conceptual Wall Plan

Murrieta Hot Springs at Jefferson Residences Project

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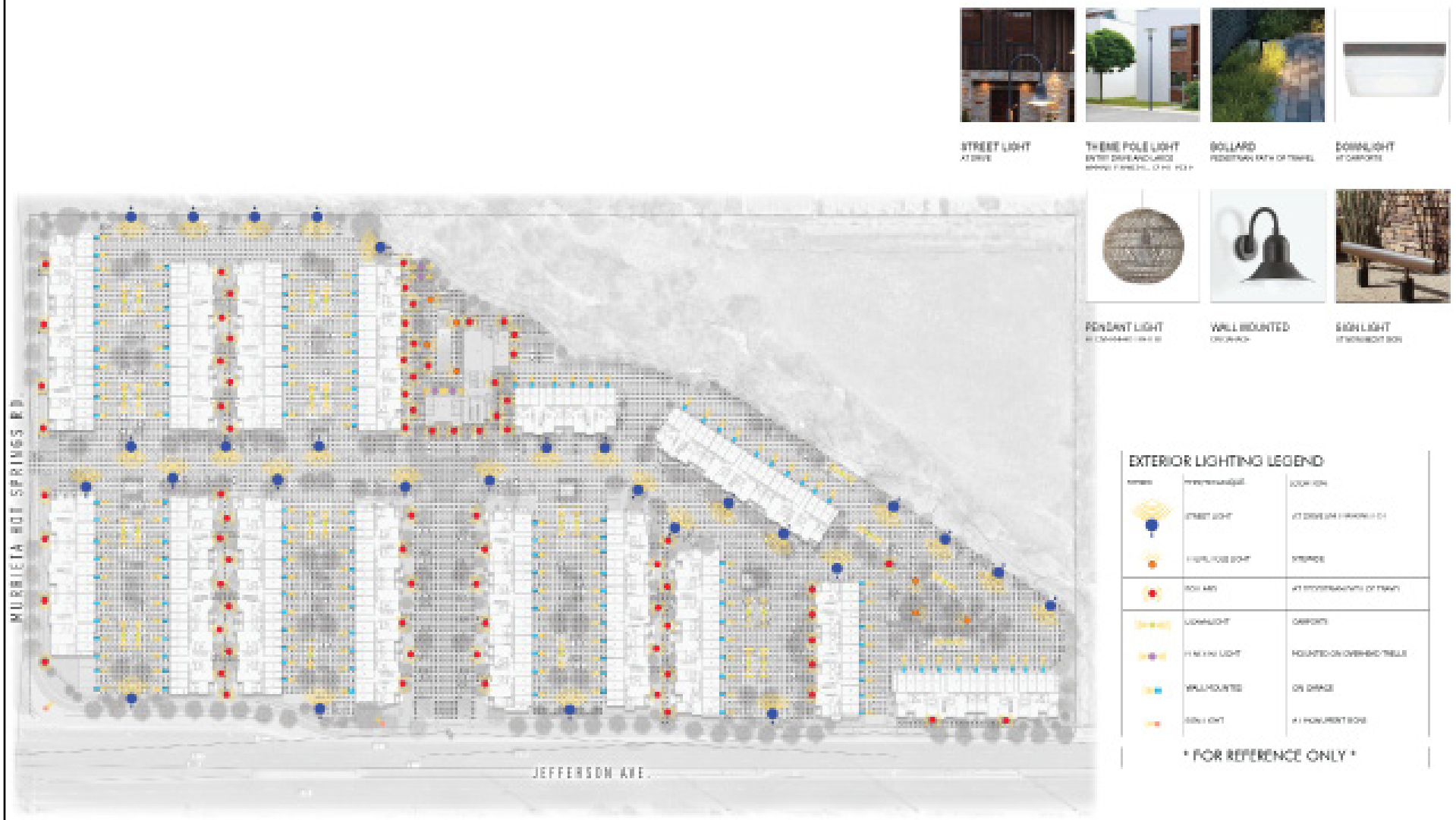


EXHIBIT 7: Conceptual Lighting Plan
Murrieta Hot Springs at Jefferson Residences Project

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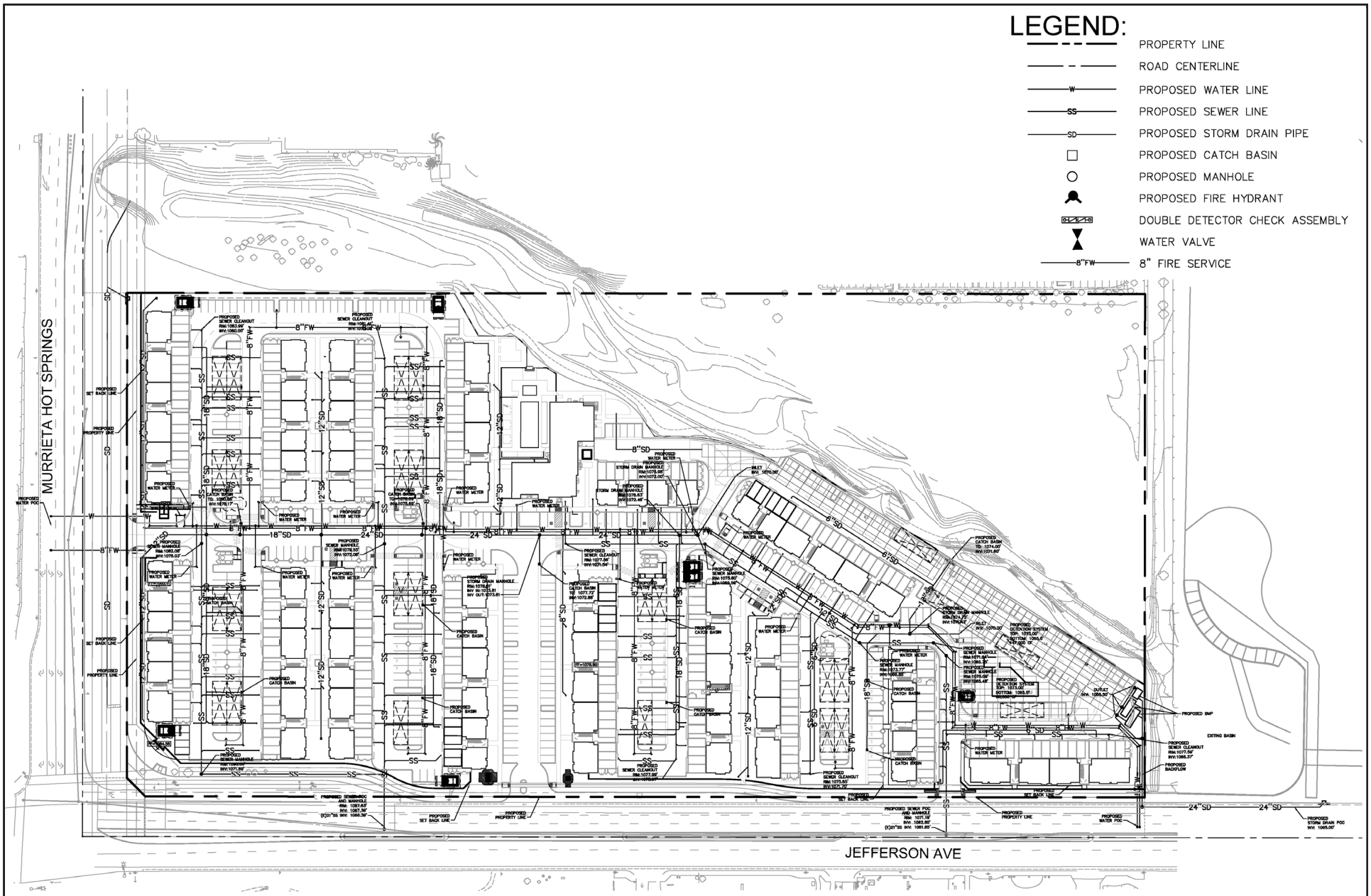


EXHIBIT 8: Utility Plan

Murrieta Hot Springs at Jefferson Residences Project

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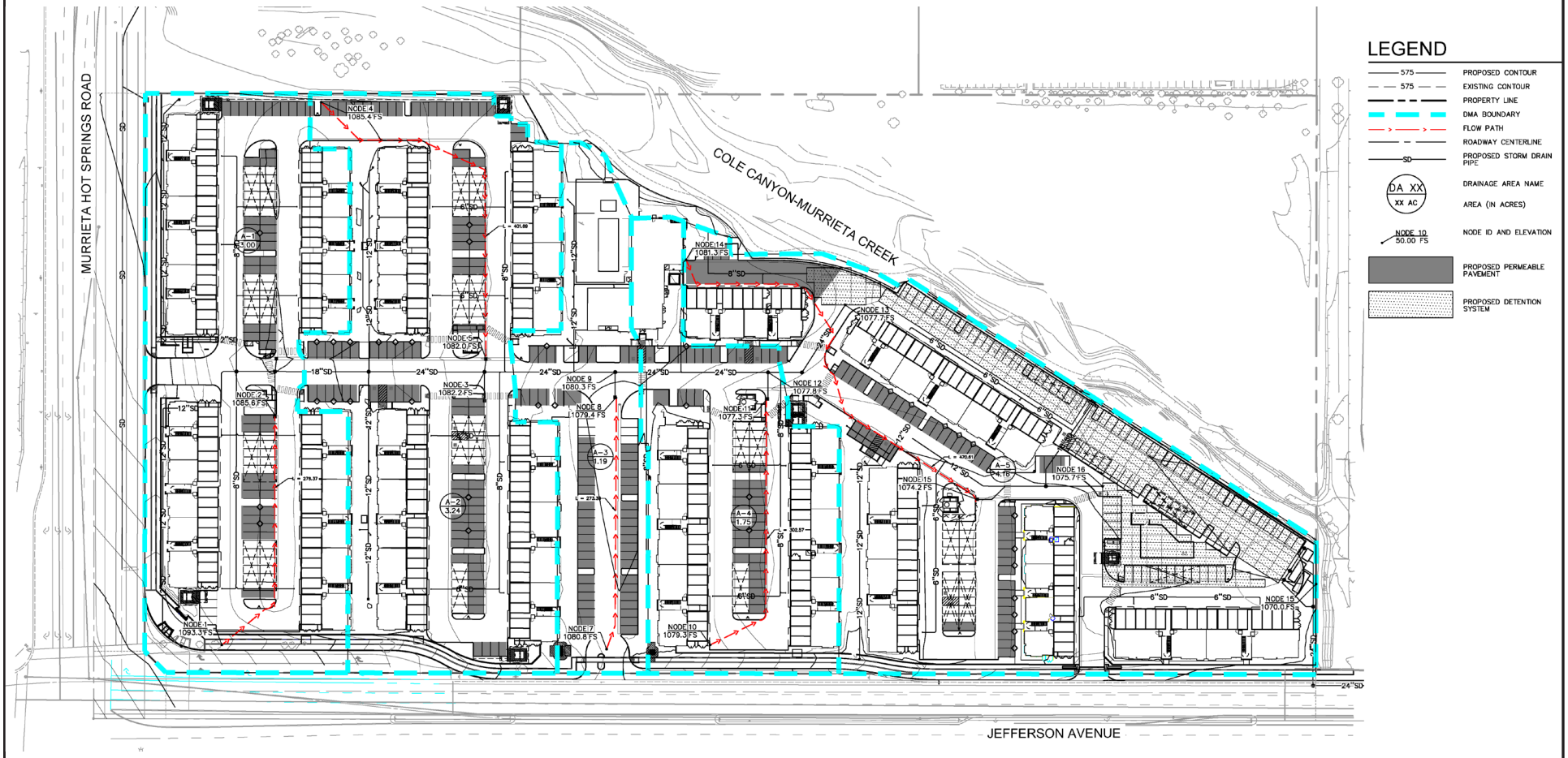


EXHIBIT 9: Water Quality Plan

Murrieta Hot Springs at Jefferson Residences Project

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3.0 INITIAL STUDY CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION:

On the basis of this initial evaluation (check one):

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

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

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

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

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

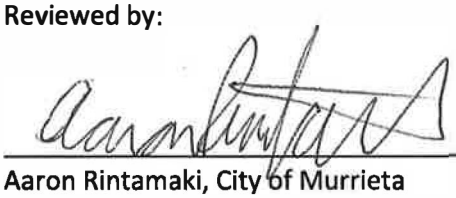
CERTIFICATION:

Prepared by:



Kimley-Horn and Associates, Inc.

Reviewed by:



Aaron Rintamaki, City of Murrieta

ENVIRONMENTAL CHECKLIST

The following environmental checklist is patterned after State CEQA Guidelines **Appendix G**. An explanation is provided for all responses except "No Impact" responses, which are supported by the cited information sources. The responses consider the whole action involved with the proposed project: on and off the site, direct and indirect, and short-term construction and long-term operational. The explanation of each issue also identifies the significance criteria or threshold, if any, used to evaluate each question, and the mitigation identified, if any, to avoid or reduce the impact to less than significant. To each question, there are four possible responses:

- **No Impact.** The project would not have any measurable environmental impact.
- **Less Than Significant Impact.** The project would have the potential to impact the environment, although this impact would be below established thresholds that are considered to be significant.
- **Less Than Significant with Mitigation Incorporated.** The project would have the potential to generate impacts, which may be considered as a significant effect on the environment, although mitigation measures or changes to the project's physical or operational characteristics could reduce these impacts to a less than significant level.
- **Potentially Significant Impact.** The project could have impacts, which may be considered significant, and therefore additional analysis is required to identify mitigation. A determination that there is a potential for significant effects indicates the need to more fully analyze the project's impacts and identify mitigation.

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1.	**AESTHETICS. Except as provided in Public Resources Code §21099, would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
2.	**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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:**				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
3.	**AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:**				

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐
4.	**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 Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological	☐	☐	☒	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐
5.	**CULTURAL RESOURCES. Would the project:**				

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐
6. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐
7. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☒	☐	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	where sewers are not available for the disposal of waste water?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
8.	**GREENHOUSE GAS EMISSIONS. Would the project:**				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
9.	**HAZARDS AND HAZARDOUS MATERIALS. Would the project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒
10.	**HYDROLOGY AND WATER QUALITY. Would the project:**				

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐
11. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
13. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
14. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
15. PUBLIC SERVICES. Would the project result in				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐
16. RECREATION. Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
17. TRANSPORTATION. Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐
18. TRIBAL CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to	☐	☒	☐	☐

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				
19. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
i) Water	☐	☐	☒	☐
ii) Wastewater Treatment	☐	☐	☒	☐
iii) Stormwater	☐	☐	☒	☐
iv) Electric Power, Natural Gas, Telecommunications	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐
20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project	☐	☐	☐	☒

ENVIRONMENTAL IMPACTS Issues		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒
21.	**MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:**				
a)	Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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4.0 ENVIRONMENTAL ANALYSIS

4.1 Aesthetics

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

Less Than Significant Impact. The City of Murrieta General Plan EIR defines a scenic vista as "a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed."[4] The General Plan EIR identifies the Hogbacks (a ridgeline that crosses the eastern portion of the City), the San Jacinto Mountains, and the Santa Margarita and Agua Tibia ranges as visual features in the City's landscape. The project site is located in the southern portion of Murrieta and is approximately 1.7 miles northeast of the Santa Ana Mountains and Santa Rosa Plateau. The topography of the project site is generally flat. Mature trees are located along the jurisdictional watercourse that bisects the site. The surrounding area contains vacant land interspersed with residential and commercial development.

A scenic vista impact would occur when a scenic vista can be viewed from the project area or immediate vicinity and the proposed development interferes with/obscures the view of the scenic vista. The project site is located in an area of the City where there is existing and pending development from recently approved projects, which obstruct views of scenic vistas. For example, the Santa Ana Mountains and Santa Rosa Plateau are visible from the project site but existing intervening development (structures, streetlights, power poles, trees, and berms) partially obstructs these views. Only the tops of the nearby Santa Rosa Plateau and Santa Ana Mountain ranges are visible from the project site. A recently approved three-story residential development (Jefferson Avenue Apartment Project) would be located approximately 0.3-mile northwest of the project site along Jefferson Avenue. This planned development would further obstruct views of scenic vistas from the project site.

Although project development would construct three-story multi-family buildings with a maximum height of 42.75 feet, views of the Santa Rosa Plateau, San Jacinto Mountains, Santa Margarita Mountains, San Bernardino Mountains, and San Gabriel Mountains would not be completely blocked. The project provides separation between residential buildings, allowing for views of scenic vistas in the background. Further, lands northwest and southeast of the project site is vacant, thereby providing additional views of scenic vistas. Therefore, the proposed project would have a less than significant effect on scenic vistas and no mitigation is required.

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

No Impact. The California Department of Transportation (Caltrans) Scenic Highway System Map indicates that the project site is not proximate to a designated State scenic highway.[5] The nearest eligible scenic highway is I-15, located approximately 0.4 mile to the north. The nearest designated scenic highway is SR-74, located approximately 21.6 miles to the northeast. The project site is not visible from I-15 due to changes in elevation and intervening commercial development. The site does not contain any scenic rock outcroppings or historic buildings. The proposed project would retain existing trees along the jurisdictional watercourse; the trees and watercourse would be left as open space. Therefore, the

[4] City of Murrieta. General Plan EIR. Available at https://www.murrietaca.gov/DocumentCenter/View/785/05-03---Aesthetics-PDF, Accessed July 12, 2022.

[5] State of California Department of Transportation. *California State Scenic Highway System Map.* Available at https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, Accessed July 12, 2022.

proposed project would not affect scenic resources along an officially designed or an eligible scenic highway. No impact would occur and no mitigation is required.

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

Less Than Significant Impact. The project site is within a suburban area of the City. The project site is bordered by Murrieta Hot Springs Road and Jefferson Avenue, the Madison Marketplace commercial center, two hotels, and vacant land, the latter which is planned for development. The City of Murrieta Zoning Map depicts the City's zoning and indicates the project site is zoned community commercial (CC), with a Transit Oriented Development (TOD) Overlay District. The general development standards including parcel size and coverage, density and intensity, setbacks, and building height would influence the visual character/quality of a development site and its context to nearby uses. The proposed project would allow for the construction of a multi-family residential community and would comply with all applicable development standards and be consistent with the General Plan. Further, there are several General Plan policies that govern scenic quality in the Los Alamos Hills; however, these policies are not applicable to the project because the project site is not within this area. The General Plan envisioned future development to occur on the project site.

Project implementation and compliance with applicable development standards would not conflict with zoning regulations governing scenic quality. Compliance with Murrieta Municipal Code Sections 16.18.080-Height Measurement and Height Limit Exceptions and 16.18.140-Setback Regulations and Exceptions would be ensured through the City's development review process and future review of building permits. The proposed architecture and massing would complement the existing residential development on Jefferson Avenue by sharing similar neutral color palettes and material choice. Further, the proposed project would not conflict with any General Plan policies related to scenic vista protection because they are not applicable to the project. Therefore, impacts would be less than significant and no mitigation is required.

Threshold (d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The project site is in a growing developed area with existing light sources, which include some streetlights on Murrieta Hot Springs Road and Jefferson Avenue, lighting from surrounding commercial retail businesses and residences, vehicle headlights, and traffic signals. No nighttime construction is proposed and construction activities would be subject to Murrieta Municipal Code Section 16.18.100 – Lighting, which identifies the requirements for exterior and security lighting.

The proposed project would generate lighting from two primary sources: lighting from building interiors that would pass through windows, and lighting from exterior sources (e.g., street lighting, parking area lighting, building illumination, security lighting, and landscape lighting). Additionally, the proposed on-site amenities and walkways would provide lighting for wayfinding. This proposed lighting is typical of lighting proposed for multiple-family residential developments.

Project lighting would be subject to compliance with Murrieta Municipal Code Section 16.18.100. Specifically, light would be directly downward and shielded to prevent glare onto adjacent parcels. Outside and parking lot lighting would not exceed 0.3 footcandles at residential property lines. In addition,

the City's Planning and Building Division would review any proposed lighting to ensure conformance with the California Building Code, Title 24 (California Code of Regulations), as well as the California Green Building Standard Code (Part 11 of Title 24, California Code of Regulations), such that only the minimum amount of lighting is used and no light spillage occurs. Proposed lighting near the watercourse would be directed inward toward the project site. Further, the proposed landscaping plan includes Arizona Sycamores and Mediterranean Fan Palms, which would serve as a landscape screen to limit light pollution on the watercourse area. Although the proposed project would introduce new light sources, the surrounding area is a developing suburban area and is already illuminated. The proposed lighting conditions would be similar to that currently used surrounding the project site, which would not cause adverse effects; therefore, a less than significant impact would occur and no mitigation is required.

Sunlight or artificial light reflecting from finished surfaces such as window glass or other reflective materials can cause reflected light (glare). Buildings constructed of highly reflective materials from which the sun reflects at a low angle commonly cause adverse glare. The project does not propose use of materials known to cause glare, such as mirrored/reflective glass; therefore, a less than significant impact would occur and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are applicable or required.

4.2 Agriculture and Forestry Resources

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

No Impact. The State of California Department of Conservation Farmland Mapping and Monitoring Program identifies the project site as Farmland of Local Importance.[6] According to the General Plan EIR, Farmland of Local Importance is defined as a "land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee".[7] The project site is zoned Community Commercial with a TOD overlay and not intended for agricultural production or farmland use. The 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 on the General Plan Land Use map. Because the City does not identify the project site for agricultural use, and no Prime Farmland, Unique Farmland or Farmland of Statewide Importance has been identified, no impacts would occur.

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

No Impact. A Williamson Act contract allows for private landowners and local city or county governments to restrict specific parcels of land for agricultural or open space use in exchange for a lower property tax assessment. However, the project site is not under a Williamson Act contract. Additionally, the project site is not zoned for agricultural use. Therefore, the proposed project would not conflict with agricultural zoning district or a Williamson contract. No impact would occur.

Threshold (c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))? or

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

No Impact. The project site is not zoned for forest land, timberland, or timberland production and would therefore not conflict with zoning for these uses. There are no forest or timberland resources on the project site or in the surrounding area. The project site is zoned community commercial, which does not permit for timberland production. Therefore, no impact would occur.

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

No Impact. The project site and surrounding area do not include nor are proximate to agricultural uses or forest land. Therefore, the project would not directly or indirectly result in the conversion of property from agricultural or timberland uses. Therefore, no impact would occur.

[6] State of California Department of Conservation. *Farmland Mapping and Monitoring Program.* Available at https://www.conservation.ca.gov/dlrp/fmmp, Accessed July 6, 2022.

[7] City of Murrieta General Plan EIR. *Agricultural* Resources. Available at https://www.murrietaca.gov/DocumentCenter/View/756/05-11---Agricultural-Resources-PDF, Accessed July 6, 2022.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.3 Air Quality

An air quality analysis was prepared for the proposed project by Kimley-Horn and Associates, Inc. (Kimley-Horn, 2022). The output and results of the air quality modeling are included in **Appendix A: Air Quality/Greenhouse Gas Data** and summarized below.

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

Less Than Significant Impact. The project site is in the South Coast Air Basin (Air Basin) which includes all of Orange County and non-desert portions of San Bernardino, Los Angeles, and Riverside counties. The Air Basin is approximately 6,600 square miles extending from the Pacific Ocean to the San Gabriel, San Bernardino, and San Jacinto Mountains. The Air Basin is a coastal plain with broad valleys and low hills, and semi-arid climate. The South Coast Air Quality Management District (South Coast AQMD) and the California Air Resources Board (CARB) monitor air quality within the Air Basin.

The South Coast AQMD and the Southern California Association of Governments (SCAG) prepare the Air Quality Management Plan (AQMP). Air quality plans describe strategies to control air pollution and measures for implementation by a city, county, region, and/or air district. An AQMP's primary purpose is to bring an area that does not attain federal and State air quality standards into compliance with federal Clean Air Act and California Clean Air Act requirements. An AQMP uses the term "non-attainment" to describe an air basin that exceeds one or more federal or State ambient air quality standard. In addition, the goal of AQMPs is to ensure that an area maintains a healthful level of air quality based on National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

The current plan is the 2022 AQMP adopted on December 2, 2022. The primary purpose of the 2022 AQMP is to identify, develop, and implement strategies and control measures to meet the 2015 8-hour ozone NAAQS. Air quality management planning is a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the U.S. EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2020 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. . In order for a project to be consistent with the AQMP, it would have been included in the projections used to formulate the AQMP. According to the South Coast AQMD's CEQA Air Quality Handbook, the purpose of the consistency finding is to determine if a project is inconsistent with the AQMP assumptions and objectives, and therefore if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The South Coast AQMD's CEQA Handbook identifies two key indicators of consistency with the AQMP:

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

With respect to the first criterion, based on the air quality modeling analysis conducted for the proposed project, project construction and operations would not result in significant impacts based on the South Coast AQMD thresholds of significance (refer to Threshold [b], below for a discussion of the construction and operational modeling methodology, inputs, and results); therefore, project construction and

operations would not increase the frequency or severity of existing air quality violations. The proposed project would not contribute to the exceedance of any air pollutant concentration standards.

Concerning the second criterion, SCAG has developed growth forecasts for cities and counties, which are based on General Plans and included in SCAG's *Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS). In turn, the South Coast AQMD used SCAG's growth forecasts to develop the 2022 AQMP.

The project proposes a residential development of 389 multi-family residences. Based on the average person per household of 3.09, the project would have 1,203 new residents in the City.[8] The anticipated increase represents a nominal increase in population growth (approximately one percent) when compared to the City's existing population of 111,183 residents. In addition, the proposed project would be consistent with the allowable land uses, which permit residential development in a commercial zoning. The proposed project meets the minimum 30 du/ac density for residential projects in TOD overlay per the Murrieta Municipal Code. As a result, the General Plan has already factored population growth on the project site, which would have been captured in the SCAG RTP/SCS, and in turn, the South Coast AQMD 2022 AQMP. Therefore, the project would not induce substantial unplanned population growth. As such, the proposed project would not interfere with attainment because this growth is consistent with the General Plan and would not conflict with the projections used to formulate the AQMP.

Further, as addressed in the following analysis, total project emissions are less than the South Coast AQMD significance thresholds and localized emissions during construction and operations would not exceed South Coast AQMD LST thresholds; see Thresholds 4.3b and 4.3c below. The project-related emissions increase would not interfere with the AQMP or attainment of federal and State ambient air quality standards. Therefore, project emissions would not be greater than those anticipated in the AQMP. As such, the project would be consistent with Criterion No. 2.

The determination of AQMP consistency is primarily concerned with the long-term influence of a project on the Air Basin's air quality. The proposed project would not result in a long-term impact on the region's ability to meet the standards for federal and State air quality. In addition, the proposed project would be consistent with the AQMP goals and policies for the controlling fugitive dust. Impacts would be less than significant and no mitigation is required.

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

Construction Emissions: Less Than Significant Impact. Both the U.S. Environmental Protection Agency (U.S. EPA) in the NAAQS and CARB in the California CAAQS identifies air quality standards in Southern California. The air quality standards of the following five criteria pollutants relate to development projects: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and particulate matter (PM_{10} and $PM_{2.5}$). Of these criteria pollutants, the Air Basin, in which Murrieta lies, is designated nonattainment for O_3 and particulate matter, meaning the Air Basin has recorded exceedances of the air quality standards for these pollutants in recent years.[9]

8 State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022. Available at: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/, Accessed November 22, 2022.

9 A portion of the Air Basin in Los Angeles County is also designated a non-attainment basin for lead, which is not a criteria pollutant that is relevant to this project, since air emissions of lead would not be generated by the project.

The project's construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the project area include ozone-precursor pollutants (i.e., reactive organic gases [ROG] and nitrogen oxides [NO_X]) and $PM_{10,}$ and $PM_{2.5}$. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but are considered a significant air quality impact if the volume of pollutants generated would exceed the South Coast AQMD's thresholds of significance.

Construction equipment would include excavators, dozers, rollers, rubber-tired loaders, tractors, trenchers, and pavers. The basis for exhaust emission factors for typical diesel-powered heavy equipment is the California Emissions Estimator Model (CalEEMod) program defaults. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on or off the site. The analysis of daily construction emissions has been prepared using CalEEMod.

In accordance with the South Coast AQMD Guidelines, CalEEMod was used to model construction emissions for ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. NO_X are a family of highly reactive gases that are a primary precursor to the formation of ground-level O_3 and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_x) is a reddish-brown gas that can cause breathing difficulties at high levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). Sulfur oxides (SO_X) belong to the family of sulfur oxide gases that are formed when fuel containing sulfur from coal and oil are burned and during industrial metal smelting processes. SO_2 contributes to respiratory illness, particularly in children and the elderly, and aggravates existing heart and lung diseases.

CalEEMod allows the user to input standardized measures such as watering the construction area to limit fugitive dust. Standard conditions were inserted into CalEEMod model for certain reduction credits (i.e., compliance with South Coast AQMD rules) and result in a decrease of pollutant emissions. The basis for reduction credits is studies developed by CARB, South Coast AQMD, and other air quality management districts throughout California, and were programmed within CalEEMod. **Table 4.3-1**: **Construction Emissions** identifies the project's anticipated daily short-term construction emissions, assuming reductions associated with Standard Condition (SC) AQ-1 (Dust Control) and SC AQ-2 (Architectural Coatings). The project would be required to adhere to South Coast AQMD Rules 402 and 403, as part of SC AQ-1 to reduce PM_{10} and $PM_{2.5}$ emissions resulting from fugitive dust and Rule 1113 as part of SC AQ-2 to reduce ROG emissions. As indicated in the table, project construction emissions would not exceed any South Coast AQMD thresholds. Therefore, the project's construction-related impacts would be less than significant for all criteria pollutants.

Operational Emissions: Less Than Significant Impact. Project-generated operational emissions would be associated with motor vehicle use, energy, and area sources, such as the use of natural gas-fired appliances and landscape maintenance equipment. Mobile and stationary (area and energy) source operational emissions would result from normal daily activities on the project site after occupancy. Motor vehicles traveling to and from the project site would generate mobile source emissions. Area source emissions would be generated due to an increased demand for consumer products, architectural coating, and landscaping. The project would generate energy source emissions because of electricity and natural gas (non-hearth) usage associated with the proposed project. The project's primary use of electricity and natural gas would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. **Table 4.3-2: Operational Emissions** summarizes long-term operational emissions attributable

to the proposed project. As shown in the table, the project's long-term operational emissions would not exceed any South Coast AQMD thresholds. Therefore, the project's operational emissions would be less than significant.

Table 4.3-1: Construction Emissions

Emissions Source	Pollutant (pounds per day) [a, b]					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Construction: 2023	3.40	34.11	28.93	0.06	9.86	5.53
Construction: 2024	2.47	15.48	26.34	0.06	3.86	1.47
Construction: 2025	2.30	14.44	25.60	0.06	3.78	1.38
Construction: 2026	32.15	24.22	43.56	0.09	5.00	2.02
South Coast AQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
South Coast AQMD Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

ROG: reactive organic gases; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM_{10}: particulate matter 10 microns or less in diameter; $PM_{2.5}$: particulate matter 2.5 microns or less in diameter.

a. Emissions were calculated using the California Emissions Estimator Model (CalEEMod), as recommended by the South Coast AQMD. See **Appendix A**.

b. The modeling incorporates reduction/credits for construction emissions based on measures included in CalEEMod and as required by the South Coast AQMD through Rule 403. This includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the South Coast AQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment.

c. At the time when air quality and greenhouse gas emissions modeling was conducted, the project was anticipated to begin construction in summer 2023. The project is now slated to begin construction at the end of 2023. However, for purposes of air quality analysis, emission factors for construction would decrease over time as emissions regulations become more stringent. As construction is anticipated to commence at a later date than what was assumed in the model, the original construction schedule emissions analysis presented in Section 4.3 herein is conservative. It should also be noted that the overall construction schedule (approximately 32 months) nor the scope of construction would change.

Source: Kimley-Horn, 2022.

Table 4.3-2: Operational Emissions

Emissions Source	Pollutant (pounds per day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Source	9.64	6.10	26.87	0.04	0.60	0.60
Energy Use	0.17	1.41	0.60	0.01	0.11	0.11
Mobile Source	7.20	9.27	67.26	0.16	17.20	4.67
Total	**17.01**	**16.78**	**94.73**	**0.21**	**17.91**	**5.38**
South Coast AQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
South Coast AQMD Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

ROG: reactive organic gases; NO_X: nitrogen oxides; CO: carbon monoxide; SO_X: sulfur oxides; PM_{10}: particulate matter 10 microns or less in diameter; $PM_{2.5}$: particulate matter 2.5 microns or less in diameter.

Note: Emissions were calculated using the California Emissions Estimator Model (CalEEMod), as recommended by the South Coast AQMD.

Source: Kimley-Horn, 2022.

A significant impact to air quality would occur if a project would result in a cumulative considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable NAAQS or

CAAQS (including releasing emissions that exceed quantitative thresholds for ozone precursors). It should be noted that the SCAQMD thresholds used for the project-level analysis are considered to be cumulative by SCAQMD, meaning that a project that does not exceed the thresholds on a project basis is generally not considered to have a cumulative impact to air quality (which is cumulative by nature). Ozone precursors include ROG and NO_X. The Air Basin is in non-attainment for ozone (State and federal), PM_{10} (State), $PM_{2.5}$ (State and federal), and lead (federal, partial non-attainment in a portion of Los Angeles County). To determine whether the project would result in a cumulatively considerable increase in non-attainment criteria pollutants or exceed the quantitative thresholds for ozone precursors, the Lead Agency may evaluate project emissions based on the quantitative emission thresholds established by the South Coast AQMD in its CEQA Air Quality Handbook (South Coast AQMD 1993, as amended). The South Coast AQMD has established quantitative thresholds against which the Lead Agency may evaluate a project's emissions to determine if there is a potential for a significant impact. In the event direct impacts from a project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable future projects are in excess of screening levels and the project's contribution accounts for more than an insignificant proportion of the cumulative total emissions. As previously, addressed, the proposed project would not result in significant construction or operational air quality affects including non-attainment criteria pollutants. Therefore, the project's contribution to regional pollutant concentrations would not be cumulatively considerable.

Concerning the project's construction-period air quality emissions and cumulative Air Basin conditions, the South Coast AQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal Clean Air Act mandates. As such, the project would be subject to compliance with South Coast AQMD's Rule 403 (see SC AQ-1). Rule 403 requires that construction operations control fugitive dust with the best available control measures to reduce dust such that it does not remain visible in the atmosphere beyond the property line of a project site. Per South Coast AQMD rules and mandates, as well as the CEQA requirement that a project mitigate its significant impacts to the extent feasible, these same requirements (i.e., Rule 403 compliance, implementation of all feasible measures, and compliance with adopted AQMP emissions control measures) would also apply to other construction projects throughout the Air Basin. Compliance with South Coast AQMD rules and regulations would preclude significant construction-related impacts. Therefore, project-related construction emissions, in combination with the emissions from other local projects, would not substantially deteriorate the local air quality.

As previously discussed, the proposed project would not result in long-term air quality impacts since operational emissions would not exceed South Coast AQMD thresholds. South Coast AQMD and other entities are constantly developing emission reduction technology, strategies, and plans. In summary, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Impacts would be less than significant and no mitigation is required.

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

Less Than Significant Impact. A significant impact could occur if a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. This section addresses the exposure of sensitive receptors for the following: CO hotspots, localized emissions concentrations, and toxic air contaminants (TACs, specifically diesel PM) from on-site construction.

Carbon Monoxide Hot Spots

An analysis of CO "hot spots" determines whether the change in the level of service (LOS) of an intersection caused by the proposed project would have the potential to result in exceedances of the CAAQS or NAAQS. Vehicle emissions cause CO exceedances, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. The South Coast AQMD designated the basin as in attainment in 2007 and the South Coast AQMD's AQMP no longer addresses CO hotspots. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

The Air Basin was re-designated as attainment in 2007 and is no longer addressed in the South Coast AQMD's AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the South Coast AQMD *CO Hotspot Analysis*, the Wilshire Boulevard/Veteran Avenue intersection in the City of Los Angeles, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm federal standard. The proposed project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of South Coast AQMD's *CO Hotspot Analysis*. Since CO hotspots were not observed at the Wilshire Boulevard/Veteran Avenue intersection which accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at project area intersections because of the 2,629 additional vehicle trips attributable to the project. Therefore, impacts would be less than significant.

Localized Significance Threshold Analysis

Localized Significance Analysis. The Localized Significance Threshold (LST) Methodology provides a look-up table for construction and operational emissions, based on the emission rate, location, and distance from receptors, and provides a methodology for air dispersion modeling to evaluate whether a construction or operation could cause an exceedance of an ambient air quality standard. Local air quality emissions were analyzed from construction using the South Coast AQMD's Mass Rate Localized Significant Threshold Look-Up Tables and the methodology described in *Localized Significance Threshold Methodology* (South Coast AQMD, revised July 2008) to determine if the project's daily emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$, would result in a significant impact to local air quality. Construction emissions were compared to the South Coast AQMD's screening thresholds. Project implementation would require the export of approximately 4,600 cubic yards (cy) of soil material. The nearest receptors to the project site are residences located approximately 750 feet to the west.

As shown in **Table 4.3-3**: **Localized Significance of Construction and Operational Emissions**, project construction and operational emissions would not exceed South Coast AQMD LSTs. Therefore, the project would not result in significant localized construction or operational emissions.

Table 4.3-3: Localized Significance of Construction and Operational Emissions				
	Pollutant (pounds per day)[1]			
Emission Source	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation (2023)	27.52	18.24	9.66	5.48
Grading (2023)	34.51	28.05	5.36	2.87
Construction (2024)	13.44	16.17	0.61	0.58
Construction (2025)	12.47	16.08	0.53	0.50
Construction (2026)	12.47	16.09	0.53	0.50
Architectural Coating (2026)	28.47	1.81	0.05	0.05
Paving (2026)	8.58	14.59	0.42	0.38
Maximum Daily Emissions (for all phases and years)	*34.51*	*28.05*	*9.66*	*5.48*
South Coast AQMD Localized Significance Threshold: (Adjusted for 4 acres of daily disturbance at 260 meters)	702	11,793	111	42
South Coast AQMD Threshold Exceeded?	**No**	**No**	**No**	**No**
Operational Emissions				
Operations – 2026 (area + energy sources)	9.70	27.39	0.71	0.71
South Coast AQMD Localized Significance Threshold: (Adjusted for 5 acres at 260 meters) (5 acres at 25 meters)[2]	*751*	*12,620*	*28*	*11*
South Coast AQMD Threshold Exceeded?	**No**	**No**	**No**	**No**

NO_x: nitrogen oxides; CO: carbon monoxide; SO_X: sulfur oxides; PM_{10}: particulate matter 10 microns or less in diameter; $PM_{2.5}$: particulate matter 2.5 microns or less in diameter.

1. South Coast AQMD Rule 403 Fugitive Dust applied. See Appendix Air Quality/Greenhouse Gas Data.
2. Although the site is 13 acres, the analysis conservatively used the 5-acre screening lookup threshold as the thresholds increase with size.

Sources: CalEEMod version 2020.4 and Kimley-Horn, 2022.

Project-Related TAC Emissions

Construction of the project would result in the generation of diesel particulate matter (DPM) emissions from the use of required off-road diesel equipment required. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The California Office of Environmental Health Hazard Assessment (OEHHA) has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time which would limit the exposure of any proximate individual sensitive receptor to TACs.

Additionally, construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Sections 2485 and 2449), which reduce diesel PM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited.

Therefore, considering the relatively short duration of DPM-emitting construction activity at any one location, and the highly dispersive properties of DPM, sensitive receptors would not be exposed to substantial concentrations of construction-related TAC emissions. Impacts would be less than significant.

The project consists of a residential development and would not generate trips by heavy-duty diesel trucks or propose stationary sources of DPM/TACs. Therefore, the project would not generate operational TAC emissions, and impacts would be less than significant.

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

Less Than Significant Impact. The South Coast AQMD CEQA Air Quality Handbook (South Coast AQMD, 1993) identifies certain land uses as sources of odors. These land uses include agriculture, wastewater treatment plant, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project is a residential development and does not propose to include any odor-inducing uses on the site.

During construction-related activities, some odors (not substantial pollutant concentrations) that the public may detect are those typical of construction vehicles (e.g., diesel exhaust from grading and construction equipment). These odors are a temporary short-term impact, which are typical of construction projects and disperse rapidly. The project would not include any of the land uses that South Coast AQMD identifies as odor sources. Therefore, impacts would be less than significant and no mitigation is required.

Standard Conditions and Requirements

SC AQ-1 **Dust Control.** During construction, construction contractors shall comply with South Coast Air Quality Management District's (South Coast AQMD's) Rules 402 and 403 to minimize construction emissions of dust and particulates. South Coast AQMD Rule 402 requires that air pollutant emissions not be a nuisance off site. Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

South Coast AQMD Rule 403 requires that fugitive dust be controlled with Best Available Control Measures so that the presence of such dust does not remain visible beyond the property line of the emission source. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. This requirement shall be included as notes on the contractor

specifications. Table 1 of Rule 403 lists the Best Available Control Measures that are applicable to all construction projects. The measures include, but are not limited to, the following:

a. Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

b. All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.

c. All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d. The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

e. Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.

SC AQ-2 **Architectural Coatings.** South Coast Air Quality Management District (South Coast AQMD) Rule 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce reactive organic gas (ROG) emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. Architectural coatings shall be selected so that the volatile organic compound (VOC) content of the coatings is compliant with South Coast AQMD Rule 1113. This requirement shall be included as notes on contractor specifications.

Mitigation Measures

No mitigation measures are required.

4.4 Biological Resources

A Biological Technical Report and MSHCP Consistency Analysis was prepared by VCS Environmental in December 2022. Additionally, a Tree Inventory and Assessment was prepared by Arborist and Nursery Services in June 2022. The biological technical report is included in this Initial Study as **Appendix B: Biological Technical Report and MSHCP Consistency Analysis** and the arborist report is included in this Initial Study as **Appendix C: Tree Inventory and Assessment**. Both studies are summarized herein. The Project is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) and subject to the provisions and regulations set forth by the MSHCP.

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

Less Than Significant Impact with Mitigation. The project site is vacant and bisected by a jurisdictional watercourse in a north-south direction toward the eastern half of the site. The project site contains open fields comprised of herbaceous forbs and grasses vegetated with a variety of non-native and early successional weedy plant species.

Vegetation

General biological surveys were conducted within the project site and offsite roadway improvements area on November 29, 2021, and March 15, 2022, by VCS biologists Wade Caffrey, Carla Marriner, and Molly Burdick-Whipp. The vegetation communities and habitat conditions were inspected to confirm presence and habitat vegetation quality. Descriptions of vegetation communities from the Manual of California Vegetation (MCV) second edition were also utilized as part of the evaluation. Vegetation communities were mapped using field observations and utilizing aerial imagery.

A rare plant focus survey was conducted within the project site and offsite roadway improvements area on April 16 and May 13, 2022, by botanist CJ Fotheringham. During the survey, the botanist walked the entirety of the project site, with focus on areas that could host sensitive vegetation communities or had the potential to provide suitable habitat for special status plant species. Plant species were identified using plant field and taxonomical guides, such as The Jepson Manual: Vascular Plants of California, second edition. All plant species encountered during the field survey were identified and recorded in field notes.

Sensitive Plant Species

Species of plants are afforded "special status" by federal agencies, state agencies, and/or non-governmental organizations (e.g., USFWS, CDFW, CNPS, and United States Forest Service [USFS]) because of their recognized rarity, potential vulnerability to extinction, and local importance. These species typically have a limited geographic range and/or limited habitat and are referred to collectively as "special status" species. **Appendix B** includes the list of "special status" criteria.

No sensitive plant species were observed within the project site during the April and May 2022 rare plant surveys. The San Diego tarplant (Deinandra paniculata) is classified under the California Rare Plant Rank (CRPR) as 4. Plants within CRPR Rank 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. However, CRPR Rank 4 status does not meet the CEQA standards and thresholds for impact considerations.

Project implementation would result in the removal of mostly herbaceous forbs and grasses, and common ruderal plant species. Common plant species present on the project site occur in large numbers throughout the region and their removal does not meet the significance threshold. Based on the low habitat quality and the lack of any special-status plants observed during the April and May 2022 rare plant surveys, the project is not expected to impact any special-status plant species. No impacts to sensitive plant species are expected.

Acreages for each vegetation community and land type within the project site are depicted in **Table 4.4-1: Vegetation Communities**. The majority of the vegetation type within the project site is characterized by open fields comprised of herbaceous forbs and grasses vegetated with a variety of non-native and early successional weedy plant species. As mentioned, a jurisdictional watercourse with riparian trees is present within the project site.

Table 4.4-1: Vegetation Communities

	Project Site (acres)	Offsite Roadway Improvements (acres)
Disturbed fiddleneck fields	16.26	1.02
Red willow riparian woodland	1.73	-
Source: Appendix B		

Sensitive Wildlife Species

A total of 23 wildlife species or signs thereof were observed during the March/April 2022 surveys. Sensitive wildlife species with high or moderate potential to occur on the project site, but were not observed during the biological surveys, include the following:

- burrowing owl, a California Department of Fish and Wildlife (CDFW) Species of Special Concern and USFWS Bird of Conservation Concern
- California glossy snake (Arizona elegans occidentalis), a CDFW Species of Special Concern
- California horned lark (Eremophila alpestris actia), a CDFW Watch List species
- coastal California gnatcatcher (Polioptila californica californica), a federally threatened species and CDFW Species of Special Concern
- grasshopper sparrow (Ammodramus savannarum), a CDFW Species of Special Concern
- least Bell's vireo (Vireo bellii pusillus), a federally and State endangered species
- San Diego black-tailed jackrabbit (Lepus californicus bennettii), a CDFW Species of Special Concern
- Southern California rufous-crowned sparrow (Aimophila ruficeps canescens), a CDFW Watch List species
- southwestern willow flycatcher (Empidonax traillii extimus), a federally and State endangered species

One sensitive species was observed outside of the project site, within 500 feet of the site: Cooper's hawk (Accipiter cooperii), a CDFW Watch List species. A complete list of sensitive wildlife species analyzed with potential to occur within the project site and offsite improvements area are included in **Appendix B**.

Wildlife

On March 15, 2022, during a general biological survey, biologists analyzed the project site and offsite roadway improvements area for habitat areas that could be suitable for special status wildlife species. All wildlife species encountered visually or audibly during the field surveys were identified and recorded in field notes. In addition, the potential for occurrence of a species was based on presence of suitable habitat to support the species, known records or occurrence within the area, known distribution and elevation range, and habitat utilization, as well as information from literature reviews.

Bat Foraging and Roosting Habitat

Suitable bat roosting habitat occurs within the riparian willow habitat within the project site; however, this resource would be avoided by project activities. The biologists did not observe signs of nests, nesting activity or bat roosting within the project site during the March/April 2022 biological surveys. No bat roosting habitat would be directly impacted by the residential development occurring on the 13 net acres. The existing vegetation on the project site represents marginally suitable foraging habitat. Permanent impacts on foraging habitat would be less than significant, given the habitat onsite is marginal and vast availability of other locations with suitable roosting and foraging habitat in the adjacent open space lands and in the region. Therefore, no mitigation would be required for permanent impacts to bat roosting habitat on the project site.

Burrowing Owl

The project site is within the MSHCP Burrowing Owl Survey Area; therefore, a burrowing owl habitat assessment was performed. The burrowing owl assessment followed the guidelines identified in Burrowing Owl Survey Instructions for the MSHCP (County of Riverside 2006). The survey instructions note the following steps to the MSHCP burrowing owl assessment:

- Step 1: Habitat Assessment
- Step 2: Locating Burrows and Burrowing Owls
    - Part A: Focused Burrow Survey
    - Part B: Focused Burrowing Owl Surveys (4 separate surveys)

The habitat assessment was performed on March 3, 2022, which involved walking the project site and surrounding 500-foot buffer (include offsite roadway improvements area). The assessment was performed to determine if the project areas contain suitable habitat for burrowing owls. Soil conditions, topography, vegetative communities, and habitat quality were reviewed as part of the assessment as well.

A majority of the 500-foot buffer area was inaccessible due to legal access limitations; these areas were viewed through binoculars. The habitat assessment determined that the project site provided suitable habitat for burrowing owls; therefore additional surveys were required (Step 2).

The focused burrow and burrowing owl surveys were conducted within the areas where suitable habitat and burrows were identified during the habitat assessment. Field methodology included pedestrian survey transects spaced apart to allow 100 percent visual coverage of the ground surface (approximately 10 to 15 meters [30 to 50 feet]); adjusted for specific field conditions including vegetation and topography). The commercial developed areas located immediately northeast of the project site were determined to be unsuitable for the burrowing owl; therefore, these areas were not assessed during the focused surveys.

All encountered burrows or structure entrances were checked for the presence of burrowing owls, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement at or near a burrow entrance. Natural or man-made structures and debris piles that could support burrowing owls were also surveyed. All burrows were monitored at a short distance from the entrance, and at a location that would not interfere with burrowing owl behavior. All burrow locations were recorded using GPS technology. The surveys were not conducted during rain, high winds (> 20 miles per hour), dense fog, or temperatures above 90-degree Fahrenheit (°F). The methods used to detect and identify burrowing owls included observation of key signs identified by the California Burrowing Owl Consortium (CBOC) such as sight, scat, tracks, burrows, nests, and calls. All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Binoculars were used to aid in the identification of observed wildlife. Photographs were taken to document existing conditions within the Study Area and are included in **Appendix B**.

The Biological Technical Report noted that burrowing owls have a moderate potential to occur at the project site due to presence of suitable burrows and documented occurrences within two miles of the site. The results of the protocol-level presence/absence surveys were conducted in March and April 2022 and did not identify individual burrowing owls or their presence on the project site. However, there is a potential for project construction activities to impact suitable burrows; Mitigation Measure (MM) BIO-1 is required. MM BIO-1 requires a pre-construction/absence survey for burrowing owls within 30 days prior to commencement of ground disturbing activities, including vegetation clearing, grubbing, tree removal, or site watering. If burrowing owls and suitable habitat is identified during the survey, the applicant/biologist must immediately inform the City and resource agencies and prepare a Burrowing Owl Protection and Relocation Plan a well as a Determination of Biologically Equivalent or Superior Preservation (DBESP) for approval by the City a prior to initiating ground disturbance. Impacts would be considered less than significant with mitigation incorporated.

California Glossy Snake

This species was not observed during the March and April 2022 surveys. This species has a moderate potential to occur within the drainage feature which contains sandy habitat, as well as a rock riprap area located southeast of the project site. However, the project site would avoid the watercourse area and is not within the development footprint. Therefore, no impacts to California glossy snake are anticipated.

California Horned Lark

This species has the potential to occur within the project site for foraging and nesting habitat. Although project implementation would result in the loss of habitat for foraging and nesting, there is similar available habitat in the region which would not decrease populations below self-sustaining levels. Horned larks are widespread songbirds of fields, deserts, and tundra and they favor bare, dry ground and areas of short, sparse vegetation. There is a prevalence of such habitat throughout the region, including in protected spaces. Although there is prevalence of such habitat, implementation of MM BIO-2 (Nesting Bird Surveys) would be required. MM BIO-2 requires pre-construction nesting bird surveys if vegetation removal activities are conducted during nesting season (typically September 1 to December 31). The pre-construction survey would be conducted by a qualified biologist within three days prior to commencement of vegetation clearing/ground disturbance activities. Therefore, impacts are considered less than significant with mitigation.

Coastal California Gnatcatcher and Southern California Rufous-crowned Sparrow

Coastal sage scrub habitat occurs on the opposite side of Jefferson Avenue to the southwest, within 100 feet of the project site and provides suitable habitat for the coastal California gnatcatcher and Southern California rufous-crowned sparrow. The Coastal California gnatcatcher is an obligate, permanent resident of coastal sage scrub habitat in arid washes, on mesas, and on slopes in southern California. The coastal California gnatcatcher was not incidentally observed within the project site or within adjacent habitats during the March and April 2022 biological surveys. The Southern California Rufous-crowned Sparrow has a low moderate potential to occur within the project site due to proximity to coastal sage scrub, however no breeding habitat for this species exist on the project site. The species was also not observed within the project site or within adjacent habitats during the March and April 2022 biological surveys.

The project site provides low-quality but suitable fly-over or foraging habitat for these species due to its proximity to coastal sage scrub, however, the project site does not provide suitable breeding habitat**.** To avoid impacts to avian species during nesting season, implementation of MM BIO-2 would be required. As discussed above, MM BIO-2 requires pre-construction nesting bird surveys if vegetation removal activities are conducted during nesting season (typically September 1 to December 31). The pre-construction survey would be conducted by a qualified biologist within three days prior to commencement of vegetation clearing/ground disturbance activities.

The loss of approximately 14.21 acres of low-quality foraging habitat for coastal California gnatcatcher would not decrease populations below self-sustaining levels given the disturbed nature of the project site, the lack of nesting habitat, and availability of habitat remaining in the region. Impacts to the coastal California gnatcatcher and Southern California rufous-crowned sparrow would be less than significant with mitigation incorporated.

Grasshopper Sparrow and San Diego Black-tailed jackrabbit

Although not observed during biological surveys, both the Grasshopper Sparrow and San Diego Black-tailed jackrabbit have the potential to occur within the project site. The project site presents low-moderate potential for foraging habitat, but lacks suitable nesting habitat. Although project implementation would result in the loss of habitat for foraging and nesting, there is similar available habitat in the region which would not decrease populations below self-sustaining levels. The Black-tailed jackrabbit is found throughout southern California in forests, chaparral, and coastal sage scrub. The Grasshopper Sparrow is found in grasslands, prairies, hayfields, and open pastures with little to no scrub cover and often with some bare ground. Both of the habitats supporting these species are present throughout the region and the site's habitat is limited for both species. Therefore, impacts are considered less than significant.

Least Bell's Vireo and Southwestern Willow Flycatcher and Cooper's hawk

The riparian woodland habitat within the watercourse provides suitable habitat for least Bell's vireo and southwestern willow flycatcher. The least Bell's vireo is a small, olive-gray, migratory songbird that primarily occupies riverine riparian habitats that typically feature dense cover within one to two meters of the ground and a dense, stratified canopy. Suitable riparian habitat for this species occurs within the drainage feature onsite. This species was not observed within the onsite or adjacent riparian habitat during protocol surveys conducted in 2005. Additionally, this species was not incidentally observed within the onsite or adjacent riparian habitat during the March and April 2022 biological surveys. In addition, the CNDDB database review identified the nearest historic occurrence of least Bell's vireo approximately 0.82 mile away from the site, and the most recent sighting in 2016. The remainder of the project site area lack suitable nesting and foraging habitat for this species.

Willow flycatchers occupy areas with willows or other shrubs near standing or running water. The southwestern willow flycatcher is present in breeding territories by mid-May, including southern California. It breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands including lakes and reservoirs. Suitable riparian habitat for this species occurs within the drainage feature onsite. This species was not observed within the onsite or adjacent riparian habitat during protocol least Bell's vireo surveys conducted in 2005. This species was not incidentally observed within the onsite or adjacent riparian habitat during the March and April 2022 biological surveys. The remainder of the project site and offsite roadway improvements area lack suitable nesting and foraging habitat for this species. Project implementation would avoid the watercourse area, and therefore avoid impacts to the riparian woodland habitat. No direct impacts to either species would occur. The project would implement best management practices such as placement of equipment and personnel outside the stream channel or on sand and gravel bars, banks, avoiding construction activities during breeding season, and implementation of water pollution and erosion control plans, would further reduce impacts to Willow flycatchers.

The project site contains suitable habitat for sensitive wildlife species. Project implementation would result in the loss of foraging and nesting habitat. However, the project site has been disturbed by previous agricultural uses in the past. Further, there is similar available habitat in the region which would not cause species populations to decrease below self-sustaining levels. Project implementation would also avoid the jurisdictional watercourse, which would further limit loss of suitable habitat. Nevertheless, due to the presence of suitable riparian habitat located adjacent to the project site, indirect impacts to nesting least Bell's vireo and southwestern willow flycatchers could occur as a result of project activities during the breeding season. To avoid indirect impacts to avian species, including the least Bell's vireo, during the nesting season, implementation of MM BIO-1 (Burrowing Owl Surveys) and MM BIO-2 (Nesting Bird Surveys) would be required. Additionally, Best Management Practices outlined in Appendix B and taken from the Western Riverside MSHCP would further avoid impacts to sensitive and common bird species. Because the site is within the MSHCP, compliance with standard BMPs is required. Following implementation of mitigation, impacts to candidate, sensitive, or special-status plant or wildlife species would be less than significant.

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

Less Than Significant Impact

Vegetation Communities. Project implementation could potentially impact 14.28 acres of vegetation communities. Specifically, the proposed project would impact disturbed fiddleneck fields. However, impacts to disturbed fiddleneck fields are considered less than significant because this habitat contains an abundance of non-native vegetation, is common in the surrounding area, and does not represent a California Natural Diversity Database (CNDDB) or CDFW sensitive plant community. The proposed project would avoid red willow riparian woodland habitat found in and near the jurisdictional watercourse. Therefore, the project would have no impacts to riparian woodland or other sensitive habitats.

Sensitive Plant Communities. No plant communities considered sensitive by resource agencies were mapped on the project site; therefore, no impacts would occur.

Riparian Habitat. VCS biologists Wade Caffrey and Molly Burdick-Whipp assessed the presence or absence of potential jurisdictional streams and drainages within the project site on November 29, and December

13, 2021. The project site supports riparian habitats identified or otherwise regulated under local or regional plans, policies and regulations, and by the CDFW or USFWS. The jurisdictional watercourse is a woodland riparian habitat. However, project implementation would avoid the jurisdictional watercourse wetland. During the 2021 visit, the outer limits of the Waters of the State and the riparian and riverine areas were flagged and the project engineer precisely surveyed the limits on the drainage (See **Appendix B**). No potential wetlands occur within the project's development footprint and the project avoids the jurisdictional waters.

Approximately five acres, inclusive of the jurisdictional watercourse wetland, would remain as undisturbed open space. The proposed project would adhere to standard best management practices including clearly delineating the limits of disturbance, development and implementation of water and erosion control plans in accordance with Regional Water Quality Board requirements, proper equipment storage in areas with minimal risks of direct drainage into riparian areas and maintaining solid waste disposal to avoid attracting predators of species of concern. Best Management Practices can be applied during construction and project operations. Therefore, potential impacts to the riparian woodland habitat would be considered less than significant.

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

Less Than Significant Impact. The project would avoid riparian habitat and wetlands. As discussed above, a drainage feature containing riparian willow habitat occurs on the project site, however, the drainage and riparian canopy would be avoided by project activities as confirmed through precise field survey data taken by the project engineer. Therefore, no direct impacts to wetlands would occur due to project construction or implementation. Further, five acres, inclusive of the jurisdictional watercourse wetland, would be avoided and remain as undisturbed open space. To minimize indirect impacts to the drainage feature and riparian habitat, project implementation would implement best management as discussed previously. No impacts to wetlands would occur due to project avoidance. Impacts to jurisdictional resources would be considered less than significant.

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

Less Than Significant Impact. Wildlife movement corridors are physical connections that allow wildlife to move between areas of suitable habitat in both undisturbed and fragmented landscapes. The project site is bordered by Murrieta Hot Springs Road and Jefferson Avenue, vacant land, and adjacent commercial development. The riparian woodland habitat within the on-site jurisdictional watercourse wetland provides local connectivity between upstream habitats and Murrieta Creek, an important regional resource located downstream of the project site. However, as discussed above, the proposed project would avoid the riparian woodland habitat, which would continue to serve as local connectivity for wildlife. Surrounding roadways and adjacent commercial retail development do not play a significant role in wildlife movement. No long-term or significant effects to wildlife movement are anticipated due to project implementation. Impacts would be less than significant and no mitigation is required.

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

No Impact. Murrieta Municipal Code Section 16.42.080 establishes protection of trees within the City. There are 77 trees of various species on the project site, mostly concentrated near the riparian woodland wetland. As previously addressed, this wetland habitat would be avoided by project development. There are no trees in the 13 acre project development footprint area; no tree removal would occur. Therefore, the project would not conflict with the City's tree preservation ordinance. No impacts would occur.

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

Less Than Significant Impact with Mitigation. The project site is within the Western Riverside County Regional Conservation Authority's Multiple Species Habitat Conservation Plan (MSHCP), Southwest Area Plan. The project site is within the Santa Ana Mountains Habitat Management Unit but is not mapped as being within or adjacent to a Criteria Cell or Cell Group. Therefore, the site is not identified for conservation. The project site is not located within an MSHCP Amphibian, Mammal, Narrow Endemic Plant Species or Criteria Area Plant Species Survey Area; therefore, no additional surveys were required.

The project site does contain riparian/riverine resources. Because the project would avoid these resources, no direct impact would occur. No vernal pools or habitat suitable for fairy shrimp were identified on the project site. Due to the presence of suitable riparian habitat located adjacent to the project site, indirect impacts to nesting least Bell's vireo and southwestern willow flycatchers could occur as a result of project activities during the breeding season. To avoid indirect impacts to avian species, including the least Bell's vireo, during the nesting season, implementation of MM BIO-2 (Nesting Bird Surveys) would be required. Additionally, Best Management Practices outlined in Appendix B would further avoid impacts to sensitive and common bird species.

The entirety of the project site is within the MSHCP Burrowing Owl Survey Area. Therefore, a Habitat Assessment and focused surveys for burrowing owl were conducted. No burrowing owl or active signs thereof (e.g., active burrows, whitewash, pellets, etc.) were observed during the four focused surveys. However, suitable burrows were observed at the project site. Therefore, MM BIO-1 is required.

Following implementation of mitigation and payment of all applicable MSHCP development impact fees, conflicts with the provisions of an adopted HCP, NCP, or other approved local, regional, or state habitat conservation plan would be less than significant.

Standard Conditions and Requirements

No Standard Conditions are applicable.

Mitigation Measures

MM BIO-1 **Burrowing Owl Survey.** A pre-construction presence/absence survey for burrowing owl at the project site where suitable habitat is present shall be conducted by a qualified biologist within 30 days prior to the commencement of ground disturbing activities including vegetation clearing, grubbing, tree removal, or site watering. If burrowing owls are not found, no further action would be required.

If burrowing owl have colonized within the area of planned disturbance prior to initiation of construction, the biologist/applicant shall immediately inform the City and Wildlife

Agencies (CDFW and USFWS) and prepare a Burrowing Owl Protection and Relocation Plan and Determination of Biologically Equivalent or Superior Preservation (DBESP) for approval by the City prior to initiating ground disturbance. Additionally, if ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey shall again be conducted to confirm burrowing owl have not colonized the site since it was last disturbed. If burrowing owl are found, the same coordination described above shall be necessary.

MM BIO-2 **Nesting Bird Surveys.** Vegetation removal activities shall be conducted outside the nesting season (typically September 1 to December 31) to avoid potential impacts to nesting birds. Any construction activities that occur during the nesting season (January 1 to August 31) will require that all suitable habitats be thoroughly surveyed for the presence of nesting birds by a qualifies biologist within three days before commencement of vegetation clearing and ground disturbance activities. If any active nests are detected, a buffer of 500 feet of an active listed species or raptor nest, 300 feet of other sensitive bird nests (non-listed), and 100 feet of most common songbird nests will be delineated, flagged, and avoided until the nesting cycle is complete. The buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts.

4.5 Cultural Resources

A Cultural Resource Study was prepared by Brian F. Smith and Associates, Inc. in June 2022. The technical report is included in this Initial Study as **Appendix D: Cultural Resource Study** and the results are summarized herein.

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

No Impact. Historical resources are defined as buildings, structures, objects, sites, and districts of significance in history, archaeology, architecture, and culture. These resources include intact structures of any type that are 50 years or more of age. These resources are sometimes called the "built environment" and can include, in addition to houses, other structures such as irrigation works and engineering features. Historical resources are preserved because they provide a link to a region's past as well as a frame of reference for a community.

State CEQA Guidelines Section 15064.5 defines "historic resources" as resources listed in the California Register of Historical Resources or determined to be eligible by the California Historical Resources Commission for listing in the California Register of Historic Resources.[10] The National Register of Historic Places recognizes properties that are significant at the national, State and local levels. In accordance with CEQA Guidelines Section 15064.5, a site or structure may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals as set forth in PRC §5020.1(j), or if it meets the criteria for listing in either the National Register of Historic Places or the California Register of Historical Resources (14 CFR §4850). CEQA allows local historic resource guidelines to serve as the California Register of Historical Resources criteria if enacted by local legislation to act as the equivalent of the State criteria.

The project site is vacant and does not contain any structures. An archaeological record search for the project site and surrounding area within a one-mile radius was requested from the Eastern Information Center at the University of California, Riverside in February 2022. Record search results indicate 78 cultural resources are located within a one-mile radius of the project site. However, the record search did not identify any historic buildings or resources on the project site. Project implementation would not impact previously identified off-site resources. Further, review of historic maps and aerial photographs indicate that the project site has historically remained vacant. The project site appears to have been graded and cleared of vegetation a few times but has largely been left undeveloped. Due to the lack of significant historic resources on the project site, the project would have no impact on known historic resources.

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

Less Than Significant Impact with Mitigation. The archaeological record search noted that 119 cultural studies have been conducted in the vicinity of the project site, of which 3 included the project site.[11] As discussed above, the record search identified 78 cultural resources located within a one-mile radius of the project site. Archaeological site locations are not publicly available. These resources include 37 historic single-family properties, 2 historic fence lines, 2 historic ancillary buildings, 1 historic grain elevator, 1 historic multi-family property, the historic Ray's Café building, 1 historic private landing strip, 2 historic wells, 5 historic commercial buildings, 1 historic ranch, the historic Women's Clubhouse building, 3 historic

[10] California Public Resources Code §5020.1(k), §5024.1(g).

[11] Brian F. Smith and Associates, Inc., Cultural Resources Study for the Jefferson Avenue Project, June 2022.

refuse deposits, and 2 historic roads. Prehistoric resources including artifact scatters, prehistoric lithic scatters, midden deposit, and isolates were also identified.

Due to the undeveloped nature of the project site and high sensitivity for cultural resources in the surrounding area, project excavation and grading activities could impact previously unidentified cultural and archaeological resources. The project would be required to comply with Murrieta Municipal Code Chapter 16.26, which contains regulations pertaining to the protection of cultural resources. Additionally, implementation of MM CR-1 would be required, which specifies preparation of a cultural resources monitoring program conducted by a qualified archaeologist. The archaeological monitor could temporarily halt or redirect work to permit the sampling, identification, and evaluation of the artifacts and resources. If resources are significant, the archaeological monitor would determine appropriate actions, in cooperation with the City and applicant. Compliance with the Murrieta Municipal Code and MM CR-1 would reduce potential impacts to a less than significant level.

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

Less Than Significant Impact. No dedicated cemeteries are on or near the project site. The disturbance of most Native American human remains is typically in association with prehistoric archaeological sites. As discussed previously, the project site does not contain any known, identified archaeological resources. However, due to the undeveloped nature of the project site and high sensitivity for cultural resources in the surrounding area, the potential exists for the project's ground-disturbing activities to encounter human remains. If previously unknown human remains are discovered during the project's ground-disturbing activities, a substantial adverse change in the significance of such a resource could occur. If human remains are found, those remains would require proper treatment in accordance with applicable laws, including State of California Health and Safety Code (HSC) §§7050.5 -7055 and PRC §§5097.98 and 5097.99. Health and Safety Code §§7050.5 - 7055 describe the general provisions for treatment of human remains. Specifically, HSC §7050.5 prescribes the requirements for the treatment of any human remains that are accidentally discovered during excavation of a site. HSC §7050.5 also requires that all activities cease immediately and a qualified archaeologist and Native American monitor be contacted immediately. As required by State law, the proposed project would implement the procedures set forth in PRC §5087.98, including evaluation by the County Coroner and notification of the Native American Heritage Commission (NAHC). The NAHC would designate the "Most Likely Descendent" of the unearthed human remains. If excavation results in the discovery of human remains, the proposed project would halt excavation near the find and any area that is reasonably suspected to overlay adjacent remains would remain undisturbed until the County Coroner has investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with the established regulatory framework (i.e., HSC §§7050.5-7055 and PRC §5097.98 and §5097.99), the project's potential impacts concerning human remains would be less than significant and no mitigation is required.

Standard Conditions and Requirements

No standard conditions are applicable to the proposed project.

Mitigation Measures

MM CR-1 **Cultural Resources Monitoring Program.** Prior to issuance of a grading permit, the applicant shall provide written verification that a certified archaeologist has been retained to implement the monitoring program. This verification shall be presented in a letter from the project archaeologist to the City of Murrieta.

The project applicant shall provide Native American monitoring during grading. The Native American monitor shall work in concert with the archaeological monitor to observe ground disturbances and search for cultural materials

The certified archaeologist shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program.

During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and tribal representative shall be on the site, as determined by the consulting archaeologist, to perform periodic inspections of the excavations. The frequency of inspections will depend upon the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The consulting archaeologist shall have the authority to modify the monitoring program if the potential for cultural resources appears to be less than anticipated.

Isolates and clearly non-significant deposits will be minimally documented in the field in order that the monitored grading can proceed.

In the event that previously unidentified cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. The archaeologist shall contact the City of Murrieta at the time of discovery. The archaeologist, in consultation with the City, shall determine the significance of the discovered resources. The City must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the City before being carried out using professional archaeological methods. If any human bones are discovered, the Riverside County Coroner's Office and City shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains.

Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The project archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis.

All cultural material collected during the grading monitoring program shall be processed and curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees necessary for permanent curation.

A report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the lead agency prior to the issuance of any building permits. The report will include State of California Department of Parks and Recreation Primary and Archaeological Site Forms.

4.6 Energy

The energy calculations and results are included in **Appendix A** of this Initial Study and summarized below.

Building Energy Conservation Standards

In June 1977, the California Energy Resources Conservation and Development Commission (now the California Energy Commission) adopted energy conservation standards for new residential and non-residential buildings, which the Commission updates every three years (Title 24, Part 6, of the California Code of Regulations). Title 24 requires the design of building shells and building components to conserve energy. The periodic update of these standards allows for consideration and possible incorporation of new energy efficiency technologies and methods. On May 9, 2018, the California Energy Commission (CEC) adopted the 2019 Building Energy Efficiency Standards (Energy Code), which went into effect on January 1, 2020. The CEC adopted the 2022 Energy Code in August 2021, which aims to improve upon the 2019 Energy Code for new construction of, and additions and alterations to, residential and non-residential buildings. The 2022 Energy Code will go into effect January 1, 2023. The California Energy Commission updates the standards every three years.[12]

Senate Bill 350

In September 2015, then California Governor Jerry Brown signed Senate Bill (SB) 350 (de Leon) into law. This legislation established tiered increases to the Renewable Portfolio Standard: 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030.

Senate Bill 100

On September 10, 2018, then Governor Brown signed SB 100 (De Leon). This legislation, referred to as "The 100 Percent Clean Energy Act of 2019," increased the required Renewable Portfolio Standards. Under SB 100, the total kilowatt-hours (kWh)of energy sold by electricity retailers to their end-use customers must consist of at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

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

Less Than Significant Impact

Electricity. Southern California Edison (SCE) provides electricity to the project area. The project's annual energy demand would total 1,120,530 kWh.[13] Project implementation would introduce a new residential use on the project site and therefore would result in a permanent increase in electrical demand over existing conditions. The increased demand is expected to be adequately served by the existing SCE electrical facilities. Total electricity demand in SCE's service area is forecast to increase by approximately 12,000 gigawatt-hours (GWh)—or 12 billion kWh—between 2015 and 2026.[14] The increase in electricity

[12] California Energy Commission, 2022 Building Energy Efficiency Standards, Available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency, Accessed April 22, 2022.

[13] CalEEMod version 2020.4.0

[14] California Energy Commission, California Energy Demand 2018-2030 Revised Forecast, Figure 49 Historical and Projected Baseline Consumption SCE Planning Area, January 2018

demand from the proposed project would represent an insignificant percent increase (less than one percent) compared to overall demand in SCE's service area. In addition, the project would include the construction of solar PV panels on proposed car ports with an estimated annual production of 1.26 million kWh, offsetting the electricity demand of the project. Therefore, projected electrical demand would not significantly impact SCE's level of service.

It should also be noted that the project's design and materials would be required to comply with Building Energy Efficiency Standards. Prior to issuance of a building permit, the City of Murrieta Building and Safety Division would review and verify that the project plans demonstrate compliance with the current version of the Building and Energy Efficiency Standards. The project would also be required to adhere to the provisions of the CALGreen Code, which establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. Project implementation would not interfere with the 60 percent Renewable Portfolio Standard set forth in SB 100 for 2030 or the 100 percent standard for 2045. These goals apply to SCE and other electricity retailers. As electricity retailers reach these goals, emissions from end user electricity use would decrease from current emission estimates.

Natural Gas. Southern California Gas Company (SoCalGas) provides natural gas service to the project area. The CalEEMod modeling outputs estimates that the project's annual natural gas demand would total approximately 5,594,660 KBtu (0.0055 billion cubic feet [bcf]).[15] SoCalGas would be able to serve the increased demand with the existing SoCalGas facilities. From 2018 to 2035, the California Gas and Electric Utilities anticipates that residential demand will decline from 236 bcf to 186 bcf, while supplies remain constant at 3.775 bcf per day[16] (bcfd) from 2015 through 2035.[17] Therefore, the project's natural gas demand would represent a nominal percentage of overall demand in SoCalGas' service area. The proposed project would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

Fuel. During construction, transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would be associated with the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel/gasoline. The use of energy resources by these vehicles would fluctuate according to the construction phase and would be temporary. Assuming that all off-road construction equipment, haul trucks, and vendor trucks would be diesel-fueled and all worker vehicles are gasoline-fueled, the Project is anticipated to require approximately 125,422 gallons of diesel fuel and 82,689 gallons of gasoline (see Appendix A for energy calculations). This would constitute approximately 0.05 percent and 0.01 percent of projected fuel demand within Riverside County.[18] Some incidental energy conservation would occur during construction through compliance with CCR, Title 13, §§2485 and 2449 requiring that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and California Air Resources Board (CARB) Tier 3 In-Use Off-Road Diesel Engine emissions standards, including the CARB Low Emissions Vehicle (LEV) III and EPA's emissions standards for light-duty vehicles, trucks, and motorcycles. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel

[15] CalEEMod version 2020.4.0

[16] 1 bcfd is equivalent to about 1.03 billion kBTU

[17] California Gas and Electric Utilities, 2018 California Gas Report, Southern California Gas Company Annual Gas Supply 2018-2035 Table 1-SCG, Accessed May 31, 2022.

[18] EMFAC2021 Model, California Air Resources Board

prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Therefore, impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure; impacts would be less than significant.

During operations, energy consumption would be associated with resident, visitor, and employee vehicle trips; delivery and supply trucks; and trips by maintenance and repair crews. The Project is anticipated to require approximately 37,442 gallons of diesel fuel and 400,923 gallons of gasoline (see Appendix A for energy calculations). This would constitute approximately 0.06 percent and 0.01 percent of projected fuel demand within Riverside County.[19] The project is near public transportation and close to commercial retail opportunities, which would further reduce the need to drive. The City and surrounding areas are urbanized with numerous gasoline fuel facilities and infrastructure. Consequently, the proposed project would not result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities. Existing rules and regulations concerning vehicle fuel consumption efficiencies would ensure that vehicle trips generated by the proposed project would not be considered as inefficient, wasteful, or unnecessary. Additionally, the proposed project is an infill development and consistent with the buildout of the General Plan, which would not induce wasteful, inefficient, or unnecessary consumption of energy. The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts are less than significant and no mitigation is required.

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

Less Than Significant Impact. Project design and operation would comply with the most current State Building Energy Efficiency Standards (Title 24, Parts 6 and 11), which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Part 6 of Title 24 specifically establishes energy efficiency standards for residential and nonresidential buildings constructed in the State of California in order to reduce energy demand and consumption. Title 24, Part 11, contains voluntary and mandatory energy measures that are applicable to the Project under the California Green Building Standards Code. As discussed above, the project would result in an increased demand for electricity, natural gas, and petroleum. In accordance with Title 24 Part 11, mandatory compliance, the applicant would have (a) 50% of its construction and demolition waste diverted from landfills; (b) mandatory inspections of energy systems to ensure optimal working efficiency; (c) low pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring and particle boards; and (d) a 20% reduction in indoor water use. Compliance with these mandatory measures would decrease the consumption of electricity, natural gas, and petroleum. Implementation of the Title 24 standards and green building standards would significantly reduce the project's energy usage and would not cause inefficient, wasteful and unnecessary energy consumption, and no adverse impact would occur. The proposed project would also include design features such as high efficiency windows to reduce heating and cooling loads; Energy Star appliances; high efficiency heating and cooling systems to reduce energy consumption, and therefore reduce GHG emissions. Therefore, the project is consistent with AB 32, which aims to decrease emissions statewide to 1990 levels by 2020. Potential impacts are less than significant.

SCAG's Connect SoCal RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2045 as well as an overall GHG target for the project region consistent with both the target date

[19] EMFAC2021 Model, California Air Resources Board

of AB 32 and the post-2020 GHG reduction goals of EOs 5-03-05 and B-30-15. The project is consistent with regional strategies to reduce passenger vehicle miles traveled (VMT). As seen in SCAG's 2020 RTP/SCS Exhibit 3.4, the proposed project is proximate to identified job centers within the City of Murrieta and in the nearby City of Lake Elsinore and City of Temecula.

The City has adopted VMT thresholds as required by CEQA and the passage of SB 743. The City's March 2021 Guidelines provide appropriate screening thresholds: (1) Project Type Screening (2) General Plan Comparison. Since the proposed project is consistent with the General Plan and zoning district, the anticipated VMT generation from the project site would be consistent with what was analyzed in the buildout of the General Plan. As a result, the project would have a less than significant impact on VMT.

Increasing residential land uses near major employment centers is a key strategy to reducing regional VMT. Therefore, the project would not conflict with the stated goals of the RTP/SCS. Therefore, the project would not interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets outlined in the 2020 RTP/SCS. Potential impacts are less than significant and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.7 Geology and Soils

A Geotechnical Exploration Study was prepared by Leighton and Associates, Inc. in April 2022. The technical report is included in this Initial Study as **Appendix E: Geotechnical Exploration Study** and the results are summarized herein. A Paleontological Assessment prepared by Brian F. Smith and Associates Inc. are included as **Appendix F: Paleontological Assessment.**

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

Less Than Significant Impact with Mitigation. According to the most recent Alquist-Priolo Fault Zone and Seismic Hazard Zone Map, a known earthquake fault is located near or known to traverse the project site. Specifically, the Elsinore Fault Zone extends 350 feet into the project site, as shown in **Exhibit 10: Fault Lines**. The Elsinore Fault Zone is comprised of the Willard Fault and the Wildomar Fault. The City of Murrieta requires any proposed tracts of four or more dwelling units to investigate the potential for and to set back development from ground rupture hazards. The Geotechnical Exploration Study notes that previous site-specific fault trench studies did not find evidence indicating that the Wildomar Fault extends into the project site. As a result, no building restrictions or setbacks are required as part of project development. However, given the strong potential for ground shaking at the project site, the proposed project would be required to implement seismic design recommendations outlined in the Geotechnical Exploration Study under MM GEO-1. Implementation of MM GEO-1 and applicable regulations would reduce potential impacts related to risk of loss, injury, or death involving the rupture of a known earthquake fault to a less than significant level.

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

Less Than Significant Impact with Mitigation. The City of Murrieta, as well as most of Southern California, is located in a region of historic seismic activity. The principal source of seismic activity is movement along the northwest-trending regional faults such as the San Andreas, San Jacinto and Elsinore Fault Zones. During seismic events, the project site could experience moderate ground shaking associated with the faults described above. Strong levels of seismic ground shaking can cause damage to buildings. The intensity of ground shaking on the project site would depend upon the earthquake's magnitude, distance to the epicenter, and geology of the area between the project site and epicenter. The City would impose regulatory controls to address potential seismic hazards through the development review process. The project would be subject to the current California Building Code (CBC), as adopted by the City's Planning and Building Division, with respect to seismic design parameters. Conformance with these standard engineering practices and design criteria would reduce the effects of seismic ground shaking.

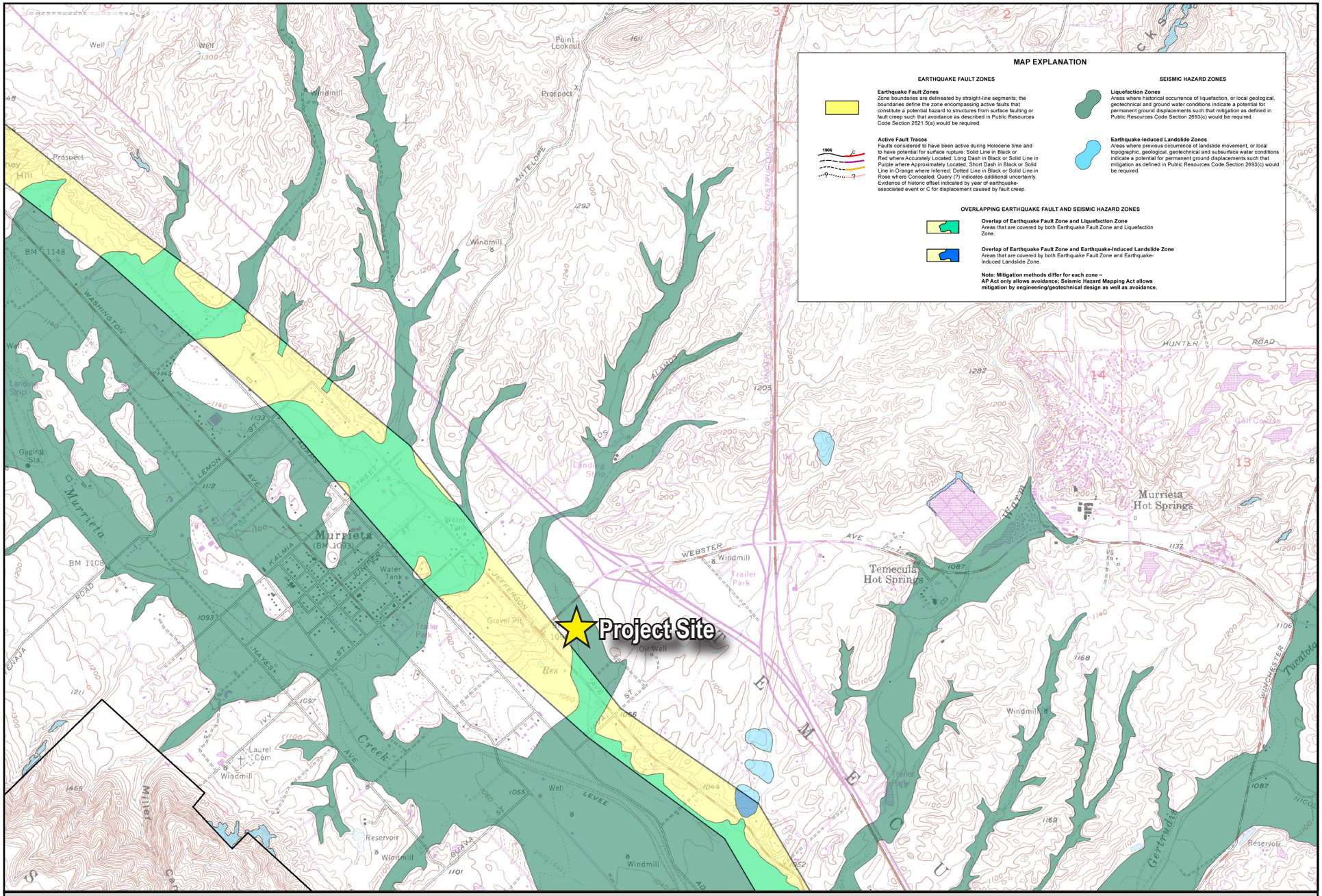


EXHIBIT 10: Fault Lines

Murrieta Hot Springs at Jefferson Residences Project

Kimley»Horn

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The Geotechnical Exploration Study analyzed various geologic and seismic hazards based on site-specific parameters, including strong seismic ground shaking shrinkage, and subsidence. Section 5 of the Geotechnical Exploration Study makes recommendations concerning seismic design parameters, foundations, slabs, and general earthwork and grading, among other factors. The study concludes that the proposed project appears feasible from a geotechnical standpoint. Further, the project would be subject to compliance with MM GEO-1, which requires the City to review all project plans grading, foundation, structural, infrastructure, and all other relevant construction permits relative to the Geotechnical Exploration Study and code requirements. Compliance with MM GEO-1 and applicable regulations would reduce potential impacts related to strong seismic ground shaking to a less than significant level.

Following compliance with standard engineering practices, the established regulatory framework (i.e., Murrieta Municipal Code Title 15 – Building and Construction and CBC), the Geotechnical Exploration recommendations, and MM GEO-1, the project's potential impacts concerning exposure of people or structures to potential adverse effects involving strong seismic ground shaking would be less than significant.

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

Less Than Significant Impact with Mitigation. Liquefaction is a phenomenon where earthquake-induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. Liquefaction typically occurs below water tables, however after liquefaction occurs, the liquefied soil/water matrix can propagate upward into overlying non-saturated soil as excess pore water dissipates. Based on subsurface exploration data, a potential for liquefaction in relatively loose silt and sand layers at depths greater than 10 feet below ground surface could occur. However, due to the depth of the liquefiable layers and presence of cohesive/clay layers at shallow depth, settlement is estimated to be relatively consistent with differential settlement not expected to exceed 1-inch in a 30-foot horizontal distance.

The Murrieta Planning and Building Division would review construction plans to verify compliance with standard engineering practices, the Murrieta Municipal Code/CBC and the Geotechnical Exploration Study's recommendations. Following compliance with standard engineering practices, the established regulatory framework (i.e., Murrieta Municipal Code and CBC), the Geotechnical Exploration Study's recommendations, and MM GEO-1, the project's impacts involving substantial adverse effects, including the risks of loss, or death involving seismic-related ground failure, including liquefaction, would be less than significant.

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

No Impact. Landslides can occur if ground shaking and/or heavy rainfall disturb areas of steep slopes consisting of unstable soils. The project site is relatively flat and is not located within an Earthquake-

Induced Landslide Zone.[20] Therefore, the potential for landslides is negligible. Therefore, no impacts related to landslides would occur.

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

Less Than Significant Impact. The project site is underlain by alluvial deposits and weathered Pauba Formation. Some portions of the project site along the existing roads may be covered with a thin layer of artificial fill due to past grading activities associated with the existing street improvements. Laboratory testing results indicate that the alluvial deposits and weathered Pauba formation include layers of relatively loose and compressible soils, specifically sandy silt, clayey silt and silty clay layers.

Given the site's topography and geological composition, the potential for loss of topsoil is low. During construction, the proposed project would be required to comply with erosion and siltation control measures outlined in Murrieta Municipal Code Chapter 15.52 - Grading, Erosion, and Sediment Control. Specifically, Section 15.52.160 requires all grading plans to include an erosion and sediment control plan designed to limit erosion and sediment of all disturbed portions of a property and to minimize the transport of soil onto adjacent properties or into streets, storm drains, or drainage ways in accordance with the provisions of Sub article 6 of the Grading Manual. Additionally, the proposed project would be subject to compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit); see Threshold 4.10a. The Construction General Permit requires development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and monitoring plan, which must include erosion-control and sediment-control Best Management Practices (BMPs) that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Following compliance with the established regulatory framework (i.e., the Murrieta Municipal Code and Construction General Permit), the project's potential impacts concerning soil erosion and loss of topsoil would be less than significant and no mitigation is required.

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

Less Than Significant Impact. The project site would not be subject to seismically induced liquefaction (see Threshold 4.7, aiii above) or landslides (see Threshold 4.7aiv). Subsidence occurs when the withdrawal of groundwater, oil, or natural gas vertically displaces a large portion of land. Soils that are particularly subject to subsidence include those with high silt or clay content. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring, or planned, at the project site or in the general project site vicinity. Further, due to relatively flat terrain, fine and cohesive nature of the shallow layers (upper 10 to 15 feet), potential for lateral spreading is low.

As discussed in Threshold 4.7aii, Chapter 5 of the Geotechnical Exploration Study makes preliminary recommendations concerning design parameters, foundations, slabs, and general earthwork and grading, among other factors. The Murrieta Building Division would review construction plans to verify compliance with standard engineering practices, the Murrieta Municipal Code/CBC, and the Geotechnical Exploration Study's recommendations, including those concerning subsidence. Following compliance with standard engineering practices, the established regulatory framework, and the Geotechnical Exploration Study's

[20] California, State of, Department of Conservation. (2020). CGS Seismic Hazards Program: Landslide Zones Retrieved from CGS Earthquake Zones (ca.gov), Accessed July 24, 2022.

recommendations, the project site would not become unstable and potentially result in subsidence. Therefore, impacts would be less than significant and no mitigation is required.

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

Less Than Significant Impact. The Geotechnical Exploration Study concluded that site's soils have an expansion index that varies from very low (less than 21) for sandy soils to low (less than 51) for the surficial silt and clay layers. As discussed in Threshold 4.7aii, Geotechnical Exploration Section 5 makes recommendations concerning design parameters, foundations, slabs, and general earthwork and grading, and import soils requirements. The Murrieta Building Division would review construction plans to verify compliance with standard engineering practices, the Murrieta Municipal Code/CBC, and the Geotechnical Exploration Study's recommendations, including those concerning expansive soils. The project would be required to comply with the regulatory provisions of Murrieta Municipal Code Chapter 8.36, Stormwater and Runoff Management and Discharge Controls Ordinance, in addition to compliance with Municipal Code Chapter 15.52, for erosion control. Following compliance with standard engineering practices, the established regulatory framework, and the study's recommendations, the project would not create substantial direct or indirect risks to life or property concerning expansive soils. Therefore, impacts would be less than significant and no mitigation is required.

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

No Impact. There is existing sewer infrastructure located within the adjacent roadways. The project would connect to the existing sanitary sewer system for wastewater disposal and does not include the use of septic tanks. Therefore, no impact would occur.

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

Less Than Significant Impact with Mitigation. Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. The western portion of the project site is underlain by fossiliferous sandstone member of the Pleistocene Pauba Formation and Pleistocene to Pliocene-aged "unnamed sandstone and conglomerate of the Wildomar area". The eastern portion of the project site is underlain by Holocene and latest Pleistocene-aged young alluvial channel deposits covering the Pauba Formation. These geologic formations are known to yield paleontological resources. Where these geological formations have been present in the cities of Murrieta, Wildomar, and Temecula, they have produced abundant paleontological resources.

A paleontological literature review and records search was performed for the proposed project using reports obtained from the Division of Geological Sciences at the San Bernardino County Museum (SBCM), the Los Angeles County Museum of Natural History (LACM), and the Western Science Center (WSC) for prior nearby projects. The records search from LACM and the WSC did not identify known fossil localities within or near project site. However, published SBCM localities reveal several fossil localities yielded by the "unnamed sandstone of the Wildomar area" geologic formation within one mile of the project site. As a part of the proposed project, a pedestrian survey was conducted. No paleontological resources or evidence of paleontological resources were identified.

Based on the project site's geological composition, high sensitivity of fossil records within geologic formations, and recorded fossil localities within one mile of the project site, the site is considered to have a high potential to yield significant paleontological resources. Project implementation would result in ground disturbing activities which could potentially impact previously undiscovered paleontological resources. Implementation of MM GEO-2 is required. MM GEO-2 would require implementation of a Paleontological Mitigation Monitoring and Reporting Program, which outlines specific guidelines for paleontological monitoring as well as instructions and handling procedures in the case of accidental discovery. Potential impacts to undiscovered paleontological resources would be mitigated to a less than significant level.

Standard Conditions and Requirements

No standard conditions are applicable to the proposed project.

Mitigation Measures

MM GEO-1 Prior to the issuance of grading permits, the City shall review all project plans for grading, foundation, structural, infrastructure, and all other relevant construction permits to ensure compliance with the Geotechnical Exploration Study recommendations.

MM GEO-2 **Paleontological Mitigation Monitoring and Reporting.** Prior to the issuance of the first grading permit or permit for ground disturbance activities, the applicant shall provide evidence of retention of a qualified professional paleontologist to the City of Murrieta Planning and Building Division. The qualified paleontologist shall implement the recommended Paleontological Mitigation Monitoring and Reporting (MMRP) outlined in the Paleontological Assessment prepared for the project. The Paleontological MMRP would identify specific procedures for monitoring during excavation of specific geological soils with high probability of containing fossil resources. Additionally, the Paleontological MMRP would outline instructions during accidental discovery of paleontological resources as well as salvage parameters. Lastly, preparation of a final report of findings and significance including list of all fossils recovered shall be submitted to the City of Murrieta to signify satisfactory completion of the monitoring program.

4.8 Greenhouse Gas Emissions

A greenhouse gas (GHG) emissions analysis (Kimley-Horn, 2022) was prepared for the proposed project. The GHG modeling outputs and results are included in **Appendix A** of this Initial Study and summarized below.

Background

The "greenhouse effect" is the natural process that retains heat in the troposphere, the bottom layer of the atmosphere. Without the greenhouse effect, thermal energy would "leak" into space resulting in a much colder and inhospitable planet. With the greenhouse effect, the global average temperature is approximately 61˚F (16˚C). Greenhouse gases (GHGs) are the components of the atmosphere responsible for the greenhouse effect. The amount of heat retained is proportional to the concentration of GHGs in the atmosphere. As human activities and natural sources release more GHGs into the atmosphere, GHG concentrations increase and the atmosphere retains more heat, increasing the effects of climate change. The Kyoto Protocol identified six gases for emission reduction targets: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). When accounting for GHGs, all types of GHG emissions are expressed in terms of CO_2 equivalents (CO_2e) and are typically quantified in metric tons (MT) or million metric tons (MMT).

CO_2, CH_4, and N_2O cause approximately 80 percent of the total heat stored in the atmosphere. Human activities, as well as natural sources, emit these three gases. Each of the GHGs affects climate change at different rates and persists in the atmosphere for varying lengths of time. Global warming potential (GWP) is the relative measure of the potential for a GHG to trap heat in the atmosphere. The GWP allows comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of one ton of a gas will absorb over a given period, relative to the emissions of one ton of CO_2. The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that period. GWPs provide a common unit of measure, which allows analysts to add up emissions estimates of different gases (e.g., to compile a national GHG inventory), and allows policymakers to compare emissions reduction opportunities across sectors and gases.

Stationary source combustion of natural gas in equipment such as water heaters, boilers, process heaters, and furnaces emit GHGs, primarily CO_2, CH_4, and N_2O. GHGs also emit from mobile sources such as on-road vehicles and off-road construction equipment burning fuels such as gasoline, diesel, biodiesel, propane, or natural gas (compressed or liquefied). Indirect GHG emissions result from electric power generated elsewhere (i.e., power plants) used to operate process equipment, lighting, and utilities at a facility. Included in GHG quantification is electric power, which is used to pump the water supply (e.g., aqueducts, wells, pipelines) and disposal and decomposition of municipal waste in landfills.[21]

Regulations and Significance Criteria

Former California Governor Arnold Schwarzenegger issued Executive Order S-3-05 in June 2005, which established the following GHG emission reduction targets: (a) by 2010: reduce GHG emissions to 2000 levels; (b) by 2020: reduce GHG emissions to 1990 levels; and (c), by 2050: reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill (AB) 32 Statutes of 2006, Health and Safety Code §38500 et seq. require that CARB determine what the Statewide GHG emissions level was in 1990 and approve a Statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of

[21] California Air Resources Board, *Climate Change Scoping Plan*, 2008.

427 million metric tons of CO_2 equivalent ($MTCO_2e$). Additionally, issued in April 2015, Executive Order B-30-15 requires Statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030.

The Governor issued Executive Order B-30-15, in April 2015, which requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. SB 32, signed into law in September 2016, codified the 2030 GHG reduction target in Executive Order B-30-15. SB 32 authorizes CARB to adopt an interim GHG emissions level target for the State to achieve by 2030; and, to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. With SB 32, the California Legislature passed companion legislation AB 197, which provided additional direction for developing an updated Scoping Plan.

Adopted December 15, 2022, CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential (GWP); providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on residential and mixed-use projects.[22] CARB specifically states that Appendix D does not address other land uses (e.g., industrial).[23]

Due to the nature of global climate change, no single development project would be expected to have a substantial effect on global climate change. GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to contribute cumulatively to global climate change.

[22] California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, *Appendix D: Local Actions*, Page 21, November 2022.

[23] California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality*, *Appendix D: Local Actions*, Page 4, November 2022.

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The State CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency must determine whether a project's GHG emissions would have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 CRC §15064.4(a)).

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, which could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008 (42). The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.

- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.

- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:

    - Residential and Commercial land use: 3,000 MT CO2e/yr

    - Industrial land use: 10,000 MT CO2e/yr
    - Based on land use type: residential: 3,500 MT CO2e/yr; commercial: 1,400 MT CO2e/yr; or mixed use: 3,000 MT CO2e/yr

- Tier 4 has the following options:

    - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.

    - Option 2: Early implementation of applicable AB 32 Scoping Plan measures

    - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 MT CO2e/SP/year for projects and 6.6 MT CO2e/SP/year for plans;

    - Option 3, 2035 target: 3.0 MT CO2e/SP/year for projects and 4.1 MT CO2e/SP/year for plans

- Tier 5 involves mitigation offsets to achieve target significance threshold.

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

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

Less Than Significant Impact. Project construction and operations would result in direct GHG emissions. Direct project-related GHG emissions include those from construction activities, area sources, and mobile sources, while indirect emissions include those from electricity consumption, water demand, and solid waste generation. The basis for operational GHG emissions estimates is based on the energy emissions from natural gas usage and automobile emissions. CalEEMod relies upon trip data; specifically daily trip generation rates from the *LMC Murrieta Multi-Family Scoping Agreement for Traffic Impact Analysis* (Kimley-Horn, 2022) and project-specific land use data to calculate emissions using CalEEMod. **Table 4.8-1: Project Greenhouse Gas Emissions** presents the project's estimated CO_2, CH_4, and N_2O emissions and indicates construction activities would generate approximately 706.12 $MTCO_2e$ over the course of construction period (or 23.54 $MTCO_2e$ amortized over 30 years).[24] Once construction is complete, these construction-related GHG emissions would cease. The analysis quantifies and amortizes construction-related GHG emissions over the life of the project (30 years). Then the analysis adds the amortized construction emissions to the annual average operational emissions.

Table 4.8-1: Project Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/Year)
Construction Emissions	706.12
Construction Emissions Amortized over 30 Years	23.54
Operational Emissions	
Area Source	89.24
Energy	364.02
Mobile	2,615.97
Waste	45.05
Water	109.85
Total	**3,224.13**
South Coast AQMD Threshold	*3,000.00*
South Coast AQMD Threshold Exceeded?	**Yes**

Note: CalEEMod version 2020.4.0 See Appendix A for Model Data Outputs.
Source: Kimley-Horn, 2022.

Operational emissions consist of area sources, energy sources, mobile sources, solid waste generation, water use, and wastewater treatment. Area source emissions occur from hearths, architectural coatings, landscaping equipment, and consumer products. Energy source emissions are from electricity usage and

[24] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13, August 26, 2009).

natural gas consumption. Mobile source emissions are from the project's net new vehicle trips. Emissions from water consumption occur from energy use for conveyance and treatment, and emissions from solid waste occur as materials decompose. The project would generate approximately 3,224.13 $MTCO_2$/yr of GHG emissions, considering both amortized construction and operational emissions, as indicated in **Table 4.8-1**.

Lead agencies must either establish significance thresholds for their respective jurisdictions or determine significance on a case-by-case basis.[25] The lead agency should use its "careful judgment" in making a determination of significance, and should make a "good-faith" effort to "describe, calculate or estimate" the amount of GHGs that will result from a project.[26,27] The lead agency is given the discretion to select a reasonable model and methodology to quantify GHGs and to rely on a qualitative analysis or performance based standards for its determination.[28] A lead agency should also consider the following factors, among others, when assessing the significance of impacts from GHGs: (1) the extent to which the project may increase or reduce GHGs; (2) whether the GHG emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, local plan for the reduction or mitigation of GHG emissions.[29]

CEQA Guidelines Section 15064 provides that a determination that an impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including plans or regulations for the reduction of GHG emissions.

As discussed above, no applicable numeric significance threshold for GHG emissions has been adopted by the State, SCAQMD, or the City of Murrieta. Although State, regional, and local plans and policies have been adopted to help address climate change, no current law or regulation would regulate all aspects of the Project's GHG emissions. In the absence of any adopted numeric threshold, the City has determined to assess the significance of the Project's GHG emissions as provided in CEQA Guidelines Section 15064.4(b)(2) by determining whether a Project is consistent with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

Therefore, under this analysis, a significant impact would occur if the project would not comply with applicable regulatory plans and policies to reduce GHG emissions such as those discussed within CARB's Scoping Plan and subsequent updates, SCAG's 2020–2045 RTP/SCS, and the City's Climate Action Plan. The analysis below describes the extent to which the proposed project complies with or exceeds the performance-based standards included in the regulations outlined in these plans. As shown herein, the proposed project would be consistent with the applicable GHG reduction plans and policies.

SCAG RTP/SCS Consistency

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy [SCAG RTP/SCS]). The SCAG RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. SCAG RTP/SCS embodies a collective vision for the region's future and is developed

25 CEQA Guidelines Section 15064.7(b)
26 CEQA Guidelines Section 15064.4(a).
27 Ibid.
28 CEQA Guidelines Section 15064.4(a)(1)-(2).
29 CEQA Guidelines Section 15064.4(b).

with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15.

The SCAG RTP/SCS accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. SCAG RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and use resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore project comparison to SCAG RTP/SCS is an appropriate indicator of whether the project would inhibit the post-2020 GHG reduction goals promulgated by the state. The project's consistency with the SCAG RTP/SCS goals is analyzed in detail in **Table 4-8.2: Regional Transportation Plan/Sustainable Communities Strategy Consistency.**

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in SCAG RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in **Table 4-8.2**, the proposed project would be consistent with the stated goals of SCAG RTP/SCS. Therefore, the proposed project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

Table 4-8.2: Regional Transportation Plan/Sustainable Communities Strategy Consistency			
SCAG Goals		**Compliance**	
GOAL 1:	Encourage regional economic prosperity and global competitiveness.	N/A:	This is not a project-specific goal and is therefore not applicable. The project would redevelop the site which would contribute to regional economic prosperity.
GOAL 2:	Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent:	Although not a transportation improvement project, the project is located near an existing transit route on Madison Avenue.
GOAL 3:	Enhance the preservation, security, and resilience of the regional transportation system.	N/A:	This is not a transportation improvement project and this goal is therefore not applicable.
GOAL 4:	Increase person and goods movement and travel choices within the transportation system.	N/A:	This is not a transportation improvement project and this goal is therefore not applicable.
GOAL 5:	Reduce greenhouse gas emissions and improve air quality.	Consistent:	The project is located within a suburban area in proximity to freeways. The location of the project in a developed area would reduce trip lengths, which would reduce GHG and air quality emissions.
GOAL 6:	Support healthy and equitable communities	Consistent:	The project would not exceed the South Coast AQMD's regional or localized thresholds. Based on the Friant Ranch decision, projects that do not exceed the South Coast AQMD's LSTs would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and result in no criteria pollutant health impacts.
GOAL 7:	Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A:	This is not a project-specific goal and is therefore not applicable.
GOAL 8:	Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	N/A:	This is not a project-specific goal and is therefore not applicable.
GOAL 9:	Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent:	The project is a multi-family residential development within 0.2-mile of existing bus/transit stops along Madison Avenue.
GOAL 10:	Promote conservation of natural and agricultural lands and restoration of habitats.	N/A:	The project site is not located on agricultural lands.
Source: Southern California Association of Governments, *Connect SoCal – The Regional Transportation Plan/Sustainable Communities Strategy*, 2020.			

Consistency with the CARB Scoping Plan

The California State Legislature adopted AB 32 in 2006. AB 32 focuses on reducing GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted

the *Climate Change Scoping Plan* (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program. The 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. The 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would require 100 percent clean electricity by 2045; requiring 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-electric vehicle buses and trucks.[30, 31] Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation.[32] The 2022 Scoping Plan continues to implement SB 375, which sets regional targets for GHG emission reductions from changed land use patterns and improved transportation.[33] GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905.[34] SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.[35]

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHG emissions locally which, in turn, are intended to assist the State in meeting the ambitious State GHG reduction targets incorporated into the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section that provides guidance to local land use authorities when evaluating in CEQA GHG analyses plan-level and project-level alignment with the 2022 Scoping Plan's recommended steps that can be taken to meet the State's Climate Goals. In this appendix, CARB recommends project attributes that local jurisdictions should consider when assessing new

30 CARB, Advanced Clean Cars II, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii, accessed February 2023

31 CARB, Advanced Clean Fleets, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets, accessed February 2023

32 CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, Page 189, November 2022. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C

33 CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, Page 72, November 2022. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C

34 CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, Page 112, November 2022. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C

35 CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, Page 45, November 2022. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents#:~:text=The%202022%20Scoping%20Plan%20Update%20focuses%20on%20outcomes%20needed%20to,economic%2C%20environmental%2C%20energy%20security%2C

development projects' consistency with the 2022 Scoping Plan. Notably, this section is primarily focused on residential and mixed-use projects consisting of primarily residential units.[36]

CARB Scoping Plan Appendix D lists potential actions that support the State's climate goals. However, the Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

Appendix D recommends the following three priority areas and identifies these as residential and mixed-use project attributes to qualitatively determine consistency with the 2022 Scoping Plan:

1. Transportation electrification
2. VMT reduction
3. Building decarbonization

Appendix D notes that projects that have all of the key project attributes should accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals.

Transportation Electrification. Table 3 in the 2022 Scoping Plan, Appendix D, notes that to be clearly consistent with the State's goals, projects should provide EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the CALGreen code. The project would provide 79 parking spaces with electric vehicle supply equipment (EVSE), which would provide EV charging infrastructure to support CARB's goal of transportation electrification.

VMT Reduction. The Scoping Plan notes that to be consistent with the VMT reduction attribute, projects should be located on sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land; do not result in the loss or conversion of natural and working lands; and consist of transit-supportive densities (minimum of 20 residential dwelling units per acre). The proposed project is surrounded by existing uses, does not result in the loss of natural and working lands (i.e., it would develop underutilized vacant land), and has a density of 30 dwelling units per acre. There are currently no improved pedestrian facilities adjacent to the project site. The project would include construction of pedestrian sidewalks along the east side of Murrieta Hot Springs Road and Jefferson Avenue. In addition, there are several transit stops in the project vicinity, specifically along Madison Avenue which is northeast of the project site. The nearest transit stop is the RTA Route 23 bus stop located at the existing Walmart at 41200 Murrieta Hot Springs Road, approximately 0.2 mile north of the project site. Route 23 provides service between the cities of Wildomar and Temecula, with stops along Murrieta Hot Springs Road and Madison Avenue.

Building Decarbonization. Building decarbonization involves maximizing energy efficiency and eliminating use of fossil fuel energy. While the proposed project would have natural gas water heaters, electric appliances (e.g., electric stoves) would be installed in all proposed units. This would minimize the use of fossil fuels, supporting the transition to non-fossil fuel energy. The proposed project would also include the construction of PV modules on the carports for an estimated annual production of approximately 1.26 million kWh, which would offset project electricity demand.

[36] California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 21, November 2022.

The proposed project would include the Appendix D key residential and mixed-use project attributes. As noted above, these measures include EV charging stations, transit-supportive densities, and solar panels, requiring energy conserving appliances, and requiring low-flow toilets and faucets.

Consistency with the City of Murrieta Climate Action Plan

The City of Murrieta Climate Action Plan (CAP) establishes a review process for new proposed development projects subject to CEQA. The Murrieta CAP outlines goals and strategies to reduce energy consumption and GHG emissions to create a more sustainable community. The CAP recommends GHG emission targets consistent with reduction targets of the State of California. The CAP also provides implementation practices and recommendations to measure progress. The proposed project would be consistent with the City's CAP strategies, goals and measures. CAP strategies applicable to the project are shown in **Table 4.8-3: Project Murrieta CAP Compliance.**

Table 4.8-3: Project Murrieta CAP Compliance

Project Related CAP Strategy	Project Related Strategy CAP Goal
Strategy 1: Community Involvement Strategy	**Not Applicable**. The CAP 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 project would help improve the City's jobs-housing balance and is located within 0.15-mile of existing bus/transit stops along Madison Avenue. The project is also located within a TOD Overlay District and would provide pedestrian improvements (i.e., sidewalks) to improve connections to surrounding land uses.
Strategy 3: Transportation and Mobility Strategy	**Consistent**. The project would provide pedestrian improvements (i.e., sidewalks) to improve connections to surrounding land uses and would be located within walking distance (within 0.15-mile) of existing transit stops along Madison Avenue. 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 project would also include solar PV panels in accordance with Title 24 Energy Efficiency Standards for an estimated annual production of approximately 1.26 million kWh. 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 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 consists of a multi-family residential development and would be required to comply with the City's waste reduction and recycling programs and policies.

Table 4.8-3: Project Murrieta CAP Compliance	
Project Related CAP Strategy	**Project Related Strategy CAP Goal**
Strategy 7: Open Space Strategy	**Consistent**. The project would provide common outdoor open space for on-site residents and maintain approximately five as undisturbed open space. The project would also include a variety of trees, bushes, groundcover, and landscaping throughout the site.

As shown herein, the proposed project would be consistent with the applicable GHG reduction plans and policies. Therefore, the project would not generate GHG emissions, directly or indirectly, that would have a significant impact on the environment. Impacts would be less than significant and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.9 Hazards and Hazardous Materials

The basis for the information provided in this section is the Phase I and Limited Phase II Environmental Site Assessment (ESA) prepared by Leighton (December 2021); the report is included in **Appendix G: Phase I and Phase II Environmental Site Assessment** of this Initial Study.

Regulatory Setting

Various federal, State, and local agencies regulate hazardous materials management. Federal and State agencies include the U.S. EPA, United States Department of Transportation (DOT), California Environmental Protection Agency (Cal EPA), California Department of Toxic Substances (DTSC), California State Water Resources Control Board (SWRCB), Regional Water Quality Control Board (RWQCB), and the California Highway Patrol. Local agencies include the Riverside County Department of Environmental Health Hazardous Materials Branch, which regulates hazardous waste generation in the County and administers Cal EPA Unified Program elements in the City of Murrieta.

Site History and Existing Site Conditions

Historical aerial images indicate that the project site has remained vacant with no structures since 1938. Scattered residential uses developed in the surrounding areas in 1938. The jurisdictional watercourse and roadways (Murrieta Hot Springs Road and Jefferson Avenue) were observed in the 1938 aerial. From 1949, the project site supported dry farming/agricultural production until 2005. From 2005 to present day, the project site remained vacant and no major land use changes occurred. No hazardous substances, drums, underground storage tanks, vent lines, fill or overfill ports, or other chemical containers were observed on the site during site reconnaissance performed by Leighton. A pad transformer is located along the project's southern boundary on Jefferson Avenue. No leaks or stains were observed beneath the transformer.

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

Less Than Significant Impact. Project construction would involve the transport, storage, use and/or disposal of limited quantities of hazardous materials, such as fuels, solvents, degreasers, and paints. The use of these materials during project construction would be short term and would occur in accordance with standard construction practices, as well as with applicable federal, State, and local regulations. Potentially hazardous materials would be contained, stored, and used during construction in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Examples of such activities include fueling and servicing construction equipment and applying paints and other coatings. Project construction would be temporary, and existing regulations of several agencies would govern these activities. Construction activities would be subject to compliance with relevant regulatory requirements and restrictions concerning the transport, use, or disposal to prevent a significant hazard to the public or environment. The primary regulatory requirements include South Coast AQMD Rule 1166 (volatile organic compound emissions) and Rule 1466 (fugitive dust-toxic air contaminants).

The project proposes the construction of 389 multi-family residences. The project would not emit hazardous emissions or involve hazardous or acutely hazardous materials, substances, or waste. However, the proposed project could involve the use of materials associated with routine maintenance of the property, such as janitorial supplies for cleaning purposes and/or herbicides and pesticides for landscaping. The project would be required to comply with Western Riverside MSHCP Best Management Practices (BMP), which include implementation of water pollution and erosion control plans to prevent disturbance and direct drainage into riparian habitats. The project would implement a water quality

management plan, which would include stormwater BMPs to treat storm water flows and potentially contaminated flows. Further, the project would use an automatic drip irrigation system, which would further reduce runoff into the riparian habitats. A water quality management plan restrictive covenant would also be enforced to ensure all best management practices are maintained.

These uses would not involve the routine transport, use, or disposal of quantities of hazardous materials that could create a significant hazard to the public or environment. The hazardous materials used during operations would be stored, handled, and disposed of in accordance with applicable regulations. Therefore, following compliance with the regulatory requirements, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant and no mitigation is required.

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

Less Than Significant Impact. The project site was vacant until 1949 when agricultural farming operations began. The agricultural use lasted until 2005. Since then, the project site has remained vacant and undeveloped. The Phase I ESA did not report any recognized environmental conditions (RECs), historical RECs, or controlled RECs associated with the project site.

A limited Phase II investigation was prepared to assess the presence of residual pesticides and chemicals associated with the agricultural use on the project site. Soil testing borings were conducted in December 2021 at a depth at 0.5 and 2 feet below ground surface and analyzed for organochlorine pesticides. The soil sampling results did not exceed any reporting limits for organochlorine pesticides.

The project would not 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. The project proposes 389 multi-family residences. The nature of the project would not involve the release of hazardous materials. Further, compliance with all relevant and applicable federal, State, and local laws and regulations that pertain to the storage, use, and disposal of hazardous materials and waste would ensure that future development activities would not create a significant hazard to the public. Therefore, the impact would be less than significant and no mitigation is required.

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

Less Than Significant Impact. The school nearest the project site is the Murrieta Elementary School located at 24725 Adams Avenue, approximately one mile west of the project site. The project does not propose any uses that could potentially generate hazardous materials in significant quantities that would have an impact to surrounding schools. Impacts would be less than significant and no mitigation is required.

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

No Impact. California Government Code §65962.5 refers to the Hazardous Waste and Substances Site List, commonly known as the Cortese List, maintained by the DTSC. The Cortese list contains hazardous waste and substance sites including public drinking water wells with detectable levels of contamination; sites

with known USTs having a reportable release; and solid waste disposal facilities from which there is a known migration. The Cortese List also includes hazardous substance sites selected for remedial action; historic Cortese sites; and sites with known toxic material identified through the abandoned site assessment program. The project would not be located on a site which is included on a hazardous materials site list compiled pursuant to California Government Code §65962.5.[37] Further, the DTSC EnviroStor database and State Water Resources Control Board Geotracker database do not identify any open cleanup sites on the property. Therefore, the project would not create a significant hazard to the public or the environment. No impact would occur.

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

No Impact. The nearest airport to the project site is the French Valley Airport in unincorporated Riverside County, located approximately four miles east of the project site. The project site is not within the French Valley airport land use plan notification area or within any airport compatibility zones.[38] Therefore, the project would not result in a safety hazard or excessive noise for people working or residing at the project site. No impact would occur.

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

Less Than Significant Impact. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Project construction activities would not require the complete closure of any public or private streets or roadways. Temporary construction activities would not impede use of roads for emergencies or access for emergency response vehicles.

The proposed project would provide vehicular access from one driveway on Jefferson Avenue and one on Murrieta Hot Springs Road. The driveway entrance and drive aisles would measure up to 28 feet to accommodate standard fire apparatus path of travel, standard fire lane turning radii, and hammerhead turnaround maneuvers. Murrieta Fire and Rescue would review project plans and design standards approval prior to issuance of building permits. Murrieta Municipal Code Chapter 15.24.130 Section 503.2.1 requires fire apparatus access roads serving multi-family structures have an unobstructed improved width of not less than 24 feet. The project design would meet the code requirement. Compliance with Murrieta Fire and Rescue requirements would ensure that no impacts to emergency access would occur. Project implementation would not impede the flow of traffic on nearby major streets or highways which could serve as evacuation routes. Therefore, impacts would be less than significant and no mitigation is required.

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

No Impact. The California Department of Forestry and Fire Protection (CalFire) Fire Hazard Severity Zone Map for the County of Riverside indicates the project site is not within a State Responsibility Area. The project site is in a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) within a Local Responsibility

[37] California, State of, Department of Toxic Substances Control, DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). Available at: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed: June 1, 2022.

[38] Riverside County Airport Land Use Commission, October 2007, Riverside County Airport Land Use Compatibility Plan Policy Document – Map FV-1,.. Accessed November 28, 2022.

Area. The proposed project would not result and a potential to expose people or structures to fire hazards. No impact would occur and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.10 Hydrology and Water Quality

The basis for the information provided in this section is the Water Quality Management Plan and Hydraulics Study prepared by Kimley-Horn (June 2022); the report is included in **Appendix H: Hydrology Studies** of this Initial Study.

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

Less Than Significant Impact. Project impacts related to water quality could occur over three different periods:

- During the earthwork and construction phase, where the potential for erosion, siltation, and sedimentation would be the greatest;
- Following construction, before the establishment of ground cover, when the erosion potential may remain relatively high; and
- After project completion, when impacts related to sedimentation would decrease markedly but those associated with urban runoff would increase.

Urban runoff, both dry and wet weather, discharges into storm drains, and in most cases, flows directly to creeks, rivers, lakes, and the ocean. Polluted runoff can have harmful effects on drinking water, recreational water, and wildlife. Urban runoff pollution includes a wide array of environmental, storm water characteristics depend on site conditions (e.g., land use, impervious cover, and pollution prevention practices), rain events (duration, amount of rainfall, intensity, and time between events), soil type and particle sizes, the amount of vehicular traffic, and atmospheric deposition. Major pollutants typically found in runoff from urban areas include sediments, nutrients, oxygen-demanding substances, heavy metals, petroleum hydrocarbons, pathogens, and bacteria. Most urban storm water discharges are non-point sources.

Existing Conditions

The project site is relatively flat, with elevations ranging from approximately 1,074 to 1,100 feet above mean sea level. In the current condition, water sheet flows to an off-site outfall point located beyond the southeastern boundary of the project site. Any runoff that does not sheet flow directly to the southeast corner sheet flows into the jurisdiction watercourse that bisects the site before eventually flowing into the same outfall location. Runoff is then routed into the public storm drain system through three 36-inch reinforced concrete storm drains.

Construction

Short-term impacts related to water quality can occur during the earthwork and construction phases when the potential for erosion, siltation, and sedimentation would be the greatest. Additionally, impacts could occur prior to the establishment of ground cover when the erosion potential may remain relatively high. Project construction has activities could produce typical pollutants, such as nutrients, heavy metals, pesticides and herbicides, and chemicals related to construction and cleaning, waste materials, including wash water, paints, wood, paper, concrete, food container, sanitary wastes, fuel, and lubricants. Impacts to storm water quality could occur from construction, and associated earthmoving, and increased pollutant loading.

Construction and demolition activities subject to the Construction General Permit for Stormwater Discharge Associated with Construction Activity (Construction General Permit) include but not limited to

clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre. The project would disturb approximately 13 gross acres; therefore, the project would be subject to the Construction General Permit.

To obtain coverage under the Construction General Permit, the applicant is required to file with the State Water Board the Permit Registration Documents (PRDs), which include a Notice of Intent (NOI) and other compliance-related documents. The Construction General Permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Erosion-control BMPs prevent erosion, whereas sediment controls trap sediment once it has been mobilized. The types of required BMPs are relative to the amount of soil disturbed, the types of pollutants used or stored at the project site, and proximity to water bodies. Additionally, the project would be subject to comply with Murrieta Municipal Code Chapter 8.36 which regulates stormwater, runoff management, and discharge controls. The Municipal Code Section requires new development be designed to control discharges and pollutants in runoff pursuant to the requirements of the NPDES permit. All individual grading and building project permits are required to conform to the Construction General Permit requirements and implement measures, including adherence to a stormwater pollution prevention plan, to ensure that all pollutants would be either eliminated or reduced to the maximum extent practicable, and would not cause or contribute to an exceedance of water quality objectives as described in the San Diego Regional Water Quality Control Board Basin Plan.

Following compliance with NPDES and Murrieta Municipal Code requirements, which include implementation of BMPs, the project's construction-related activities would not violate any water quality standards or otherwise substantially degrade surface or groundwater quality. Therefore, impacts would be less than significant and no mitigation is required.

Operations

The County of Riverside and the City of Murrieta along with other incorporated cities therein (Permittees) discharge pollutants from their municipal separate storm sewer (drain) systems (MS4s). Stormwater and non-stormwater enter and are conveyed through the MS4s and discharged to the San Diego Region watersheds. These discharges are subject to countywide waste discharge requirements contained in Order No. R9-2013-0001 (NPDES Permit No. CAS0109266), which was adopted on May 8, 2013.[39] The MS4 Permit Order provides waste discharge requirements for MS4 discharges within the San Diego region watersheds, which includes Murrieta. Specifically, the City of Murrieta is within the Santa Margarita River watershed which includes the cities of Menifee and Wildomar, and portions of unincorporated County of Riverside, and the entire City of Temecula. Portions of the Santa Margarita River watershed within Riverside County is referred to as the "Santa Margarita Region of Riverside County". Murrieta Municipal Code Chapter 8.36 requires compliance with the NPDES MS4 Permit water quality requirements.

The MS4 Permit Order requires development and implementation of a Water Quality Management Plan (WQMP) for all "New Development" and "Redevelopment" projects subject to the Order. New development and redevelopment projects/activities include all development projects equal to 1.0 acre or greater of disturbed area; and new development that creates 10,000 sf or greater of new impervious surface on a previously undeveloped site. The project development would impact 13 acres and therefore is subject to the requirements set forth in the Riverside County Santa Margarita River Watershed Region Design Handbook for LID and BMPs for water quality.

[39] *Regional Board Order No*. R9-2013-0001 w*as amended by Order No.* R9-2015-0001 *and Order No.* R9-2015-0100.

The project site is vacant and 100 percent pervious. In the post-development condition, the project site would be approximately 20 percent pervious and 80 percent impervious.

The proposed drainage pattern would match the site's existing drainage pattern. The project would treat site runoff in accordance with the Riverside County Santa Margarita River Watershed Region Design Handbook requirements. The project proposes five Drainage Management Areas (DMA) to collect and convey runoff from landscape area, surface drainage areas, and roof drains to the proposed treatment devices. DMA 1-4 would collect sheet flows via permeable pavement and catch basins located along the drive aisles and route flows to a proposed 18-inch storm drain and a 24-inch storm drain line internal to the project site. Similarly, DMA 5 would also collect sheet flows via proposed catch basins and route flows to the storm drain line, which would connect to a proposed underground detention vault system located along the southeastern portion of the project site. Four Modular Wetlands System (MWS) Biofiltration vaults are proposed within DMAs for water quality treatment. DMAs 1 and 2 and DMAs 3 and 4 would each have one MWS, and DMA 5 would have two MWS. The secondary MWS within DMA 5 would treat overflow in the event of large storm events.

The design of the MWS Biofiltration vaults would provide a three-phase treatment system. When the stormwater initially enters the treatment system, a trash rack, filter media and settling chamber would capture large trash/debris and sediment in the storm water. The design of this system would treat storm water flow horizontally. Before the storm water enters the "wetland" chamber, the runoff flows through the second phase – a pre-filter cartridge – which captures fine total suspended solids (TSS), metals, nutrients and bacteria. The wetland chamber is the system's third phase of the system, which provides final treatment through a combination of physical, chemical, and biological processes. The proposed project would also include non-structural BMPs, such as storm drain stenciling and signage and efficient irrigation systems.

Hydromodification refers to changes in the magnitude and frequency of stream flows and its associated sediment load due to urbanization or other changes in the watershed land use and hydrology and the resulting impacts on receiving channels, such as erosion, sedimentation, and potential degradation of in-stream habitat. Due to the increase of impervious surfaces, from 0 to 80 percent, runoff from the project site would increase. However, implementation of storm water BMPs and on-site MWS would reduce the potential for off-site impacts from increased flows. Implementation of BMPs would address the pollutants of concern associated with a multiple-family residential development. Therefore, impacts would be less than significant and no mitigation is required.

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

Less Than Significant Impact. The project site is within the Temecula Valley Groundwater Basin. The project site's water purveyor Western Municipal Water District (WMWD) uses imported water and local groundwater to meet the water needs of its service area. In 2020, WMWD imported 60 percent of its total water supply from the Metropolitan Water District of Southern California (Metropolitan). The remaining 40 percent came from groundwater from various basins. All the various basins supplying water to WMWD are adjudicated and therefore subject to a maximum allowed pumping allocation for groundwater extraction.

Project implementation would increase the site's impervious area. As previously addressed, the project site is 100 percent pervious and in the post-development condition, the project site would be

approximately 20 percent pervious and 80 percent impervious. Therefore, the increase in impervious area would reduce the surface area available for groundwater recharge through percolation. However, on-site improvements such as additional landscape areas and biofiltration MWS would allow for infiltration and detention. As mentioned previously, the project site is not in WMWD boundary but it is within the service area and is a WMWD customer. The project site is included in the WMWD 2020 Urban Water Management Plan (UWMP). The WMWD UWMP identifies projected water supplies from 2025 through 2045. Water supply allocations from groundwater sources are anticipated to remain constant at 9,892 acre-feet per year (afy) through 2045.[40] Water supply and demand analysis within UWMP are based on General Plan population forecasts and projections. Since the project is consistent with the General Plan and zoning for the site, anticipated water demand from future development would have been assumed in the WMWD 2020 UWMP.

The project's water demand would be approximately 276.24 afy. WMWD forecasts that its retail supplies would be sufficient to meet demands in single-dry-year and multiple-dry-year conditions over the 2020-2045 period. Therefore, project implementation would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede the basins' sustainable groundwater management. Therefore, impacts would be less than significant and no mitigation is required.

Threshold (c.i.) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site? and

Threshold (c.ii.) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. The project would not result in a significant change to the site's drainage pattern. As previously addressed, the project would not impact and therefore would not alter the existing jurisdictional watercourse on the project site. Project development would mimic the site's existing drainage patterns. The project proposes five DMAs to collect and convey runoff from landscape areas, surface areas, and roof drainage to the proposed treatment devices (MWS). Each DMA would collect sheet flows and route flows toward MWS treatment devices leading to a detention vault system. Flows would outlet to the existing public storm drain system via the three 36-inch reinforced concrete storm drains outside the project site boundary adjacent to Jefferson Avenue. The proposed storm drain design would limit peak flows to level equal to or less than predevelopment flow rates for the 100-year storm event. During larger storm events, surface water would sheet flow into the catch basin inlets within each DMA but bypass the MWS treatment system and flow into the internal storm drain network to discharge directly into the underground detention system. The proposed project would not result in the alteration of the course of a stream or increase amount of surface runoff that would result in flooding. Impacts would be less than significant and no mitigation is required.

[40] Groundwater supplies include the Chino Desalter (3,534 afy), Temecula Valley Basin Groundwater (1,452 afy), contractual agreement lease for Meeks and Daley Water Company groundwater rights (4,680 afy), and additional rights to Meeks and Daley Water Company through ownership in company (226.52 afy).

Threshold (c.iii.) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The City is primarily built out and maintains an existing storm water drainage system. The proposed project would not substantially alter the existing drainage patterns within the site, while post-project runoff from the site would increase due to the addition of impervious surfaces. However, the hydrology studies (Appendix H) prepared for the project demonstrate that post-development conditions would not significantly affect the downstream drainage systems due to increases in impervious surfaces and runoff. In compliance with the Riverside County Santa Margarita River Watershed Region water quality requirements, runoff from the project site would be treated on site and heavy flows would discharge into an underground detention basin prior to entering existing off-site storm drain facilities. Proposed drainage improvements include installation of MWS biofiltration vaults within the project site for water quality treatment. The proposed project's MWS would have a total volume of 24,669 cubic feet and would provide a combined treatment flow rate greater than the requirements specified in the Regional MS4 permit. Therefore, the project is consistent with the capacity of the City's existing storm drain system and surface water quality requirements. During construction, the construction plans would be reviewed along with supporting hydrology reports and calculations. The project would be required to comply with NPDES requirements, as well as Murrieta Municipal Code Chapter 15.52 to ensure that any potential impacts associated with runoff and water quality during grading and project construction would be addressed. Therefore, impacts would be less than significant and no mitigation is required.

Threshold (c.iv.) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

No Impact. The project site is not located within the 100-year hazard flood zone area. Flood Insurance Rate Map (FIRM) 06065C2715G indicates the project site is within Zone X, 0.2 percent change flood; areas with one percent annual change flood with average depths of less than one foot or with drainage areas less than one square-mile; or areas protected by levees from the one percent annual change of flood.[41] Further, the project would use MWS to reduce treat runoff and an underground detention basin to minimize impacts to existing storm water drainage facilities. The project site is not subject to flooding and would not impede or redirect flood flows. No impact would occur.

Threshold (d) In flood hazard, tsunami, or seiche zones, would the project risk the release of pollutants due to project inundation?

No Impact. As previously noted, the project site is not located within a 100-year hazard flood zone area. According to General Plan Figure 12-7, a portion of the project site along Jefferson Avenue is within the dam inundation area for Diamond Valley Lake. However, given the nature of the residential use, the project would not risk release of pollutants due to project inundation since the proposed land use is not

[41] United States, Federal Emergency Management Agency. *FEMA. Flood Insurance Rate Map 06065C2715G* Available at https://msc.fema.gov/portal/search?AddressQuery=2323%20West%20Broadway%2C%20Anaheim#searchresultsanchor. Accessed August 30, 2022.

associated with storage of toxic or hazardous materials besides household cleaners and landscape fertilizers.

Tsunamis are sea waves that are generated in response to large-magnitude earthquakes. When these waves reach shorelines, they sometimes produce coastal flooding. Seiches are the oscillation of large bodies of standing water, such as lakes, that can occur in response to ground shaking. The project site is located about 25 miles inland from the Pacific Ocean and is separated by the Santa Ana Mountain ranges. Therefore, the project site is not at risk from tsunamis. Additionally, the project site is not near any large bodies of water; therefore, the site is not at risk from a seiche. 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.

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

Less Than Significant Impact. As discussed under threshold b, the project would be required to comply with water quality standards and provisions. In 2014, the State adopted the California Sustainable Groundwater Management Act, which provides authority for agencies to develop and implement groundwater sustainability plans or alternative plans that demonstrate the sustainable management of water basins.

The project site is served by WMWD, which uses imported water and local groundwater sources for its water supply. In 2020, 40 percent of water supplies came from groundwater from various basins. All the various basins supplying water to WMWD are adjudicated and therefore subject to a maximum allowed pumping allocation for groundwater extraction.

As discussed above, the project water demand would be approximately 276.24 afy. WMWD forecasts that its retail supplies would be sufficient to meet demands in single-dry-year and multiple-dry-year conditions over the 2020-2045 period. There would be sufficient water supply to serve the project. Project implementation would not impact WMWD groundwater supply allowances from adjudicated basins. Therefore, project implementation would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede the basins' sustainable groundwater management. Impacts would be less than significant and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.11 Land Use and Planning

Threshold (a) Would the project physically divide an established community?

No Impact. Projects that would physically divide an established community include freeways, bridges, and roadways. However, the proposed project would develop 389 multi-family units at the southeast corner of the intersection of Murrieta Hot Springs Road at Jefferson Avenue. The project does not include development of any new roadways that would divide an established community. Therefore, no impacts would occur and no mitigation is required.

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

Less Than Significant Impact. The project site is zoned Community Commercial (CC) with a Transit Oriented Development (TOD) Overlay District. The commercial zoning does not allow for residential development; however, the TOD Overlay District allows for a mixture of residential and non-residential development in close proximity to transit.[42] The project proposes a multi-family residential development which would be consistent with the TOD Overlay District. **Table 4.11-1: General Plan Policies Consistency** determines the proposed project's consistency with Murrieta's General Plan policies.

Table 4.11-1: General Plan Policies Consistency

Policy	Consistency
Land Use Element	
Policy 3.3: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood.	The proposed project is a multi-family residential development, which is a permitted use under the TOD Overlay District. The surrounding area is similarly zoned with the TOD Overlay District. A nearby residential development (Jefferson Avenue Apartment Project) is located 0.3 mile north of the project site and proposes a similar use. The proposed project is consistent with the zoning and would be consistent with other residential uses in the immediate area.
Policy 4.1: Provide for housing opportunities that address the needs of those who currently live or desire to live in Murrieta.	The City's Regional Housing Needs Allocation (RHNA) is 3,043 units for the 2021-2029 planning cycle. The project proposes 389 multi-family dwelling units that would generate 1,203 new residents to the City. The anticipated population growth is within the City's population growth forecast and SCAG projections. The project would provide additional housing opportunities that address the needs of those who currently live or desire to live in Murrieta.
Policy 4.3: Locate multiple-family housing adjacent to jobs, retail, schools, open space, public transportation, and transportation corridors.	The project would construct 389 multi-family units in a growing suburban area of the City. The project site is adjacent to a retail center (Madison Marketplace) that provides job opportunities in the City. A Riverside Transit Agency (RTA) bus stop is located 0.2 mile north of the project site, which provides access to public transit. Further, the project site is located near major

[42] City of Murrieta Municipal Code. *Transit Development Oriented Overlay. Available at:* https://codelibrary.amlegal.com/codes/murrieta/latest/murrieta_ca/0-0-0-34692, accessed August 12, 2022.

Table 4.11-1: General Plan Policies Consistency	
Policy	**Consistency**
	transportation corridors including Murrieta Hot Springs Road and I-15. Therefore, the project would locate housing near job opportunities, public transportation, and transportation corridors.
Circulation Element	
Policy 5.14: Encourage new large residential, commercial, or employment developments to locate on existing and planned transit routes.	The proposed project is a high-density residential development located approximately 0.2 mile south of RTA bus route 23 transit stop. The project is proximate to existing transit routes and would encourage alternative modes of transportation for residents.
Policy 6.1: Encourage alternatives to single-occupancy vehicle transportation such as rail, public transit, paratransit, walking, cycling, and ridesharing.	The proposed project is located 0.2 mile south of the existing Madison Marketplace retail center. The proximity to retail centers would encourage alternative modes of transportation.
Economic Development Element	
Policy 5.4: Encourage housing that is within economic reach of all income levels and living styles inclusive of age-restricted housing, estate and ranch properties, single-family detached, single-family detached, town homes, condominium flats, and apartments.	The project proposes the development of 389 multi-family residences with 1-bedroom, 2-bedroom, and 3-bedroom floor plans at different price points. Therefore, the project would be consistent with this policy.
Recreation and Open Space Element	
Policy 8.1: Encourage the provision of parks, recreation facilities, and/or open space in new development and redevelopment projects.	The proposed project would include on-site recreational areas and outdoor spaces for residents. As conceptually proposed, the project would include a fitness center, pool courtyard with a swimming pool, cabanas and day beds, shaded seating and outdoor dining tables in the open space areas. A dog park, view lawn, and a barbeque are also proposed. Each residential unit would also have private balcony. Therefore, the project would be consistent with or otherwise would not conflict with this policy.
Policy 8.2: Ensure that new residential developments provide for recreation needs of residents through development fees and park dedication.	The proposed project would provide 22,784 sf of private open space and 67,251 sf of common open space. On-site amenities would be provided. Further, the project would pay development impact fees under Murrieta Municipal Code Chapter 16.36.020, including park fees. Therefore, the project would be consistent with this policy.

As discussed in Table 4.11-1, the proposed project would be consistent with or otherwise would not conflict with the identified goals and policies of the Murrieta General Plan. Therefore, the proposed project would not conflict with any land use plan, policy, or regulation adopted to mitigate an environmental effect. Impacts would be less than significant and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.12 Mineral Resources

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

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

No Impact. The City of Murrieta General Plan Exhibit 5.12-1, Mineral Resources Map, does not identify any known State or local mineral resources or locally important mineral resource recovery site on the project site.[43] The project is a residential development which would not involve any mineral extraction. Therefore, no impact would occur and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

[43] City of Murrieta General Plan EIR. *Mineral Resources*. Available at https://www.murrietaca.gov/DocumentCenter/View/757/05-12---Mineral-Resources-PDF, Accessed July 6, 2022.

4.13 Noise

A noise analysis was prepared by (Kimley-Horn, 2022) for the proposed project. The noise modeling is included in **Appendix I: Noise Data** of this Initial Study and summarized below.

The analysis describes sound in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is in relation to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, the A-weighted decibel scale (dBA) relates noise to human sensitivity. The A-weighted decibel scale provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from traffic on a major highway.

Several rating scales analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise as well as the time of day when the noise occurs. For example, the equivalent continuous sound level (L_{eq}) is the acoustic energy content of noise for a stated period; therefore, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. The Day-Night Sound level (L_{dn}) is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the nighttime. The Community Noise Equivalent Level (CNEL) is a 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 PM to 7:00 AM and an additional 5 dBA weighting during the hours of 7:00 PM to 10:00 PM to account for noise sensitivity in the evening and nighttime.

Existing Setting

The project site is vacant, and the surrounding area is characterized as suburban, with unoccupied land with some urban development. Mobile noise sources, especially cars and trucks, are the most common and significant sources of noise in the project area. Most of the existing mobile noise in the project area is from vehicles along roadways including Jefferson Avenue and Murrieta Hot Spring Road. The primary sources of stationary noise are urban activities (i.e., mechanical equipment, parking areas, and pedestrians). The noise associated with these sources may represent a single-event noise occurrence, short-term or long-term/continuous noise.

Noise-Sensitive Receptors. Noise-sensitive receptors are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Land uses such as parks, historic sites, cemeteries, and recreation areas are sensitive to increases in exterior noise levels while schools, churches, hotels, libraries, and similar other places are noise-sensitive land uses where low interior noise levels are essential. The nearest noise-sensitive receptors include the Courtyard by Marriott and Residence Inn by Marriot Hotel to the northeast (100 feet and 260 feet, respectively), and single-family residential uses approximately 1,246 feet southwest of the project site along Adams Avenue.

Noise Measurements. To quantify existing ambient noise levels in the project area, Kimley-Horn conducted five short-term (10-minute) measurements on August 3, 2022, and one long-term noise measurement (24 hours in duration) starting on August 3 and ending on August 4, 2022. Short-term (L_{eq}) measurements are representative of the noise levels throughout the day. These measurements were taken during off-peak traffic hours to characterize baseline noise levels without exposure to heavy traffic or noise-generating activities. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site. The 10-minute daytime measurements were taken between 8:25 AM to 10:08 AM near potential sensitive receptors. The average noise levels and sources of noise measured at each location are listed in **Table 4.13-1: Existing Noise Measurements.** As identified in **Table 4.13-1,** the measured daytime noise levels range between 49.7 dBA L_{eq} and 69.0 dBA L_{eq}, the measured nighttime noise level in the project area is 54.3 dBA L_{eq}, and the 24-hour noise level is 62.8 dBA CNEL.

Table 4.13-1: Existing Noise Measurements

Site	Location	Measurement Period	Duration	Daytime Average L_{eq} (dBA)[1]	Nighttime Average L_{eq} (dBA) [1]	dBA CNEL
Short-Term Noise Measurements (10-minute measurements)						
ST-1	Along Murrieta Hot Springs Road, approximately 120 feet northwest of the project site.	8:25 AM, Wednesday, August 3, 2022	10 min.	69.0	-	-
ST-2	450 feet to the northeast of project site, adjacent to the 7-Eleven store in the parking lot.	8:48 AM, Wednesday, August 3, 2022	10 min.	62.2	-	-
ST-3	East of the project site, adjacent to the Courtyard by Marriott hotel.	9:08 AM, Wednesday, August 3, 2022	10 min.	49.7	-	-
ST-4	Along Jefferson Avenue, approximately 130 feet west of the project site.	9:30 AM, Wednesday, August 3, 2022	10 min.	68.0	-	-
ST-5	At the intersection of Hawthorn Street and Adams Avenue, approximately 1,360 feet northwest of the project site.	9:58 AM, Wednesday, August 3, 2022	10 min.	64.5	-	-
Long-Term Noise Measurements (continuous 24-hour measurements)						
LT-1	Within the north section of the project site, 200 feet from Jefferson Avenue.	Wednesday, August 3, 2022, to Thursday, August 4, 2022	24 hr.	61.6	54.3	62.8

1. Daytime hours are from 7:00 AM to 10:00 PM, and nighttime hours are from 10:00 PM to 7:00 AM The 15-hour daytime average (15-hour L_{eq}) and 9-hour nighttime average were calculated from 24-hour measurements take at LT-1. The 10-minute L_{eq} is listed from short-term measurement data.

Source: Noise measurements taken by Kimley-Horn and Associates, August 3-4, 2022. See Appendix I for noise measurement results.

Transportation-related noise associated with the arterial transportation network and background noise from land use activities dominates the ambient noise levels in the project study area. Meteorological conditions were clear skies, warm temperatures with light wind speeds (<5 miles per hour) and low humidity. Noise monitoring equipment used for the ambient noise survey was a Larson Davis LxT Type I

sound level meter. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for Type I sound level meters.

Regulatory Setting

California Code of Regulations, Title 24. The California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code codifies the State's noise insulation standards. These noise standards apply to new construction for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the design of the structure would limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

City of Murrieta General Plan. The General Plan Noise Element contains noise and land use compatibility standards for various land uses throughout the City; see **Table 4.13-2**: **Land Use Compatibility for Community Noise Environments**. The standards shown in the table are the primary tool that allows the City to ensure integrated planning for compatibility between land uses and outdoor noise.

Table 4.13-2: Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential-Low Density, Single-Family, Duplex, Mobile Homes	50-60	55-70	70-75	75-85
Residential – Multiple Family	50-65	60-70	70-75	70-85
Transient Lodging – Motel, Hotels	50-65	60-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50-75	NA	70-85
Playgrounds, Neighborhood Parks	50-70	NA	67.5-77.5	72.5-85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	80-85
Office Buildings, Business Commercial and Professional	50-70	67.5-77.5	75-85	NA
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	75-85	NA

CNEL = community noise equivalent level; NA = not applicable
NORMALLY ACCEPTABLE: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
CONDITIONALLY ACCEPTABLE: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
NORMALLY UNACCEPTABLE: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.
CLEARLY UNACCEPTABLE: New construction or development should generally not be undertaken.
Source: City of Murrieta, *City of Murrieta General Plan 2035*, Table 11-2: Land Use Compatibility for Community Noise Environments.

The Noise Element also contains the City of Murrieta interior and exterior noise limits for various land uses, as identified in **Table 4.13-3: Interior and Exterior Noise Limits.**

Table 4.13-3: Interior and Exterior Noise Limits

Noise Zone	Land Use (Receptor Property)	Time Period	Allowed Exterior Noise Level (dBA)
Exterior Noise Limits			
I	Noise-sensitive area	Anytime	45
II	Residential properties	10:00 PM to 7:00 AM	45
		7:00 AM to 10:00 PM	50
	Residential properties within 500 feet of a kennel(s)	7:00 AM to 10:00 PM	70
III	Commercial properties	10:00 PM to 7:00 AM	55
		7:00 AM to 10:00 PM	60
IV	Industrial properties	Anytime	70
Interior Noise Limits			
All noise zones	Multi-family residential	10:00 PM to 7:00 AM	40
		7:00 AM to 10:00 PM	45

Source: City of Murrieta, *City of Murrieta General Plan*, Table 11-4: City of Murrieta Exterior and Interior Noise Limits, July 2020.

City of Murrieta Municipal Code. Murrieta Municipal Code Section 16.30 (Noise) establishes standards to protect the health, safety, and welfare of those living and working in the City and to implement policies of the General Plan Noise Element. Specifically, Murrieta Municipal Code Section 16.30.130 regulates construction noise by prohibiting construction activities between the hours of 7:00 PM and 7:00 AM and on Sundays and holidays. In addition, construction activities in accordance with Murrieta Municipal Code Section 16.30.130 must be conducted in a manner that the maximum noise levels at the affected structures will not exceed those listed in **Table 4.13-4: City of Murrieta Construction Noise Standards**. Construction noise at business structures (i.e., commercial/business receptors) is also limited to a maximum of 85 dBA. The Murrieta Municipal Code establishes operational noise standards for various land uses (see **Table 4.13-3**).

Table 4.13-4: City of Murrieta Construction Noise Standards

Noise Zone	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

Source: City of Murrieta, *Murrieta, California Municipal Code, Section 16.30.130(A)*.

Further, Murrieta Municipal Code Section 16.30.130(I) limits the operation of air conditioning or refrigeration equipment in a manner that exceeds the following sound levels in **Table 4.13-5: City of Murrieta Residential Air Conditioning and Refrigeration Equipment Noise Standards**.

Table 4.13-5: City of Murrieta Residential Air Conditioning and Refrigeration Equipment Noise Standards

Measurement Location	Maximum Noise Level (dBA)
Any point on neighboring property line, five feet above grade level, no closer than three feet from any wall.	55
Center of neighboring patio, five feet above grade level, no closer than three feet from any wall.	50
Outside the neighboring living area window nearest the equipment location, not more than three feet from the window opening, but at least three feet from any other surface.	50

Source: City of Murrieta, *Murrieta, California Municipal Code, Section 16.30.130(I)*.

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

Less Than Significant Impact

Construction. Construction noise represents a short-term impact on ambient noise levels. Noise generated by equipment for demolition and construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators can reach high levels. Construction activities on the project site would expose existing noise-sensitive uses to increased noise levels. In typical construction projects, the loudest noise generally occurs during site preparation and grading activities because they involve the largest equipment. **Table 4.13-6: Maximum Noise Levels Generated by Construction Equipment** shows the maximum noise levels generated by construction equipment. It is noted that the noise levels identified in this table are maximum sound levels (L_{max}), which are the highest individual sound occurring at an individual time period. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

Noise-sensitive uses near the project site include the Courtyard by Marriott Hotel and Residence Inn by Marriot Hotel to the east (100 feet and 260 feet, respectively to the project site boundary). The nearest residential use to the project site is approximately 750 feet to the west. The proposed project may expose these sensitive receptors to elevated noise levels during project construction. However, the proposed project would generally disperse construction noise acoustically throughout the project site and it would not be concentrated in one area near surrounding sensitive uses.

Table 4.13-6: Maximum Noise Levels Generated by Construction Equipment

Equipment	Typical Noise Level (dBA)		
	Acoustical Use Factor	L_{max} at 50 Feet (dBA)	L_{max} at 100 Feet (dBA)
Crane	16	88	82
Concrete Mixer Truck	40	85	79
Backhoe	40	80	74
Dozer	40	85	79
Paver	50	85	79
Roller	20	85	79
Water Truck	40	84	78
Grader	40	85	79
Compactor	40	82	76

dBA: A-weighted decibels; L_{max}: maximum noise level
Note: Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.
Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

The noise levels identified in **Table 4.13-7: Project Construction Noise Levels**, show the project's estimated exterior construction noise levels without accounting for attenuation from existing physical barriers. This analysis assumes that all construction equipment would operate simultaneously at a center of the construction area in accordance with methodologies from the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (September 2018) (FTA Transit Noise and Vibration Manual) as equipment would operate throughout the project site and not at a fixed location for extended periods of time.[44] Therefore, the distance used in the RCNM model was measured from the center of the project construction area. This methodology is considered conservative as it is unlikely that all types of construction equipment needed for each construction phase would operate simultaneously.

As shown in the table, unobstructed construction noise levels could reach approximately 68.7 dBA at the property line of the nearest sensitive receptor (the Courtyard by Marriott) during building construction phase. Construction equipment would operate throughout the project site during each phase and the associated noise levels would not occur at a fixed location for extended periods. The proposed project would disperse construction noise throughout the project site and roadway noise would mask much of the construction noise.

The Murrieta Municipal Code has established quantitative construction noise standards of 75 dBA for single family residential uses and 85 dBA for commercial/nonresidential uses. As shown in **Table 4.13-7**, noise levels at the nearest sensitive receptors would be a maximum of 68.7 dBA and would not exceed the City's construction noise standards. While ambient noise levels in the project vicinity would temporarily increase during construction activities, construction noise would be acoustically dispersed throughout the project site and not concentrated in one area near surrounding sensitive uses. Therefore, construction noise would not substantially increase ambient noise levels in exceedance of any City standards. Construction-related noise impacts would be less than significant.

[44] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

Table 4.13-7: Project Construction Noise Levels

Construction Phase	Receptor Location			Worst Case Modeled Exterior Noise Level (dBA L_{eq})	Noise Threshold (dBA L_{eq})[2]	Exceeded?
	Land Use	Direction	Distance to Project Site Center (feet)[1]			
Site Preparation	Hotel	East	540	67.0	85	No
	Hotel	East	570	66.5	85	No
	Residential	Southwest	750	64.1	75	No
Grading	Hotel	East	540	67.6	85	No
	Hotel	East	570	67.1	85	No
	Residential	Southwest	750	64.7	75	No
Building Construction	Hotel	East	540	68.7	85	No
	Hotel	East	570	68.2	85	No
	Residential	Southwest	750	65.8	75	No
Paving	Hotel	East	540	65.4	85	No
	Hotel	East	570	65.0	85	No
	Residential	Southwest	750	62.6	75	No
Architectural Coating	Hotel	East	540	53.1	85	No
	Hotel	East	570	52.6	85	No
	Residential	Southwest	750	550.2	75	No

1. Per the methodology described in the FTA *Transit Noise and Vibration Impact Assessment Manual* (September 2018), distances are measured from the nearby buildings to the center of the project construction site. Therefore, distance may not match those identified in the context, which are measured from the property line.
2. The City employs construction noise standards of 75 dBA for residential uses and 85 dBA for commercial uses as outlined in City of Murrieta Municipal Code 16.30.130 as shown in **Table 4.13-4**.

Source: Federal Highway Administration, *Roadway Construction Noise Model,* 2006. See **Appendix I** for noise modeling results.

Operation. Typical noise sources associated with residential land uses include mechanical equipment, parking lots, mobile traffic, trash/recycling collection, and landscaping equipment.

Mechanical Equipment. Mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] equipment) typically generates noise levels of approximately 52 dBA at 50 feet.[45] Sound levels decrease by 6 dBA for each doubling of distance from the source.[46] The nearest noise-sensitive receptor (the Courtyard by Marriott) would be approximately 380 feet from the closest potential area where HVAC equipment could be located at the project site. At 380 feet, mechanical equipment noise levels would be 34.4 dBA and would not exceed the City's 55 dBA exterior noise standards for commercial uses and/or residential HVAC equipment. Based on the existing ambient noise levels in the project area (see **Table 4.13-1**), noise from this equipment would not be perceptible at the nearest noise-sensitive receptors. Impacts from mechanical equipment would be less than significant.

Parking Lot Noise. Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, based on a time-averaged scale such as the CNEL scale. The instantaneous

[45] Elliott H. Berger, Rick Neitzel1, and Cynthia A. Kladden. (2010). *Noise Navigator Sound Level Database with Over 1700 Measurement Values*.

[46] Cyril M. Harris, *Noise Control in Buildings*, 1994.

maximum sound levels generated by the slamming of a car door, starting an engine starting up, and car pass-bys, range from 53 to 61 dBA[47] and may be an annoyance to adjacent noise-sensitive receptors. Conversations in parking areas may also be an annoyance to adjacent noise-sensitive receptors. Sound levels of speech typically range from 33 dBA at 50 feet for normal speech to 50 dBA at 50 feet for very loud speech.[48]

Parking lot noise would occur at the surface parking areas throughout the proposed residential community. As noted above, noise levels from parking lot activities typically range from approximately 53 to 61 dBA at a distance of 50 feet. However, parking lot noise would be well below the City's noise standards when averaged over time. The nearest parking spaces would be approximately 380 feet from the nearest off-site noise-sensitive receptors (hotel uses to the east). At this distance, parking lot noise levels would be reduced to 43.4 dBA and would not exceed the City's 55 dBA exterior noise standards for commercial uses. In addition, the adjacent hotel development generates its own parking lot noise. Therefore, noise impacts from parking lots would be less than significant.

Off-Site Mobile Noise. In general, a traffic noise increase of 3 dBA is barely perceptible to people, while a 5 dBA increase is readily noticeable. Traffic volumes on project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA.[49] Implementation of the project would generate increased traffic volumes along nearby roadway segments including Murrieta Hot Springs Road and Jefferson Avenue. According to Weekday 24-Hour Traffic Volumes published by the City, average daily traffic volumes (ADTs) on Murrieta Hot Springs Road and Jefferson Avenue are approximately 20,900 and 28,100, respectively.[50] Based on the project traffic analysis, the proposed project would generate 2,629 daily vehicle trips which is not sufficient to double the traffic volume along Murrieta Hot Springs Road or Jefferson Avenue (the access roadways to the project site). As such, the project would not result in a noticeable increase in traffic noise along roadways in the project area and impacts from off-site traffic would be less than significant.

Trash/Recycling Collection Noise. The project would require trash/recycling collection. Trash/recycling trucks would access the project site from Jefferson Avenue and/or Murrieta Hot Springs Road. Low speed truck noise results from a combination of engine, exhaust, and tire noise, as well as the intermittent sounds of back-up alarms and releases of compressed air associated with truck air brakes. As such, trash/recycling pickup trucks could generate noticeable noise levels at nearby receptors. However, trash and recycling collection activities currently occur at adjacent uses and are essential services for residential and non-residential land uses. Further, trash/recycling pickup noise would be short term and intermittent and would be partially masked by background traffic noise along Murrieta Hot Springs Road and Jefferson Avenue. This analysis anticipates that actual noise levels over time resulting from trash/recycling collection activities would be below the City's noise standards. Therefore, noise impacts associated with trash/recycling collection would be less than significant.

Landscaping Equipment. The project would include the use of landscaping equipment such as lawnmowers and leaf blowers throughout the site, which can generate noise levels between

[47] Kariel, H. G., *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), 3-10, 1991.

[48] Elliott H. Berger, Rick Neitzel1, and Cynthia A. Kladden. (2010). *Noise Navigator Sound Level Database with Over 1700 Measurement Values*.

[49] According to the California Department of Transportation, *Technical Noise Supplement to Traffic Noise Analysis Protocol* (September 2013), it takes a doubling of traffic to create a noticeable (i.e., 3 dBA) noise increase.

[50] City of Murrieta, 2018 Weekdays 24-Hour Traffic Volumes, Available at https://www.murrietaca.gov/DocumentCenter/View/439/2019-Traffic---Existing-Traffic-Volumes-PDF. Accessed August 24, 2022.

approximately 76 dBA and 88 dBA at one meter assuming a clear line of sight from source to receiver.[51] The nearest off-site noise-sensitive uses (hotels 100 feet east of the project site boundary) would be within approximately 380 feet of operating landscaping equipment. At this distance, the landscape related noise would be attenuated to 36.4 dBA and would be well below the City's 55 dBA exterior noise standards for commercial uses. In addition, surrounding uses have noise generated from landscaping equipment under existing conditions. Therefore, landscaping equipment would not exceed the City's noise standard and impacts would be less than significant.

On-Site Noise Impacts. The project site is located along Murrieta Hot Springs Road and Jefferson Avenue, which are designated as Urban Arterial and Arterial roadways, respectively, in the Murrieta General Plan Circulation Element. Based on the noise measurement data, on-site noise levels (including at balconies and outdoor common areas) would be approximately 62.8 dBA CNEL and would be within the City's normally acceptable land use compatibility noise standard of 50 to 65 dBA CNEL for multi-family residential uses (see **Table 4.13-2**). According to the General Plan Noise Element, a normally acceptable noise level is satisfactory and does not require noise abatement or insulation features. In addition, interior noise levels would be approximately 37.8 dBA assuming an exterior-to-interior reduction of 25 dBA for standard construction practices and would not exceed the City's 45 dBA CNEL interior noise standard.[52] Therefore, noise abatement measures are not required for the project and a less than significant impact would occur.

Cumulative Construction Noise

The project's construction activities would not result in a substantial temporary increase in ambient noise levels. Construction noise would be periodic and temporary noise impacts would cease upon completion of construction activities. The project would contribute to other proximate construction project noise impacts if construction activities were conducted concurrently. However, based on the noise analysis above, the project's construction-related noise impacts would be less than significant.

There are 30 cumulative projects within the City. Construction activities at planned and approved projects within the City would be required to comply with applicable City rules related to noise and would take place during daytime hours on the days permitted by the Municipal Code, and projects requiring discretionary City approvals would be required to evaluate construction noise impacts, comply with the City's standard conditions of approval, and implement mitigation, if necessary, to minimize noise impacts. Construction noise impacts are by nature localized and the cumulative projects are located throughout the City. Based on the fact that noise dissipates as it travels away from its source (a 6 dBA decrease for each doubling of distance), noise impacts would be limited to the project site and vicinity. Therefore, project construction would not result in a cumulatively considerable contribution to significant cumulative impacts, assuming such a cumulative impact existed, and impacts in this regard are not cumulatively considerable.

Cumulative Operational Noise

Cumulative Off-Site Traffic Noise. Cumulative noise impacts describe how much noise levels are projected to increase over existing conditions with the development of the proposed project and other foreseeable projects. Cumulative noise impacts generally occur as a result of increased traffic on local roadways due

[51] Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, June 26, 2015.

[52] U.S. Department of Housing and Urban Development, *The Noise Guidebook,* 2009, available at *https://www.hudexchange.info/resource/313/hud-noise-guidebook/*

to buildout of the proposed project and other projects in the vicinity. As discussed above, the project would generate 2,629 daily vehicle trips, including 156 morning peak hour trips and 199 evening peak hour trips. According to Weekday 24-Hour Traffic Volumes published by the City, average daily traffic volumes (ADTs) on Murrieta Hot Springs Road and Jefferson Avenue are approximately 20,900 and 28,100, respectively.[53] According to the Supplemental EIR for the Murrieta General Plan 2035, implementation of the General Plan would not result in significant increases in traffic noise.[54] The net increase of 2,629 daily trips on Murrieta Hot Springs Road and Jefferson Avenue can be accommodated by the existing roadway infrastructure. In addition, the proposed project is consistent with the General Plan land use designation and would not result in increases in traffic greater than what was contemplated in the Supplemental EIR. Therefore, the proposed project's contribution to cumulative increases in traffic noise would not be cumulatively considerable.

Cumulative Stationary Noise. Stationary noise sources of the project would result in an incremental increase in non-transportation noise sources in the project site vicinity. However, as discussed above, operational noise caused by the project would be less than significant. There are 30 cumulative projects within the City. Similar to the project, other planned and approved projects would be required to mitigate for stationary noise impacts at nearby sensitive receptors, if necessary. As stationary noise sources are generally localized, there is a limited potential for other projects to contribute to cumulative noise impacts.

No known past, present, or reasonably foreseeable projects would combine with the operational noise levels generated by the project to increase noise levels above acceptable standards because each project must comply with applicable City regulations that limit operational noise. Therefore, the project, together with other projects, would not create a significant cumulative impact, and even if there were such a significant cumulative impact, the project would not make a cumulatively considerable contribution to significant cumulative operational noises.

Given that noise dissipates as it travels away from its source, operational noise impacts from on-site activities and other stationary sources would be limited to the project site and vicinity. Thus, cumulative operational noise impacts from related projects, in conjunction with project specific noise impacts, would not be cumulatively significant.

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

Less Than Significant Impact. Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located near the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

[53] City of Murrieta, 2018 Weekdays 24-Hour Traffic Volumes, Available at https://www.murrietaca.gov/DocumentCenter/View/439/2019-Traffic---Existing-Traffic-Volumes-PDF. Accessed August 24, 2022.

[54] City of Murrieta, General Plan Update SEIR, available at: https://www.murrietaca.gov/267/General-Plan-Update-SEIR, accessed April 16, 2023.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.20 inch/second) appears to be conservative. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods. Building damage can be cosmetic or structural. **Table 4.13-8: Typical Vibration Levels for Construction Equipment** identifies typical vibration levels produced by construction equipment.

Table 4.13-8: Typical Vibration Levels for Construction Equipment

Equipment	Approximate Peak Particle Velocity at 25 Feet (inches/second)	Approximate Peak Particle Velocity at 100 Feet (inches/second)
Large bulldozer	0.089	0.011
Loaded trucks	0.076	0.0095
Small bulldozer	0.003	0.0004
Jackhammer	0.035	0.0044
Vibratory compactor/roller	0.210	0.0263

1. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018. Table 7-4.
2. Calculated using the following formula:

$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance
PPV (ref) = the reference vibration level in in/sec from Table 7-4 of the FTA *Transit Noise and Vibration Impact Assessment Manual,* September 2018.
D = the distance from the equipment to the receiver

Groundborne vibration decreases rapidly with distance. The project would not require pile driving. As indicated in the Table 4.13-8, based on the FTA data, vibration velocities from typical heavy construction equipment operations that the Applicant would use, during project construction, range from 0.003 to 0.210 inch-per-second peak particle velocity (PPV) at 25 feet from the source of activity. The nearest structures include the Courtyard by Marriott and Residence Inn by Marriot Hotel to the northeast (100 feet and 260 feet, respectively). At 100 feet, construction equipment vibration levels would range from 0.0004 to 0.0263 inches-per-second PPV, which would be below the 0.5 inch-per-second PPV structural damage threshold and the 0.4 inch-per-second PPV human annoyance threshold. Impacts would be less than significant and no mitigation is required.

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

No Impact. The nearest airstrip or airport to the project site is the French Valley Airport located approximately four miles northeast at 37600 Sky Canyon Drive. The project is not within an Airport Compatibility Zone and Airport Influence Area.[55] Given the project's nature and scope, the project would not expose people residing or working in the project area to excessive noise levels. Therefore, no impact would occur.

[55] Riverside County Airport Land Use Commission, October 2007, Riverside County Airport Land Use Compatibility Plan Policy Document – Map FV-1, Accessed November 21, 2022.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.14 Population and Housing

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

Less Than Significant Impact. According to the California Department of Finance, the City's current population is 111,183 persons with an average of 3.09 person per household (as of January 1, 2022).[56] The project proposes a residential development with 389 multi-family units. Based on the average person per household, the project is anticipated to generate 1,203 residents in the City, which assumes that all residents are new to Murrieta. The anticipated increase represents a nominal increase in population growth (approximately one percent) when compared to the City's existing population of 111,183 residents.

SCAG forecasts the projected growth of cities and counties in its RTP/SCS. The 2020 Demographics & Growth Forecast Technical Report includes growth projections for population, households, and employment for all jurisdictions in the SCAG region. The City is projected to reach 127,700 persons and 42,300 households by 2045.[57] The anticipated population growth associated with the project would fall within the regional population growth forecast for the City and would not be considered unplanned population growth. Further, the City's Regional Housing Needs Allocation (RHNA) for the 6th Cycle 2021-2029 planning period is 3,043 units. The proposed project would contribute 389 multi-family dwelling units to the City's housing stock and provide additional housing opportunities for current and future City residents. Additionally, the project does not include the extension of roads or other infrastructure to unserved areas, which could induce indirect growth. Therefore, the project would not induce substantial unplanned population growth in the City. Impacts would be less than significant impacts and no mitigation is required.

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

No Impact. There are no existing residential uses on the project site; therefore, the project would not displace people or housing. No impact would occur.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

[56] State of California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022.* Available at https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/, Accessed July 5, 2022.

[57] Southern California Association of Governments. *Demographics and Growth Forecast.* Available at https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579, Accessed July 5, 2022.

4.15 Public Services

Threshold (a.i) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

Less Than Significant Impact. Murrieta Fire and Rescue provides fire protection services and operates five fire stations throughout the City. The nearest fire station to the project site is Station No. 1, located at 41825 Juniper Street, approximately 0.9 mile to the northwest. Station No. 1 apparatus includes Truck 1, Water Tender 1, and Technical Rescue 1.[58] According to the General Plan, the Murrieta Fire and Rescue participates in an Automatic Aid Agreement with the Riverside County Fire Department to expedite response times to the eastern portion of the City.[59] Based on the average person per household, the project is anticipated to generate 1,203 residents, which assumes that all residents are new to Murrieta. Therefore, the project would increase the demand for fire protection and emergency medical services to the area. However, the project's population growth would not exceed the General Plan or SCAG population forecasts and anticipated public service needs and demands. Further, the project would be required to comply with applicable building and fire codes and pay the appropriate development impact fees per Murrieta Municipal Code Section 16.36.020 in effect at the time of issuance of building to offset any incremental demand in calls for service. The project can be served by existing facilities. The project does not propose, and would not create a need for, new/physically altered fire protection facilities to maintain acceptable service ratios/response times. Therefore, the project would not result in adverse physical impacts associated with such facilities. Given the project's nature and scope, a less than significant impact would occur concerning fire protection facilities and no mitigation is required.

Threshold (a.ii) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

Less Than Significant Impact. The Murrieta Police Department provides police protection and law enforcement services to the City of Murrieta, inclusive of the project site. The nearest police station is located approximately 0.9-mile northwest of the project site at 2 Town Square. As of 2022, the Murrieta Police Department employs 102 police officers, 35 dispatchers, 25 professional staff, and 30 volunteers.[60] The proposed project's 1,203 residents would therefore incrementally increase the demand for police protection services to the area. However, the projected population growth is within population growth forecasts for the City. The proposed project is within the Murrieta Police Department service area and would not substantially increase the demand for new police facilities. Furthermore, the project would be subject to payment of development impact fees in effect at the time of building permit issuance specified in Murrieta Municipal Code Section 16.36.020. The project would not require the need for new or physically altered police facilities, and service ratios and response times would be maintained. Impacts would be less than significant and no mitigation is required.

[58] City of Murrieta. Facilities Database for Fire Stations. Available at https://www.murrietaca.gov/Facilities?clear=False, Accessed July 5, 2022.
[59] City of Murrieta General Plan. *Safety Element.* Available at https://www.murrietaca.gov/DocumentCenter/View/4366/12---Safety-Element.pdf, Accessed July 11, 2022.
[60] Murrieta Police Department. Available at https://www.murrietaca.gov/153/Police, Accessed July 5, 2022.

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

Less Than Significant Impact. The project site is located within the boundaries of the Murrieta Valley Unified School District (MVUSD), which provides educational services for students in kindergarten through 12th grade. MVUSD has 22 schools: 11 elementary schools, 4 middle schools, 3 high schools, 3 alternative schools, and 1 adult/community education program. Enrollment capacity during the 2021-2022 school year was approximately 22,800 students.[61] The proposed project is forecast to generate 1,203 new residents to the area, therefore increase the demand for school services and facilities. The schools that would serve the project site and associated current enrollment capacities are identified in **Table 4.15-1: Schools Serving Project Site**.

Table 4.15-1: Schools Serving Project Site

School	Address	Grades	2021-2022 Enrollment
Murrieta Elementary School	24725 Adams Street	K-5	912
Thompson Middle School	24040 Hayes Avenue	6-8	1,533
Murrieta Valley High School	42200 Nighthawk Way	9-12	2,295
Total			**4,740**

Source: California Department of Education. *Dataquest- Enrollment Reports*. Available at https://dq.cde.ca.gov/dataquest/content.asp, Accessed July 6, 2022.

Table 4.15-2: Projected Student Generation provides the project's forecast student population growth based on City-adopted student generation rates. Based on the proposed 389 multi-family residential development and the City of Murrieta General Plan EIR's student generation factors, the project would generate between 186 and 705 new students to the MVUSD. The project's increase in student population could potentially impact school facilities. However, the project would be subject to payment of school impact fees in accordance with SB 50. Pursuant to Government Code §65995(3)(h), "payment of statutory fees is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use or development of real property…". The developer school fees for the MVUSD are $4.79/sf for residential construction projects effective October 2022.[62] Therefore, impacts would be less than significant and no mitigation is required.

Table 4.15-2: Projected Student Generation

School Level	Student Generation Factor	Number of Dwelling Units	Project Student Generation
K-5	0.16-0.9 students/du	389	63-351
6-8	0.1517-0.3 students/du		60-117
9-12	0.16-0.6071 students/du		63-237
Total			**186-705**

[61] Murrieta Valley Unified School District. *Fast* Facts. Available at https://www.murrieta.k12.ca.us/Domain/3, Accessed July 5, 2022.
[62] Murrieta Valley Unified School District. *Developer Fees.* Available at https://www.murrieta.k12.ca.us/page/149, Accessed July 12, 2022.

Source: City of Murrieta General Plan EIR. *School Facilities*. Available at https://www.murrietaca.gov/DocumentCenter/View/764/05-19---Schools-PDF, Accessed July 6, 2022.

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

See **Section 4.16: Recreation**.

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

Less Than Significant Impact. The Murrieta Public Library provides library services to the City and is located approximately 0.9-mile northwest of the project site at 8 Town Square. The proposed project is forecasted to introduce 1,203 new residents to the City, therefore increasing the demand for library services. However, the project would not exceed the General Plan and SCAG population forecasts. Further, the overall availability of books, computers, media, and library public service space would not be significantly impacted due to the payment of development impact fees (DIF). The City's DIF includes a line item for public libraries.[63,64] The payment of the DIF would go towards upkeep, maintenance, and expansion of library resources. The project would not require the construction or physical alteration of new library facilities. Therefore, impacts would be less than significant and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

[63] City of Murrieta. *Fee Schedule, Fiscal Year 2018-2019.* Available at https://www.murrietaca.gov/DocumentCenter/View/661/Fee-Schedule---Planning-Only-2018-to-2019--PDF, Accessed July 8, 2022.

[64] The current development impact fee schedule is effective July 1, 2022. The development impact fee for multi-family residential is $9,724 per unit. This amount has not changed since the 2018-2019 fee schedule; therefore, the breakdown of the development impact fee has not changed. The library line item of $270 remains the same.

4.16 Recreation

Quimby Act

The Quimby Act of 1975, (California Government Code §66477), commonly called the "Quimby Act", allows a city or county to pass an ordinance that requires, as a condition of approval of a subdivision, either the dedication of land, the payment of a fee in lieu of dedication, or a combination of both for park and recreational purposes. It allows a city or county to require a maximum parkland dedication standard of 5 acres of parkland per 1,000 residents for new subdivision development unless the jurisdiction can demonstrate that the amount of existing neighborhood and community parkland exceeds that limit. In accordance with California Government Code §66477, a jurisdiction may establish a parkland dedication standard based on its existing parkland ratio, provided required dedications do not exceed 5 acres per 1,000 persons.

Would the project:

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

Less Than Significant Impact. The Murrieta Parks and Recreation Department manages approximately 1,350 acres of the City's trails, open space, streetscape, and parkland.[65] The City has dedicated approximately 510 acres for its 50 parks.[66] The nearest park is Town Square Park at 11 Town Square, approximately 0.8-mile northwest of the project site.

According to the General Plan, the City's parkland ratio is 5 acres of parkland per 1,000 residents. Assuming the project's 1,203 residents are new to the City, the project would create a demand for approximately 6 acres of parkland. The proposed project would be subject to the City's DIF schedule, which includes a line item for parkland facilities. The payment of the DIF would go towards upkeep, maintenance, and possible expansion of the City's recreational resources. In addition to payment of park fees, the proposed project would include on-site recreational areas and open spaces that would support the residents' park and recreation needs.

Murrieta Municipal Code Chapter 16.08.020 requires new residential development to provide 50 sf/du of private open space and 150 sf/du of common open space.[67] The project proposes a 389 multi-family residential development. The project would be required to provide 19,450 sf of private open space and 58,350 sf of common open space. The proposed project would provide 22,784 and 67,251 sf of private open space and common open space, respectively, which would exceed the minimum development standards. Private open space would be provided in patios for 1st floor units, and balconies on 2nd and 3rd floor units. Common open space includes common landscaped areas and a central recreation area, which includes a swimming pool and spa, fitness room, and view terraces and lawns with lounge seating, shade trellis, barbeque areas, and dining areas. The deck area for the pool and spa would include day beds, cabanas, and other lounge furnishings. A dog park at the southern portion of the site is also proposed as common open space. The dog park would include a dog wash station, synthetic turf, and shade trees.

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65 City of Murrieta General Plan EIR. *Parks and Recreational Facilities*. Available at https://www.murrietaca.gov/DocumentCenter/View/765/05-20---Parks-and-Recreation-Facilities-PDF, Accessed on July 6, 2022.

66 City of Murrieta Parks and Recreation. *City Listing of Parks*. Available at https://www.murrietaca.gov/DocumentCenter/View/2382/City-Listing-of-Parks-PDF, Accessed on July 8, 2022.

67 Murrieta Municipal Code. *Public Facilities/Infrastructure Mitigation.* Available at https://codelibrary.amlegal.com/codes/murrieta/latest/murrieta_ca/0-0-0-26721, Accessed on July 6, 2022.

The project's recreational amenities would supplement the City's park and recreational facilities and would not substantially increase the use of existing neighborhood and regional parks resulting in the degradation of City facilities. Additionally, the project does not propose, and would not create a need for, new or physically altered recreational facilities. Therefore, impacts would be less than significant and no mitigation is required.

Threshold (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?

No Impact. The project's open space and recreational facilities would provide recreational opportunities to future residents rather than relying solely on the City's existing public park system. The proposed project would not require construction or expansion of recreational facilities. Therefore, no impacts are anticipated and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.17 Transportation

Information in this section is based on the VMT Assessment (November 2020) prepared by Kimley-Horn and Associates for the proposed project, included in **Appendix J: VMT Assessment** of this Initial Study and summarized below.

Regional Circulation

The project site is located along Murrieta Hot Springs Road and Jefferson Avenue, which is classified as an Urban Arterial and Arterial, respectively, in the City of Murrieta Circulation Element Exhibit 5-10. Murrieta Hot Springs Road runs in an east to west direction and provides access to other major streets in the City as well as freeway access to both I-15 and I-215. Jefferson Avenue runs in a northwest to southwest direction and provides access from western portion of the City to the southern border with Temecula.

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

Less Than Significant Impact

Project Construction Trip Generation. Automobile and truck traffic volumes associated with project-related construction activities would vary throughout the construction phases, as different activities occur. However, project-related construction traffic would be temporary and cease upon project completion.

Project Operations Trip Generation. Daily and peak hour trips for the proposed project were based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) trip rates for the following use:

- Multifamily Housing (Low-Rise)

Table 4.17-1 provides the trip generation rates and the project's estimated trip generation. The project would generate an estimated 2,629 average daily vehicle trips (ADT), including 156 average daily trips in the morning peak hour and 199 average daily trips in the evening peak hour.

Table 4.17-1: Project Trip Generation

Land Use	Quantity	Unit	Trip Generation Estimates						
				AM Peak Hour			PM Peak Hour		
			Daily	In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)[1]	389	DU	2,629	37	119	156	125	74	199

1. Estimated weekday vehicle trip generation based on Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition Multifamily Housing (Low-Rise) land use 220 equation trip rates.

Source: Kimley-Horn, 2022.

The existing ADT along Murrieta Hot Springs Road west of Madison Avenue is 20,700 and 24,500 ADT on Jefferson Avenue south of Murrieta Hot Springs Road in the project area.[68] The net increase of 2,629 daily trips on Murrieta Hot Springs Road and Jefferson Avenue can be accommodated by the existing roadway infrastructure.

[68] Kimley-Horn and Associates, Inc. (2023). *Traffic Study for the Proposed QMC Murrieta Multi-Family Project.*

Public Transit. Public transit bus service would continue to be provided by the Riverside Transit Agency (RTA), with bus routes along Madison Avenue. The nearest transit stop is the RTA Route 23 bus stop located at the existing Walmart at 41200 Murrieta Hot Springs Road, approximately 0.2 mile north of the project site. Route 23 provides service between the cities of Wildomar and Temecula, with stops along Murrieta Hot Springs Road and Madison Avenue. Project implementation would not interfere with existing transit routes. The proximity of the project site to the bus stop would provide access to transit service for project residents.

The Murrieta General Plan Circulation Element identifies an existing Class II bicycle lane on northbound and southbound Jefferson Avenue. Class II facilities are defined as on-road striped bike lanes. Murrieta Hot Springs Road is also planned for a future Class II bicycle lane. Project implementation would not interfere with the existing Class II bikeway on Jefferson Avenue or future planned bike lane on Murrieta Hot Spring Road. Consistent with the General Plan, the project will stripe a Class II bike land on Murrieta Hot Springs Road as part of the ultimate half-width improvements along the project frontage.

There are no existing pedestrian facilities adjacent to the project site. The project would construct pedestrian sidewalks along the project frontages on Murrieta Hot Springs Road and Jefferson Avenue. Therefore, project construction and operations would not conflict with an applicable plan, ordinance, or policy concerning the circulation system. Impacts would be less than significant impact and no mitigation is required.

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

Less Than Significant Impact. The City of Murrieta adopted Vehicle Miles Traveled (VMT) thresholds as required by CEQA and pursuant to SB 743. The City's *Traffic Impact Analysis Preparation Guidelines* (March 2021) provide screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed level analysis. Screening thresholds are broken down into: (1) project type screening or (2) General Plan Comparison. The City Guidelines state that a project only needs to fulfill one of the screening types to qualify for screening. According to the project-specific VMT assessment prepared for the proposed project, the project site is consistent with the General Plan land use designation and TOD zoning overlay. The project meets the use, density, and development standards prescribed in the General Plan and zoning, and therefore would not generate more VMT than what was analyzed in the General Plan. Based on the City's *Traffic Impact Analysis Preparation Guidelines*, the project screens out from further VMT analysis under the General Plan Comparison screening threshold. Therefore, the project's VMT impact would be considered less than significant and no mitigation is required; no further VMT analysis would be required.

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

Threshold (d) Would the project result in inadequate emergency access?

Less Than Significant Impact. Vehicular access to the project site would be provided by two driveways: one on Jefferson Avenue and one on Murrieta Hot Springs Road. The driveway on Jefferson Avenue would be accessed through a deceleration lane along Jefferson Avenue, which would allow traffic to slow down to a safer speed to make a right turn at the driveway without affecting the main flow of traffic. Both driveway entrances would be 28 feet wide, with 26 or 28-foot-wide private drive aisles within the project site. Internal drive aisles would branch off to secondary drive aisles which would provide access to the

residential garages, carports, and guest parking. Further, the proposed project is a residential development bordered by a mix of planned future residential and existing commercial uses. The project would not include the use of any incompatible vehicles or equipment, such as farm equipment. The project would be consistent with the existing land use designations and would not substantially increase hazards due to geometric design features.

With regards to emergency access, Murrieta Municipal Code Chapter 15.24.130 Section 503.2.1 requires fire apparatus access roads serving multi-family structures to have unobstructed improved width of not less than 24 feet. The project design would meet the code requirements by providing 26 or 28-foot-wide private drive aisles internal to the project site. All drive aisles would accommodate standard fire lane turning radii and hammerhead turnaround maneuvers for emergency vehicles and fire services. Compliance with Murrieta Municipal Code and Murrieta Fire and Rescue requirements would ensure that no impacts to emergency access would occur. Further, the project would not require the complete closure of any public streets or roadways during construction. Temporary construction activities would not impede the use of roadways for emergency response vehicles. Therefore, impacts are less than significant and no mitigation required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.18 Tribal Cultural Resources

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

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

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

Less Than Significant Impact with Mitigation. Chapter 532 Statutes of 2014 (i.e., AB 52) requires that lead agencies evaluate a project's potential impact on "tribal cultural resources." Such resources include "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources." AB 52 also gives lead agencies the discretion to determine, based on substantial evidence, whether a resource qualifies as a "tribal cultural resource."

In compliance with PRC §21080.3.1(b), the City has provided formal notification to California Native American tribal representatives identified by the California Native American Heritage Commission. Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects from development on tribal cultural resources as defined in PRC §21074. The City contacted tribal representatives on September 2, 2022. As of the release date of the Initial Study, the City has received one request for consultation from the Pechanga Band of Indians. Since the project site is currently vacant and contains a seasonal watercourse, it is more likely that there are undiscovered Native American tribal cultural resources at the project site. A field survey did not identify any cultural or tribal cultural resources. A sacred lands file search submitted to the Native American Heritage Commission was positive, indicating a higher likelihood of tribal cultural resources in the area. A potential impact to tribal cultural resources could occur from project construction activities. Therefore, the project would be subject to implement MM TCR-1, MM TCR-2, and MM TCR-3 which requires the applicant retain an archaeological monitor and to develop a Cultural Resources Monitoring Plan (CRMP) for the treatment and mitigation of Native American cultural resources discovered during project development.

If tribal cultural resources are found, implementation of MM TCR-4, through MM TCR-8 would also be required, which outline instructions for unanticipated discovery of human remains, funerary objects and cultural resources, and procedures for burials and funerary remains. Implementation of MM TCR-1 through MM TCR-8 would reduce potential impacts to tribal resources to a less than significant level.

Standard Conditions and Requirements

No standard conditions are applicable to the proposed project

Mitigation Measures

MM TCR-1: **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. 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.

The Project Archaeologist and the Tribal monitor(s) shall manage and oversee monitoring for all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition and etc. The Project Archaeologist and the Tribal monitor(s), shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with any required special interest or tribal monitors.

The developer/permit holder shall submit a fully executed copy of the contract to the Community Development Department to ensure compliance with this condition of approval. Upon verification, the Community Development Department shall clear this condition.

The Project archeologist and the Consulting Tribes(s) shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis.

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(s) within 60 days of completion of monitoring.

MM TCR-2: **Cultural Resource Monitoring Plan (CRMP):** 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 monitoring schedule in coordination with the permittee/owner during grading, excavation and ground-disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and

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 resources evaluation.

MM 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, the Applicant shall consult with the Consulting Tribe(s) per the requirements in the CRMP.

MM 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 CRMP required pursuant to Mitigation Measure TCR-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. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV report shall be filed with the City under a confidential cover and not subject to Public Records Requests.

3) Curation. 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.

MM TCR-5: **Human remains:** If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur within 100 feet 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 and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

MM TCR- 6: **Inadvertent Archeological Find.** If during ground disturbance activities, unique cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed.

i. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the Community Development Director to discuss the significance of the find.

ii. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Community Development Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.

iii. Grading of further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional Tribal monitors if needed.

iv. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Condition.

v. If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the project archeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.

vi. Pursuant to PRC §21083.2(b) avoidance is the preferred method of preservation for archaeological resources and cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the City Community Development Director for decision. The City Community Development Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the City Community Development Director shall be appealable to the City Planning Commission and/or City Council."

MM TCR-7: **Archeology Report – Phase IV:** 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.

MM TCR-8: **Non-Disclosure of Reburials Location**. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r)., parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

4.19 Utilities and Service Systems

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

a.i) Water - Less Than Significant Impact. See Thresholds 4.10(a) and 4.10(b). WMWD provides water services to the City. The project site is not in WMWD boundary, but it is within the service area and is a WMWD customer. Project implementation would require the annexation of the project site into the WMWD boundary for water service. The proposed project would provide connections to the existing WMWD infrastructure in Murrieta Hot Springs Road and Jefferson Avenue. Specifically, the project would connect to the existing water main in Murrieta Hot Springs Road via an 8-inch water line. Project implementation would also include off-site improvements to Murrieta Hot Springs Road, which include the installation of an 8-inch water line and laterals to serve the site and an 8-inch water line for fire to serve the site.

As discussed in **Section 4.10: Hydrology and Water Quality**, WMWD uses groundwater and imported water supplies to meet water demands. The WMWD 2020 Urban Water Management Plan (UWMP) identifies sufficient water resources to meet demand within its retail area.[69] Although the proposed project would increase water demand, the proposed on-site water system and infrastructure, including the off-site improvements along Murrieta Hot Springs Road would be designed to accommodate for the increased demand of new residents. Project water demand would be approximately 276.24 afy. Water supplies for retail customers within WMWD had a water supply of 21,831 afy in 2020, with projected supplies totaling 41,821 afy by 2045.[70] The anticipated available water supply within WMWD's service area is anticipated to be greater than the demand for water in the future. WMWD has available capacity to serve the proposed project without requiring the construction of new water facilities beyond those that would be developed within the project site. Therefore, project implementation 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 and no mitigation is required.

a.ii) Wastewater Treatment - Less Than Significant Impact. WMWD also provides sewer service to the project area. WMWD owns and maintains sewer mains in Jefferson Avenue adjacent to the project site. WMWD contracts with the neighboring water agency, Eastern Municipal Water District (EMWD), for collection and treatment of wastewater within portions of the WMWD service area, inclusive of the project site. The project would install an 8-inch sanitary sewer line to connect to the existing sewer main in Jefferson Avenue. Wastewater would be collected and routed to the Temecula Valley Regional Water Reclamation Facility (TVRWF). TVRWF is located at 42565 Avenida Alvarado in Temecula, approximately 3.4 miles southeast of the project site. TVRWF has a typical daily flow of 14 million gallons a day (mgd), with a current capacity of 23 mgd.[71]

The WMWD Murrieta Sewer Master Plan contains wastewater generation factors by land use. Multi-family residential generates on average 330 gallons per day per Equivalent Dwelling Unit (EDU). The proposed project is anticipated to generate approximately 128,370 gallons of wastewater per day, which

[69] WMWD provides water service to wholesale customers and retail customers. The project site would fall within the WMWD retail service area.

[70] Western Municipal Water District. May 2021. 2020 Urban Water Management Plan – Table 9-5 Project Water Supplies, AFY

[71] Eastern Municipal Water District. January 2021. Temecula Valley Regional Water Reclamation Facility Fact sheet, Available at: https://www.emwd.org/sites/main/files/file-attachments/tvrwrffactsheet.pdf?1620227175, accessed August 15, 2022.

is approximately 0.9 percent of the daily flow treatment at TVRWF. Therefore, there is sufficient wastewater treatment capacity available in the region for the project's anticipated wastewater generation; project implementation would not require construction of a new or expanded wastewater treatment facility. Impacts would be less than significant and no mitigation is required.

a.iii) Stormwater - Less Than Significant Impact. See Thresholds 4.10(a) and 4.10(b). The proposed project would not substantially alter the existing drainage patterns within the site. Project implementation would replicate existing storm water patterns and include six drainage management areas (DMA) to treat and collect surface flows. The project also would install a 30-inch reinforced concrete storm drain pipe in Murrieta Hot Springs Road. Surface flows would be collected in catch basins located along the main drive aisles internal to the project site and would then flow toward a proposed underground detention basin. Flows would be detained prior to outfall into the existing off-site outfall basin southeast of the project site boundary. The proposed detention basin would be designed to meet hydromodification requirements per the Riverside County Hydrology Manual. Please also refer to **Section 4.10, Hydrology and Water Quality**. Therefore, surface water would be adequately managed on site and as such, project implementation would not result in a significant environmental effect related to the relocation or construction of new or expanded storm water facilities. Impacts are less than significant and no mitigation is required.

a.iv) Electric Power, Natural Gas, Telecommunication – Less Than Significant Impact. Electricity is provided by Southern California Edison (SCE) and natural gas is provided by the Southern California Gas Company (SoCal Gas). Companies such as AT&T, Verizon, and T-Mobile provide telecommunications services to the City. SCE, SoCalGas, and local telecommunications companies operate and maintain transmission and distribution infrastructure in the project area. The project's electricity demand would be approximately 1,120,530 kWh/year and natural gas demand would be approximately 5,594,660 KBtu/year; see **Section 4.6, Energy**, for further discussion concerning the project's electricity and natural gas demands. The site would connect to existing electrical, natural gas, and telecommunications infrastructure, and no off-site improvements are proposed or required. Therefore, impacts are less than significant and no mitigation is required.

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

Less Than Significant Impact. The WMWD 2020 UWMP was prepared in compliance with Urban Water Management Planning Act (UWMPA) requirements. The UWMPA requires every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 AF of water annually to prepare, adopt, and file a UWMP with the California Department of Water Resources every five years in the years ending in zero and five. The 2020 UWMP provides water supply planning for a 25-year planning period in 5-year increments and identifies water supplies needed to meet existing and future demands. The demand analysis must identify supply reliability under three hydrologic conditions: a normal year; a single-year; and multiple dry years.

As discussed above, the project site is within the WMWD service area. The Murrieta service area uses local groundwater and imported water from EMWD. WMWD directly extracts groundwater for their retail customers in the Murrieta service area, inclusive of the project site, from the Temecula Valley Basin. Imported water from EMWD is delivered through the Los Alamos interconnection to supplement local groundwater supplies.

The basis for the UWMP's water demand forecasting method is a combination of population forecasts and General Plan land use designations. SCAG has developed growth forecasts for cities and counties,

which is based on General Plans; see Threshold 4.14a. In turn, the City uses SCAG's growth projections to forecast water demand in the UWMP. Since the proposed project is consistent with the General Plan land use designation of Commercial and Community Commercial (CC) zoning with a Transit Oriented Development (TOD) Overlay District, projected water demand from the project site would have been considered and contemplated in the future water demand forecast in the WMWD 2020 UWMP. Therefore, project water demand is consistent with the SCAG's growth projections used to forecast water demands in the WMWD 2020 UWMP.

The WMWD 2020 UWMP includes a water service reliability assessment for the WMWD Retail Water Service areas. WMWD forecasts that its water supplies would be sufficient to meet demands in single-dry-year and multiple-dry-year conditions over the 2025-2045 period.[72] Therefore, there are sufficient water supplies would be available to serve the project and future development during normal, dry, and multiple dry years. Therefore, a less than significant impact would occur and no mitigation is required.

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

Less Than Significant Impact. As noted in Threshold 4.19 (a), WMWD provides sewer service to the project site and Eastern Municipal Water District (EMWD) provides treatment of wastewater within portions of the WMWD service area, inclusive of the project site. Wastewater would be collected and routed to the TVRWF, which has a typical daily flow of 14 million gallons a day (mgd), with a current capacity of 23 mgd. The proposed project would generate up to 128,370 gallons a day, which represents a nominal percentage of the daily flow capacity at TVRWF. Therefore, project wastewater generation would represent a 0.9 percent of the daily flow treatment at TVRWF. Despite the increase in wastewater generation, there is adequate capacity to serve the proposed project. Therefore, impacts would be less than significant and no mitigation is required.

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

Less Than Significant Impact. The City contracts with Waste Management for solid waste and recycling services. Waste Management is responsible for all residential, commercial, and industrial waste and recycling services. A majority of solid waste that cannot be recycled is routed to the El Sobrante Landfill in the City of Corona and Badlands Sanitary Landfill in Moreno Valley.[73] Construction wasted is collected and routed to the Moreno Valley Transfer Station in the City of Moreno Valley, and transported to the Waste Management Construction & Demolition Recycling Facility in downtown Los Angeles.[74] According to the Murrieta General Plan EIR, 99 percent of solid waste is disposed at El Sobrante Landfill and Badlands Sanitary Landfill in Moreno Valley. **Table 4.19-1: Landfill Capacities** provides capacity details for each of the landfills.

Table 4.19-1: Landfill Capacities

Landfill	Maximum Daily Permitted Tonnage (tons per day)	Maximum Permitted Capacity (Cubic Yards)	Remaining Capacity

[72] Western Municipal Water District. May 2021. 2020 Urban Water Management Plan – Table 11-2 through 11-4

[73] Based on Murrieta General Plan EIR Table 5.21-1 Disposal Facilities used by Murrieta. El Sobrante and Badlands accounted for over 99 percent of all solid waste disposed from the City.

[74] Phone call with Waste Management at (818) 266-1117, August 16, 2022.

El Sobrante	16,054	209,910,000	143,977,170
Badlands	4,800	34,400,000	7,800,000
Source: CalRecycle. Solid Waste Information System (SWIS), 2022.			

Project construction would generate solid waste requiring disposal at local landfills. Materials generated during construction of the project would include paper, cardboard, metal, plastics, glass, concrete, lumber scraps and other materials. California Green Building Standards Code §4.408 of the (CALGreen; California Code of Regulations, Title 24, Part 11) requires that at least 65 percent of nonhazardous construction and demolition waste from residential construction operations be recycled and/or salvaged for reuse. Project construction would include recycling and/or salvaging at least 65 percent of construction and demolition waste in accordance with the 2019 CALGreen.

Based on a generation rate of 12.23 pounds (lbs)/household/day for residential uses, the project would generate approximately 4,757 pounds, or 2.38 tons, of solid waste per day.[75] The project's projected solid waste generation would account for less than one percent of the overall daily capacity of the landfills. Existing landfills have the capacity to serve the proposed project and solid waste generated during construction, and operations would represent a nominal increase compared to the maximum daily permitted tonnage at landfills.

Compliance with all applicable regulations and laws regarding solid waste would further reduce impacts. The project would generate solid waste that would meet State standards and conform with solid waste reduction goals. Therefore, impacts are less than significant and no mitigation is required.

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

Less than Significant. Regulations specifically applicable to the proposed project include the California Integrated Waste Management Act of 1989 (AB 939), CalGreen Code §4.408, and AB 341, which requires multi-family residential development and commercial uses to implement recycling programs.

The Integrated Waste Management Act, which requires every City and County in the State to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, identifies how each jurisdiction will meet the State's mandatory waste diversion goal of 50 percent by and after the year 2000. AB 341 increased the diversion goal to 75 percent by 2020. Murrieta Municipal Code Chapter 8.28 specifies standards and regulations for the collection and management of solid waste in the City, in accordance with the Integrated Waste Management Act.

The 2019 CalGreen Code §4.408 requires preparation of a Construction Waste Management Plan that outlines ways in which the contractor would recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition debris. During the construction phase, the project would be required to comply with the CalGreen Code through the recycling and reuse of at least 65 percent of the nonhazardous construction and demolition debris from the project site.

Murrieta Municipal Code Chapter 16.18.150 provides standards for the provision of solid waste (refuse) and recyclable material storage areas. Multi-family projects are required to provide individual unit solid waste storage requirements and common solid waste storage areas. Multi-family developments are

[75] CalRecyle. 2006. *Estimated Solid Waste Generation Rates: Residential Sector Generation Rates.* Available at https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed August 9, 2022.

required to provide a minimum of 48 square feet for solid waste and recycling storage areas (receptacles) for every 25 dwelling units. The proposed project would include common trash receptacles throughout the development and would meet the required square footage standards for solid waste and recycling storage.

The City has established a number of programs in partnership with Waste Management that promote recycling, composting, and waste reduction to increase diversion rates and decrease waste sent to landfills. Programs include bulky item and E-waste collection services and outreach and education. As noted in Threshold 4.19 (d), solid waste would be disposed of at existing waste and recycling landfills. Disposal of solid waste would comply with all federal, State, and local statues and regulations related to solid waste. The project would include bins for recyclables and solid waste, and impacts would be less than significant.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.20 Wildfire

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

No Impact. California Department of Forestry and Fire Protection (CalFire) Fire Hazard Severity Zone Map for the County of Riverside indicates the project site is not within a State Responsibility Area.[76] The project site is in a Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ) within a Local Responsibility Area. Project design would adhere to Riverside County Fire and Murrieta Fire and Rescue regulations and requirements. Project site access would adhere to the City of Murrieta Municipal Code Chapter 15.24.130 which requires fire apparatus access roads be provided and maintained for purposes of rapid and reliable fire apparatus access and for unobstructed traffic circulation for evacuation or relocation of civilians during a wildfire or other emergency. Compliance with the code requirements would ensure adequate emergency access on the project site. Additionally, project construction would not require the complete closure of any public or private streets or roadways during construction. Temporary construction activities would not impede use of the road for emergencies or access for emergency response vehicles. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and no impact would occur.

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

No Impact. The project is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. Therefore, no impact would occur and no mitigation is required.

Threshold (c) If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. As discussed above, the project is not located in or near State responsibility areas or lands classified as very high fire hazard severity zones. The project site is within a developing suburban area of the City and would connect existing infrastructure such as roads, emergency water sources, power lines, and other utilities along Murrieta Hot Springs Road and Jefferson Avenue. No impact would occur and no mitigation is required.

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

No Impact. The project is not within an area classified as a VHFHSZ. The project site has flat topography and is not within a landslide zone; therefore, people or structures would not be exposed to downstream

[76] CalFire. *FHSZ Viewer.* Available at https://egis.fire.ca.gov/fhsz/. Accessed on July 5, 2022.

flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. No impact would occur and no mitigation is required.

Standard Conditions and Mitigation Measures

No standard conditions or mitigation measures are required.

4.21 Mandatory Findings of Significance

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

Less than Significant Impact with Mitigation. As discussed throughout this Initial Study, the project does not have the potential to significantly 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 or 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 that cannot be reduced to less than significant following compliance with the established regulatory framework (i.e., local, State, and federal regulations) and the implementation of recommended mitigation measures.

As concluded in Section 4.4, the project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop self-sustaining levels, threaten or eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. The project would require implementation of MM BIO-1, which contains provisions for a pre-construction presence/absence survey for burrowing owl at the project site, and MM BIO-2, which contains provisions for pre-construction nesting bird surveys and construction scheduling to ensure compliance with the MBTA and CFGC. Following implementation with MM BIO-1 and MM BIO-2, the project would not result in impacts to nesting birds.

As concluded in Section 4.5, the project would not eliminate important examples of the major periods of California history or prehistory. Due to the undeveloped nature of the project site and high sensitivity for cultural resources in the surrounding area, the project would require implementation of MM CR-1, which specifies preparation of a cultural resources monitoring program conducted by a qualified archaeologist.

Threshold (b) Does the project have possible environmental effects which are individually limited, but cumulatively considerable?

Less Than Significant Impact. The project does not have impacts that are individually limited, but cumulatively considerable. Incremental impacts resulting from project construction and operations and other cumulative projects that would be under construction include biological resources, cultural resources, geology and soils, and tribal cultural resources. The analysis concluded that these incremental impacts are each less than significant or can be mitigated to a less than significant level. When viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects, the project's contribution is not cumulatively considerable. The proposed project complies with long-term regional air quality plans, regional population forecasts, and is within the service capabilities of utility purveyors. There would be no significant adverse environmental impacts. The analysis contained in this Initial Study evaluated existing conditions, potential impacts associated with project development, and possible environmental cumulative impacts. The project does not have any impact on projected growth or planned projects for the City or neighboring jurisdictions known as of the date of this analysis.

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

Less Than Significant Impact. There are no known substantial adverse effects on human beings, which the proposed project would cause, either directly or indirectly. The environmental evaluation has concluded that no significant environmental impacts would result from the project.

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