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April 2024

Palmdale Housing Opportunity Site Project

Draft Initial Study/Mitigated Negative Declaration

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1.0 Introduction

1.1 Statutory Authority and Requirements

This Initial Study has been conducted in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] § 21000 et seq.), the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000 et seq.), and the City of Palmdale's CEQA Procedures. Pursuant to CEQA Guidelines § 15063, this Initial Study has been conducted to determine if the proposed Palmdale Housing Opportunity Project ("proposed Project") would have a significant effect on the environment. The approximately 14.32-acre proposed Project site is located on five parcels ("Project site") that will be consolidated from 45 smaller parcels located generally between 26th Street East, East Avenue R-9, 29th Street East, and East Avenue R-12. More information on the subject parcels can be found in **Section 2.0, Project Description**. The City of Palmdale ("Applicant") proposes a community of mixed housing types serving a range of income levels. The proposed Project site is currently vacant and highly disturbed. The Project site is generally bound by undeveloped land to the north, single-family residential to the east and south, and undeveloped land to the west.

The proposed Project seeks approval of the following entitlements:

- Tentative Tract Map (TTM 24-0001)
- Master Development Plan (CDEV 24-0001)
- Site Plan Review (SPR 24-0003)

Pursuant to CEQA Guidelines § 15063(c), the purposes of an Initial Study are to:

- Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration (ND);
- Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND;
- Assist in the preparation of an EIR, if one is required;
- Facilitate environmental assessment early in the design of a project;
- Provide documentation of the factual basis for the finding in a ND that a project will not have a significant effect on the environment;
- Eliminate unnecessary EIRs; and
- Determine whether a previously prepared EIR could be used with the project.

This Initial Study is intended to be used as a decision-making tool for the Lead Agency and responsible agencies in considering and acting on the proposed Project. Responsible agencies would comply with CEQA by considering this environmental analysis for discretionary actions associated with proposed Project implementation, if any.

CEQA Guidelines § 15063(g) specifies that as soon as a Lead Agency has determined that an Initial Study will be required for a project, the Lead Agency shall consult informally with all Responsible Agencies and all Trustee Agencies responsible for resources affected by a project to obtain their recommendations as to whether an EIR, Mitigated Negative Declaration (MND), or ND should be prepared.

1.2 Summary of Findings

Pursuant to CEQA Guidelines § 15367, the City, as Lead Agency, has the authority to conduct environmental review and adopt environmental documentation in accordance with CEQA. This Initial Study has evaluated the environmental issues outlined in **Section 3.2, Environmental Factors Potentially Affected**. It provides decision-makers and the public with information concerning the proposed Project's potential environmental effects and recommended mitigation measures, if any.

Based on the Environmental Checklist Form and supporting environmental analysis, the proposed Project would have no impact or a less than significant impact concerning all environmental issue areas, except the following, for which the proposed Project would have a less than significant impact with mitigation incorporated:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Noise
- Tribal Cultural Resources

As set forth in CEQA Guidelines § 15070, an Initial Study leading to a Mitigated Negative Declaration (IS/MND) can be prepared when "(t)he Initial Study identifies potentially significant effects, but (1) revisions…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 Notice of Intent (NOI) to Adopt an MND has been provided to the Clerk of the County of Los Angeles and mailed to all Responsible Agencies and Trustee Agencies concerned with the proposed Project and other public agencies with jurisdiction by law over resources affected by the proposed Project. A 30-day public review period has been established for the IS/MND in accordance with CEQA Guidelines § 15073. During the public review period, the IS/MND, including the technical appendices, will be made available for review on the City of Palmdale website, at:

https://www.cityofpalmdaleca.gov/277/Environmental-Documents

In reviewing the IS/MND, affected Responsible Agencies, Trustee Agencies, and the interested public should focus on the document's adequacy in identifying and analyzing the proposed Project's potential environmental effects and the ways in which the potentially significant effects can be avoided or mitigated. Written comments on this IS/MND may be sent to:

City of Palmdale
Department of Economic and Community Development
Attn: Megan Taggart, Deputy Director of Economic and Community Development
Email:mtaggart@cityofpalmdale.org
38250 Sierra Highway
Palmdale, CA 93550

Following receipt and evaluation of comments from agencies, organizations, and/or individuals, the City will determine whether any substantial new environmental issues have been raised. If so, further documentation may be required. If no substantial new environmental issues have been raised or if the issues raised do not provide substantial evidence that the proposed Project would have a significant effect on the environment, the IS/MND will be considered for adoption and the proposed Project for approval.

1.4 Report Organization

This document is organized into the following sections:

Section 1.0: Introduction provides a Project introduction and overview, cites the CEQA Guidelines to which the proposed Project is subject, and summarizes the IS/MND's conclusions.

Section 2.0: Project Description details the Project's location, environmental setting, background and history, characteristics, discretionary actions, construction program, phasing, agreements, and required permits and approvals. This Section also identifies the IS/MND's intended uses, including a list of anticipated permits and other approvals.

Section 3.0: Environmental Checklist Form provides the Project background and an overview of potential impacts that may or may not result from Project implementation.

Section 4.0: Evaluation of Environmental Impacts provides an analysis of potential environmental impacts identified in the environmental checklist.

Section 5.0: References identifies resources used to prepare the IS/MND.

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2.0 Project Description

2.1 Location

The proposed Project site is in the City of Palmdale (City), approximately 62 miles by road north of downtown Los Angeles in the high desert area of northeast Los Angeles County (County). **Figure 2.1-1: Regional Vicinity Map** depicts the proposed Project site in a regional context.

The approximately 14.32-acre proposed Project site consists of five parcels, numbered Parcels 1 through 5, that will be consolidated from 45 smaller parcels located generally between 26th Street East, East Avenue R-9, 29th Street East, and East Avenue R-12. Several of the current parcels are separated by alleyways that will be incorporated into Project Parcels 1, 2, and 5. Accordingly, total acreage of Project Parcels 1, 2, and 5 is slightly larger than the combined area of the current parcels from which they will be compiled. The Assessor's Parcel Numbers (APNs) for the 45 parcels are shown in **Table 2.1-1: Proposed Project Parcels**. **Figure 2.1-2: Local Site Vicinity Map** depicts the local vicinity of proposed Project.

Table 2.1-1: Proposed Project Parcels

Project Parcel	Ultimate Acreage	Current Parcel APN
Parcel 1	2.89	3019-012-902, 3019-012-903, 3019-012-904, 3019-012-905, 3019-012-910, 3019-012-906, 3019-012-907, 3019-012-908, 3019-012-909, 3019-012-901, 3019-012-911, 3019-012-912
Parcel 2	3.66	3019-011-917, 3019-011-919, 3019-011-906, 3019-011-908, 3019-011-902, 3019-011-903, 3019-011-909, 3019-011-920, 3019-011-905, 3019-011-918, 3019-011-901, 3019-011-907, 3019-011-900
Parcel 3	3.04	3019-010-906, 3019-010-907, 3019-010-908, 3019-010-909, 3019-010-910, 3019-010-911, 3019-010-903, 3019-010-912, 3019-010-904, 3019-010-905, 3019-010-913
Parcel 4	2.78	3019-009-900
Parcel 5	1.95	3019-011-911, 3019-011-912, 3019-011-915, 3019-011-916, 3019-011-910, 3019-011-904, 3019-011-913, 3019-011-914

Source: LeSar Development Consultants, Palmdale Housing Opportunity Project Master Plan Document, August 23, 2023; Los Angeles County Office of the Assessor, <https://maps.assessor.lacounty.gov/m/> (accessed May 24, 2023).

Regional access to the proposed Project site is provided via State Route (SR) 14, which runs north-south approximately 2.8 miles west of the proposed Project site. Local access to the proposed Project site is provided via SR 138, East Avenue S, and 25th Street East. The proposed Project site encompasses portions of Section 6 of Township 5N, Range 11W, Section 1 of Township 5N, Range 12W, and Sections 31 and 32 of Township 6N, Range 11W on the Palmdale, California United States Geological Survey (USGS) 7.5-minute topographic quadrangle.

Figure 2.1-1: Regional Vicinity Map

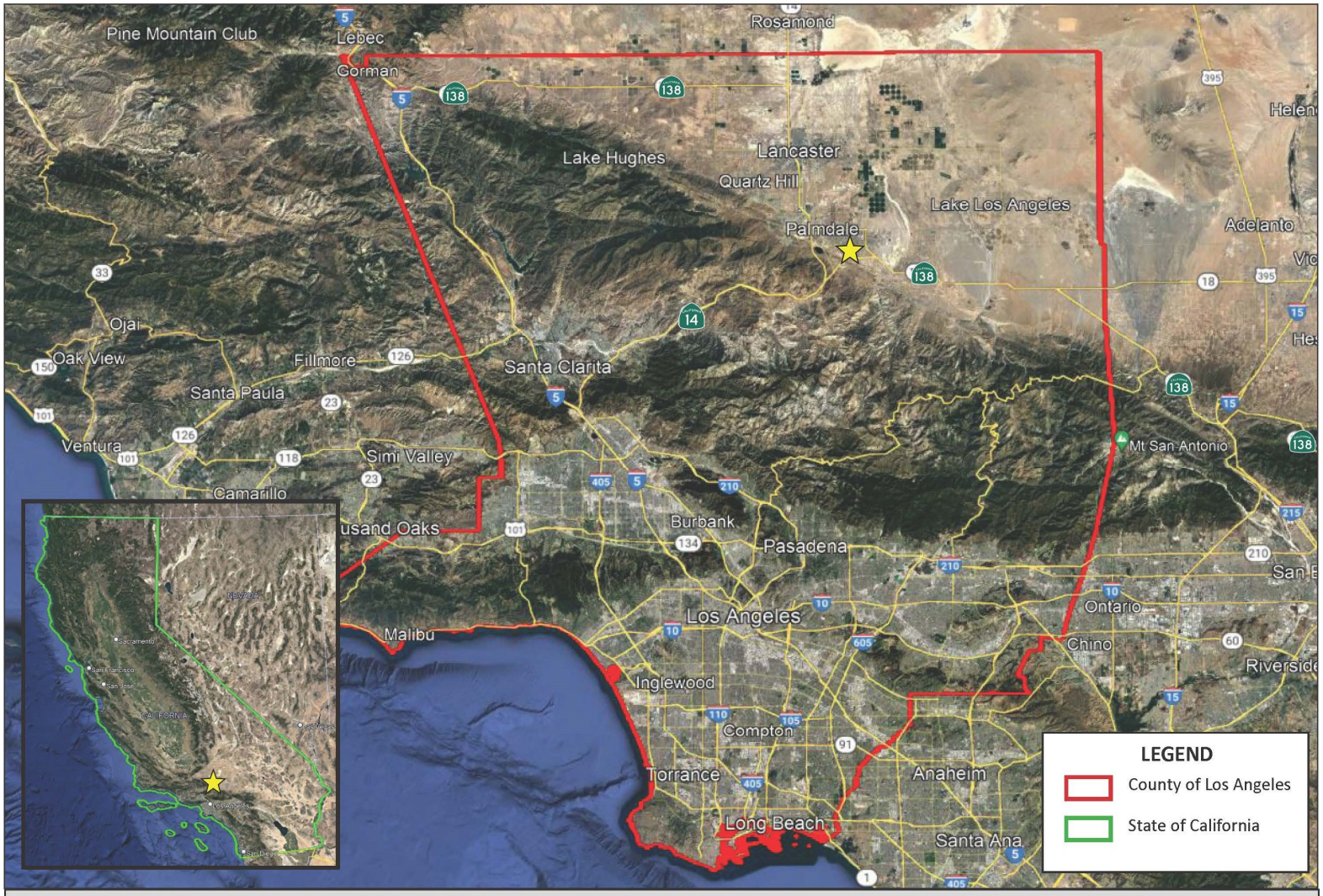

Figure 2.1-1: REGIONAL VICINITY MAP
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Figure 2.1-2: Local Site Vicinity Map

Figure 2.1-2: LOCAL SITE VICINITY MAP
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2.2 Environmental Setting

The City encompasses 106.6 square miles and is located in northern Los Angeles County. The City is bound by the San Gabriel Mountains to the south, the City of Lancaster to the north, and portions of unincorporated Los Angeles County to the east and west. The City is a rapidly developing exurb of the City of Los Angeles in a rural to semi-rural desert setting. Land uses in the City are predominantly residential with commercial uses largely concentrated along the Palmdale Boulevard, 47th Street East, and SR 14 corridors. Large concentrations of business park use are found in the northern portion of the City between Avenue O, 10th Street West, and Sierra Highway. The California Aqueduct runs northwest to southeast in the western portion of the City. Park and Open Space uses are interspersed throughout the City. Industrial and Airport-related uses are concentrated around U.S. Air Force (USAF) Plant 42 (Plant 42) in the north-northeastern area of the City. Plant 42 is located approximately four miles north of the proposed Project site. Plant 42 is a classified aircraft manufacturing facility at which several private contractors build and maintain aircraft for the American and allied militaries. The facility currently operates two 12,000-foot runways.

2.2.1 On-Site and Surrounding Land Uses

As shown on **Figure 2.2-1: Existing Conditions**, the proposed Project site is vacant and undeveloped. Single-family residential uses are adjacent to the Project site along the east and can be found across East Avenue R-12 to the south. To the north and west of the Project site lie areas of undeveloped land.

2.2.2 General Plan Land Use and Zoning

Figure 2.2-2: General Plan Land Use depicts the General Plan Land Use for the proposed Project site and surrounding area. The City of Palmdale General Plan designates the proposed Project site and surrounding areas to the west, north, and east as Residential Neighborhood (RN2).[1] Areas directly to the south are designated Single Family Residential 3 (SFR3). The RN2 land use designation is intended for a range of housing types, including small-lot single-family residential, townhouses, condominiums, and apartments with on-site recreation and open space. The City's General Plan Land Use Element identifies the RN2 designation as being reserved for areas served by adequate infrastructure and services to support the planned level of development. The land use designation is considered appropriate in existing residential neighborhood areas or planned developments within a short distance of Village Centers. Residential density in areas designated RN2 represents a range from a minimum of 10 dwelling units per acre (du/ac) to a maximum of 20 du/ac. The maximum building height for areas designated RN2 is 40 feet.

[1] City of Palmdale, Palmdale 2045, Land Use Element, September 2022.

Figure 2.2-1: Existing Conditions

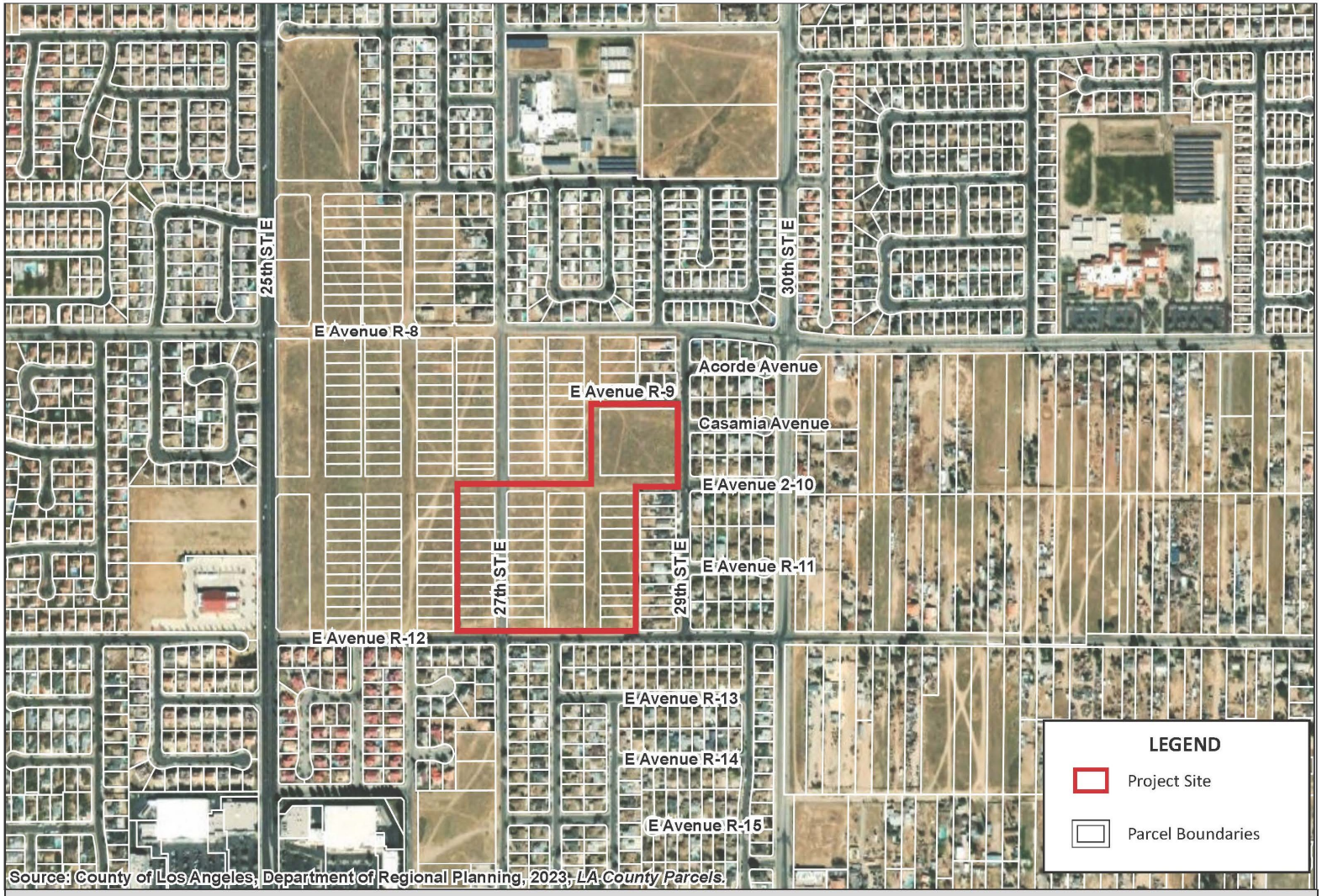

Figure 2.2-1: EXISTING CONDITIONS
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Figure 2.2-2: General Plan Land Use

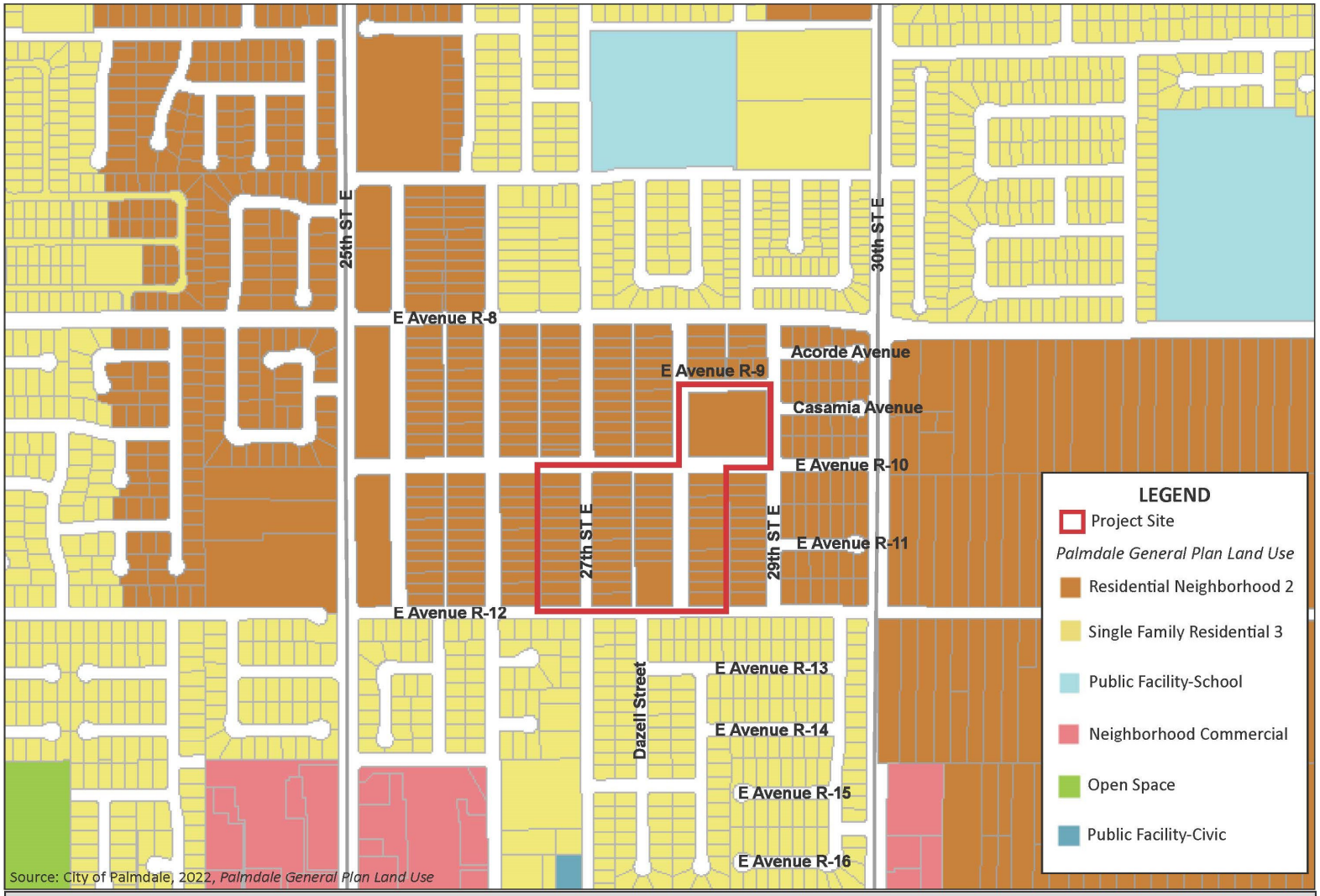

FIGURE 2.2-2: GENERAL PLAN LAND USE
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Figure 2.2-3: Zoning, depicts the zoning for the proposed Project site and surrounding area. The proposed Project site is in the Residential Neighborhood 2 (RN2) Zoning District.[2] Pursuant to Palmdale Municipal Code (PMC) Section 17.33.010.B, the RN2 Zoning District is intended for grouped housing such as small-lot single-family residential townhouses, condominiums, and apartments with on-site recreation and open space allowing a density range of 10 to 20 du/ac. The RN2 Zone is appropriate in existing residential neighborhood areas or planned developments within a short distance of Village Centers. The RN2 Zone is reserved for areas which are or will be served by adequate infrastructure and services needed to support this level of development. The RN2 Zone implements the Residential Neighborhood 2 General Plan land use designation.

The design standards for the RN2 Zoning District provide for single-family residential lot size ranges from a minimum of 1,900 square feet to a maximum of 3,000 square feet per dwelling unit. The maximum height of structures in the RN2 zoning district is 40 feet or three stories.

2.3 Project Characteristics

2.3.1 Project Overview

See **Appendix A: Palmdale Housing Opportunity Project Master Plan Document** for additional information and graphics for the proposed Project. The proposed Project is depicted in **Figure 2.3-1: Building Development Plan**. Existing zoning allows up to 286 units on the Project site. As shown, the Project proposes to develop a community of mixed housing types serving a range of income levels. **Table 2.3-1: Overall Project Summary** provides a summary of the Project's units.

Table 2.3-1: Overall Project Summary

Unit Type	Number of Units	Average Parking Provided	Spaces Provided
Affordable Walkup Apartments	152	1.4 spaces per unit	214
Market Rate Walkup Apartments	84	1.7 spaces per unit	146
Townhomes	60	2.0 spaces per unit	120
Cottages	34	1.5 spaces per unit	52
On-Street Parking Spaces			186

Source: LeSar Development Consultants, Palmdale Housing Opportunity Project Master Plan Document, August 23, 2023.

The proposed Project includes 330 dwelling units composed of 152 affordable walkup apartments, 84 market rate apartments, 60 townhomes, and 34 cottages. Approximately 32 percent of Project dwelling units are designated as low-income units and approximately 14 percent are designated as very low-income units. Under California's State Density Bonus law,[3] the inclusion of at least 24 percent low-income dwelling units qualifies the proposed Project for a 50 percent density bonus. The Project proposes a density bonus of approximately 15 percent, thereby allowing the Project to achieve a total of 330 units.

The State's Density Bonus law also allows for a number of concessions allowing for a modification of development standards and other zoning requirements as well as waivers allowing for reductions or modifications to development standards or other regulations that affect the feasibility of a project. The Project is requesting two concessions. The first concession is a reduction in front/street side setbacks for multifamily housing from 15-25 feet to 10-15 feet. The second concession is a reduction or removal of multi-family usable private open space.

[2] City of Palmdale Municipal Code, Title 17
[3] Gov. Code § 65915

Figure 2.2-3: Zoning

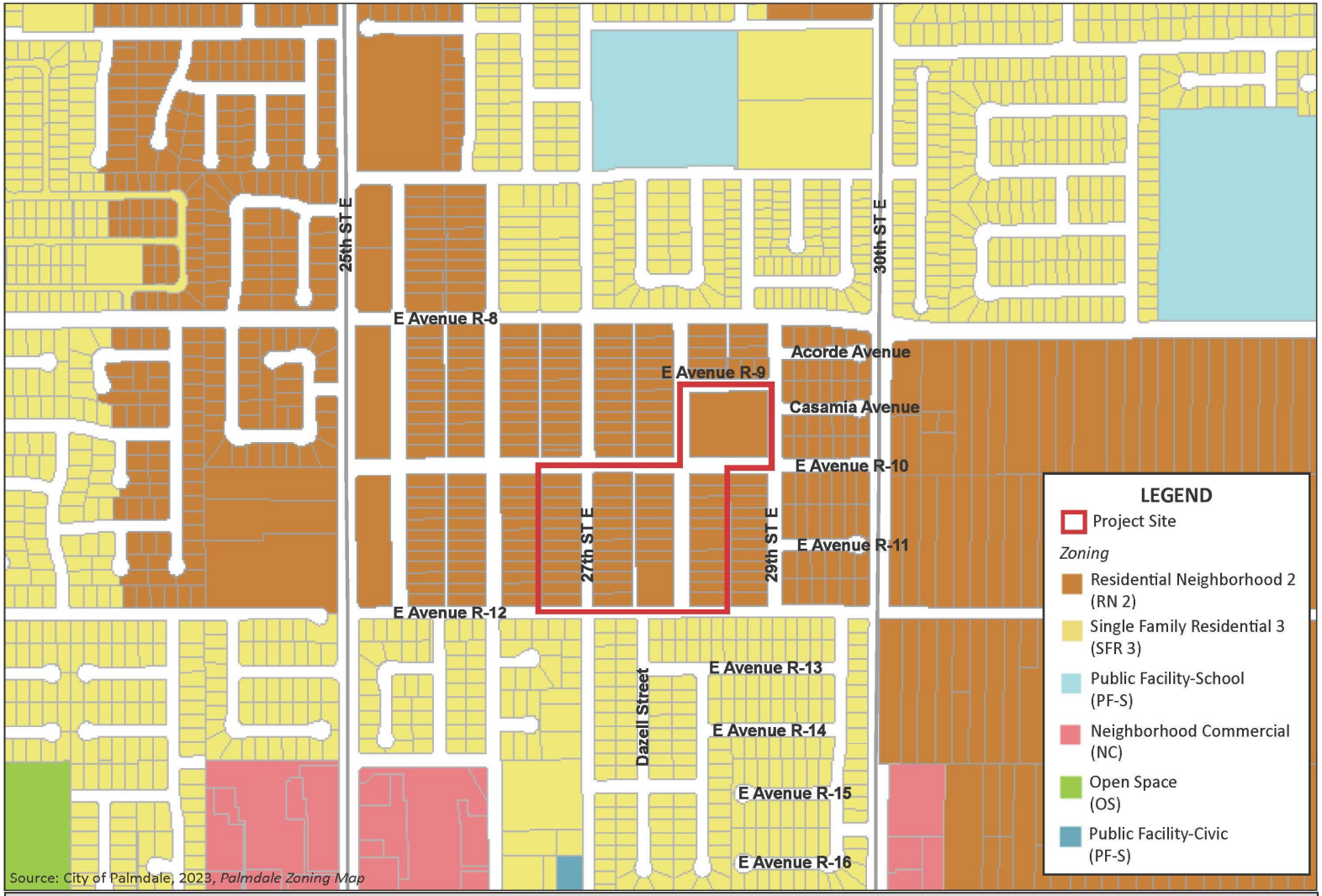

FIGURE 2.2-3: ZONING
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Figure 2.3-1: Building Development Plan

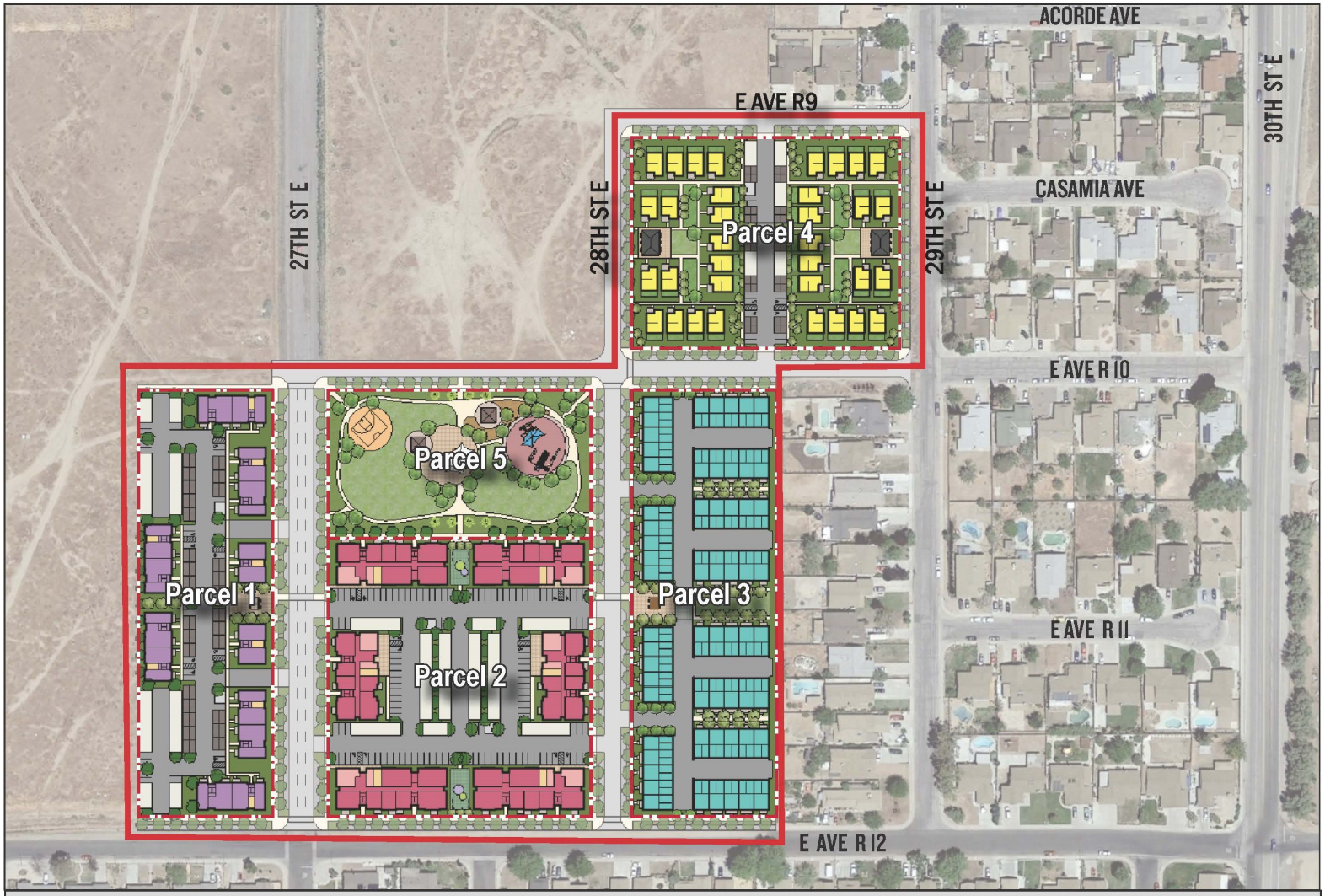

FIGURE 2.3-1: BUILDING DEVELOPMENT PLAN
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The PMC requires 200 square feet (SF) of usable open space per unit. For ground floor multi-family units, 100 SF of the 200 SF must be private open space. For upper floor multi-family units, 60 SF of the 200 SF must be private open space. The second concession would provide private open space for some multi-family ground floor units, and no private open space would be provided for upper floor units. However, the loss of private open space would be offset by the public park on Parcel 5, the play areas on Parcel 2, and the pocket park on Parcel 1, resulting in approximately 394 SF of usable open space per multi-family unit.

The proposed Project would also utilize reduced parking ratios allowed under the State's Density Bonus law. The reduced parking ratios are discussed in the following sections as part of the description of each of the Project's four residential parcels.

Figure 2.3-2: Building Development Plan – Parcel 1 (Market Rate Walkup Apartments) depicts the building development plan for Parcel 1. **Table 2.3-2: Building Development Plan – Parcel 1 (Market Rate Walkup Apartments)** provides a summary of the building development plan for Parcel 1. Parcel 1 would feature 84 market rate dwelling units in a cluster of eight three-story buildings. Buildings would be developed in one of two configurations. The first configuration, Type A, would include six buildings of approximately 11,760 SF each, with a total gross building area of approximately 70,560 SF. Type A would provide 72 dwelling units, including 36 one-bedroom units, 18 two-bedroom units, and 18 three-bedroom units. The second configuration, Type B, would include two buildings of approximately 6,840 SF each, and a gross building area of approximately 13,680 SF. Type B would provide a total of 12 two-bedroom units.

Pursuant to the PMC, multi-family units require 1 parking space per studio/one-bedroom unit, 1.5 spaces per two-bedroom unit, and 2 spaces per three-bedroom unit and 0.2 space per unit guest parking, which all together would be 134 spaces. Per the State Density Bonus, the Project is entitled to the reduced parking ratios: 1 space per studio/one-bedroom unit and 1.5 spaces per two-bedroom and three-bedroom unit. As such, the Project would be required to provide 108 parking spaces for these units; however, the proposed Project would provide 146 parking spaces for these 84 dwelling units, which is an average of 1.7 spaces per unit. Parking would be accommodated in a series of carports and enclosed garages located at the center and the western edge of the parcel. An additional 28 on-street parking spaces would also be provided. A pocket park would be located along the middle of Parcel 1 on 27th Street East, connecting to a crosswalk to Parcel 2.

Table 2.3-2: Building Development Plan – Parcel 1 (Market Rate Walkup Apartments

Building Type	Unit Type	Number of Units	Average Square Footage per Unit
Type A	One Bedrooms	36	576
	Two Bedrooms	18	864
	Three Bedrooms	18	1,026
Type A Subtotals		*72*	
Type B	Two Bedrooms	12	864
Type B Subtotals		*12*	
Parcel 1 Total Units		**84**	

Source: LeSar Development Consultants, Palmdale Housing Opportunity Project Master Plan Document, August 23, 2023.

Figure 2.3-2: Building Development Plan – Parcel 1 (Market Rate Walkup Apartments)

FIGURE 2.3-2: BUILDING DEVELOPMENT PLAN - PARCEL 1 (MARKET RATE WALKUP APARTMENTS)
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Figure 2.3-3: Building Development Plan – Parcel 2 (Affordable Walkup Apartments) depicts the building development plan for Parcel 2. **Table 2.3-3: Building Development Plan – Parcel 2 (Affordable Walkup Apartments)** provides a summary of the building development plan for Parcel 2. Parcel 2 would feature 152 affordable walkup apartments provided in a cluster of six, three-story buildings. Buildings would be developed in one of two configurations. The first configuration, Type A, would include four buildings of approximately 28,670 SF each, with a total gross building area of approximately 114,680 SF. Type A would provide 108 dwelling units, including 52 one-bedroom units, 28 two-bedroom units, and 28 three-bedroom units. The second configuration, Type B, would include two buildings of approximately 22,550 SF each, with a total gross building area of approximately 45,100 SF. Type B would provide 44 dwelling units, including 24 one-bedroom units, 10 two-bedroom units, and 10 three-bedroom units.

Table 2.3-3: Building Development Plan – Parcel 2 (Affordable Walkup Apartments)

Building Type	Unit Type	Number of Units	Average Square Footage per Unit
Type A	One Bedrooms	52	534
	Two Bedrooms	28	820
	Three Bedrooms	28	1,034
Type A Subtotals		*108*	
Type B	One Bedrooms	24	534
	Two Bedrooms	10	820
	Three Bedrooms	10	1,034
Type B Subtotals		*44*	
Parcel 2 Total Units		**152**	

Source: LeSar Development Consultants, Palmdale Housing Opportunity Project Master Plan Document, August 23, 2023.

Parking for Parcel 2 is subject to the same requirements as for Parcel 1, discussed above. As such, the Project would be required to provide 190 parking spaces for these units; however, the proposed Project would provide 214 parking spaces for these 152 dwelling units, which is an average of 1.4 parking spaces per unit. Parking would be provided in a series of carports clustered in the center of the parcel, and surface parking spaces abutting the rear of the apartment buildings. An additional 72 on-street parking spaces would also be provided. Parcel 2 would include two play areas. One play area would be situated on the north end of the parcel, connecting the public park on Parcel 5 with the Parcel 2 parking area. The second play area would connect the parking area to East Avenue R-12.

Figure 2.3-3: Building Development Plan – Parcel 2 (Affordable Walkup Apartments)

FIGURE 2.3-3: BUILDING DEVELOPMENT PLAN - PARCEL 2 (AFFORDABLE WALKUP APARTMENTS)
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Figure 2.3-4: Building Development Plan – Parcel 3 (Townhomes) depicts the building development plan for Parcel 3. **Table 2.3-4: Building Development Plan – Parcel 3 (Townhomes)** provides a summary of the building development plan for Parcel 3. Parcel 3 would feature 60 townhomes that include groups of two- and three-story townhomes. A total of 24 two-story, two-bedroom units would be developed. The two-story units would be approximately 1,496 SF each with a total gross building area of approximately 35,904 SF. A total of 36 three-story, three-bedroom units would be developed. The three-story units would be approximately 2,464 SF each with a total gross building area of approximately 88,704 SF.

Table 2.3-4: Building Development Plan – Parcel 3 (Townhomes)

Building Type	Unit Type	Number of Units	Average Square Footage per Unit
Two-Story Units	Two Bedrooms	24	1,346
Three-Story Units	Three Bedrooms	36	2,217
Parcel 3 Total Units		60	

Source: LeSar Development Consultants, Palmdale Housing Opportunity Project Master Plan Document, August 23, 2023.

Pursuant to the PMC, townhome units require two parking spaces per unit, which would be a total of 120 parking spaces for these units. Per the State Density Bonus, this Project is required to provide 90 parking spaces (1.5 spaces per two- and three-bedroom units). The proposed Project would provide 120 parking spaces, which is an average of two spaces per unit. An additional 37 on-street parking spaces would be provided. A pocket park would be developed in the middle of the parcel, connecting to a crosswalk on 28th Street East to Parcel 2.

Figure 2.3-5: Building Development Plan – Parcel 4 (Cottages) depicts the building development plan for Parcel 4. **Table 2.3-5: Building Development Plan – Parcel 4 (Cottages)** provides a summary of the building development plan for Parcel 4. Parcel 4 would feature 34 two-story single-family cottages. The gross building area per unit would be approximately 1,179 SF each with a total gross building area of approximately 40,086 SF. The average SF per unit is approximately 1,061 SF. The cottages would be clustered in two groups of 17 dwelling units, located east and west of the internal central driveway. The cottages would open onto a pocket park or central courtyard with fenced backyards facing toward the street. The courtyards would connect the cottages and street and parking areas with a series of sidewalks.

Table 2.3-5: Building Development Plan – Parcel 4 (Cottages)

Building Type	Unit Type	Number of Units	Average Square Footage per Unit
Two-Story Cottages	Three Bedrooms	34	1,061
Parcel 4 Total Units		**34**	

Source: LeSar Development Consultants, Palmdale Housing Opportunity Project Master Plan Document, August 23, 2023.

Pursuant to the PMC, single-family units require two parking spaces per unit which would be 68 spaces for these units. Per the State Density Bonus, this Project is required to provide 51 parking spaces (1.5 spaces per two- and three-bedroom units). The Project would provide 52 parking spaces accommodated in a series of carports and enclosed garages located on either side of a central driveway that would divide the parcel in half. An additional 51 on-street parking spaces would be provided.

Parcel 5 would be developed as a two-acre public park. The public park is envisioned to include features such as areas of open lawn, a central plaza with pavilions, a playground, a multi-purpose ball court, public restrooms, a walking path, and bicycle parking.

Figure 2.3-4: Building Development Plan – Parcel 3 (Townhomes)

FIGURE 2.3-4: BUILDING DEVELOPMENT PLAN - PARCEL 3 (TOWNHOMES)
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Figure 2.3-5: Building Development Plan – Parcel 4 (Cottages)

FIGURE 2.3-5: BUILDING DEVELOPMENT PLAN - PARCEL 4 (COTTAGES)
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2.3.2 Traffic Circulation

The proposed Project would include the development of new roadway access and internal driveways within Parcels 1 through 4. The Project would also develop 27th Street East, which is currently a paved but unmarked road connecting East Avenue R-8 with East Avenue R-12, as a five lane, 80-foot wide thoroughfare, featuring two eight-foot parking or drop off lanes, two 12-foot travel lanes, and a central 12-foot two-way turning lane. The two travel lanes would be marked with shared lane markings, or sharrows, indicating shared automobile/bicycle use. The proposed Project would include the development of two six-foot sidewalks and two eight-foot parkways on 27th Street East. A new thoroughfare, 28th Street East, would be developed, extending from East Avenue R-12, south of the proposed Project site, to a new road, East Avenue R-9, located along the northern edge of Parcel 4. 28th Street East would be developed as a four-lane thoroughfare featuring two eight-foot parking or drop off lanes and two 12-foot travel lanes. The proposed Project would include the development of two six-foot sidewalks and two four-foot parkways on 28th Street East. East Avenue R-10 would be extended from 27th Street East to 29th Street East.

2.3.2 Architectural Design

The proposed Project would feature a range of architectural styles. Preliminary conceptual illustrative architectural designs for the building types are provided in the Master Plan Document (see **Appendix A**). The affordable walkup apartments and market rate walk up apartments could feature contemporary exteriors with pitched roofs. The townhomes could feature large, covered front porches. The cottages could feature craftsman design elements, including gabled roofs, decorative corbels, and covered front porches.

As shown in **Figure 2.3-6: Proposed Project Birdseye View**, the proposed Project would have a greater density of buildings than the surrounding neighborhood with dwelling units more closely clustered on the proposed Project site than in the more traditional single family residential neighborhood to the east and south of the Project site. The proposed Project buildings, all two-to-three stories, would be taller than the single-story single family dwelling units in the surrounding existing neighborhoods. However, as the cottages and townhomes, featuring two-to-three story dwelling units, are located adjacent to the existing single-story dwellings, this would allow for a gradual transition in building height from existing development to the central and western sections of the proposed Project site dominated by three-story apartment buildings. In addition, the undeveloped areas to the north and west of the Project site and the single-family homes to the north and east of the Project site are all located within the RN2 Zoning District and would allow for similar densities and heights to those of the proposed Project.

2.3.3 Open Space and Landscaping

The proposed Project would include a variety of landscaped and open space areas, which would total approximately 2.95 acres. As described in **Section 2.3.1**, Parcel 5 would be developed as a public park. Parcels 1, 3, and 4 would feature pocket parks accessible to the public. Parcel 2 would include play areas, connecting the street to the interior of each parcel development.

The PMC and General Plan state that 200 SF of usable open space per unit is required for each single-family unit. The RN2 Zone requires that three amenities must be provided for the Project's cottage and townhome units. Parcel 3 and 4's pocket parks would provide approximately 276 SF of usable common open space per cottage and townhome unit. Each cottage and townhome unit would also have at least 100 SF of usable private open space in the form of back yards, front porches, front yards, or a combination thereof.

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Figure 2.3-6: Proposed Project Birdseye View

FIGURE 2.3-6: PROPOSED PROJECT BIRDSEYE VIEW
Palmdale Housing Opportunity Project
Draft Initial Study/Mitigated Negative Declaration

NOT TO SCALE

Per the requirements for the RN2 Zone, 200 SF of usable open space should be provided for each multi-family unit; of the 200 SF, each multi-family ground floor unit requires 100 SF of private open space, and each multi-family upper floor unit requires 60 SF of private open space. The Project includes a State Density Bonus concession related to the reduction/removal of multi-family private open space requirements. Usable private open space has been provided for some ground-floor units in the form of patios, terraces, or yards. However, not all multi-family units would have usable private open space and no private open space is provided for upper floor units. The pocket park in Project Parcel 1, the play area in Project Parcel 2, and the public park would result in approximately 394 SF of usable common open space per multi-family unit. The RN2 Zone requires that four amenities must be provided for the Project's multi-family units. These are provided in the form of play areas, pocket parks, and the adjacent public park.

The Project's parcels would include the following setbacks from the street: 12 feet along 27th Street East, 29th Street East, and East Avenue R-9; 12 to 15 feet along 28th Street East; 10 feet to 12 feet along East Avenue R-10; and 10 feet along East Avenue R-12. Per the PMC and General Plan, multi-family housing requires a front/street side setback of 15 to 25 feet. With the State Density Bonus concessions, the multi-family housing front/street side setbacks would be reduced to 10 to 15 feet.

The Project contains complete streets design features that encourage walking and biking in the area. The residential uses would be connected through sidewalks and pathways, including mid-block crosswalks and crosswalks at the intersections in the Project site. Trees would be planted at regular intervals along proposed Project streets and in parking areas.

2.3.5 Utilities and Infrastructure

Electric power and natural gas would be provided to the Project site by Southern California Edison (SCE) and Southern California Gas Company (SoCalGas), respectively. Water service would be provided by Palmdale Water District (PWD). Trash and recycling collection would be provided by Waste Management.

2.4 Project Construction Activities and Phasing

Project construction is anticipated to occur in multiple phases, parcel by parcel. As there is no known Project Proponent at this time, the phasing and construction schedule is speculative. Based on projects of similar size and phasing, assumptions were made to present a feasible construction schedule based on the parcels.

- Construction of Parcel 3 (Townhomes) would last approximately 14 months, beginning as early as September 2025 and ending as early as October 2026.
- Construction of Parcel 4 (Cottages) would last approximately 14 months, beginning as early as June 2026 and ending as early as July 2027.
- Construction of Parcel 1 (Market-Rate Walkup Apartments) would last approximately 16 months, beginning as early as September 2026 and ending as early as December 2027.
- Construction of Parcel 2 (Affordable Walkup Apartments) and Parcel 5 (Public Park) would last approximately 18 months, beginning as early as February 2027 and ending as early as July 2028.

For purposes of this environmental analysis, full build out of the Project is assumed to be completed by 2028. However, as the project constitutes a planning document, actual construction dates may vary. It is anticipated that as each parcel is developed it will be fully operational following construction.

Construction impacts associated with the installation of water distribution lines would primarily involve trenching to place the lines below surface. Installation of new water infrastructure would include on-site water distribution improvements, off-site work associated with connections to the public main, new fire hydrant(s), and upgrades as required by PWD, the City, and the Los Angeles County Fire Department (LACoFD). Prior to ground disturbance, Project contractors would coordinate with PWD to identify the locations and depth of all lines. Further, PWD would be notified in advance of proposed ground disturbance activities to avoid water lines and minimize disruption of water service. A Construction Management Plan would be implemented to minimize any temporary pedestrian and traffic impacts. The contractor would

implement the Construction Management Plan, which would ensure safe pedestrian access and vehicle travel in general, and emergency vehicle access throughout the construction period.

2.5 Agreements, Permits, and Approvals

As lead agency, the City would have discretionary approval authority over the proposed Project. To implement the proposed Project, at a minimum, the following discretionary permits/approvals must be granted by the City and others:

- Tentative Tract Map (TTM 24-0001)
- Master Development Plan (CDEV 24-0001)
- Site Plan Review (SPR 24-0003)

3.0 Environmental Checklist Form

3.1 Background

1.	**Project Title:** Palmdale Housing Opportunity Project
2.	**Lead Agency Name and Address:** City of Palmdale Planning Division 38250 Sierra Highway Palmdale, CA 93550
3.	**Contact Person and Phone Number:** Megan Taggart Deputy Director of Economic and Community Development 661.267.5213 mtaggart@cityofpalmdale.org
4.	**Project Location:** Between 26th Street East, East Avenue R-9, 29th Street East, and East Avenue R-12 Palmdale, CA
5.	**Project Sponsor's Name and Address:** City of Palmdale Department of Economic and Community Development 38250 Sierra Highway Palmdale, CA 93550
6.	**General Plan Designation:** Residential Neighborhood (RN2)
7.	**Zoning:** Residential Neighborhood (RN2) Zoning District
8.	**Description of Project:** *See Section 2.3: Project Characteristics*
9.	**Surrounding Land Uses and Setting:** *See Section 2.2.1: On-Site and Surrounding Land Uses*
10.	**Other public agencies whose approval is required (e.g., permits):** Los Angeles County Fire Department, Los Angeles County Sanitation Districts, Palmdale Water District
11.	**Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code §21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of the significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?** Yes, there is a plan for consultation with the Tribes that have requested such consultation within the timeframe established under AB 52.

3.2 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the proposed Project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant With Mitigation Incorporated," as indicated by the checklist on the following pages.

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

Lead Agency Determination

On the basis of this initial evaluation:

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

Brenda Magaña
Planning Manager

Date

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4.0 Evaluation of Environmental Impacts

The following environmental analysis is patterned after 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 site and off site, Project- and cumulative-level, 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.

4.1 Aesthetics

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code §21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway?				X
c) If in a non-urbanized area, 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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Impact Analysis

4.1a Would the Project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. A scenic vista is a viewpoint that provides expansive views of a highly valued landscape for public benefit. The predominant scenic vistas in the City are views of the surrounding desert and local mountains, such as the San Gabriel Mountains located approximately two miles southwest of the Project site. The Project site is currently vacant, the topography is relatively flat, and there are no tall structures or trees in the vicinity. As a result, views of the San Gabriel Mountains are visible from some roadways and residences that are adjacent to the proposed Project parcels. For example, 27th Street East which travels north-south through the western portion of the Project site, 29th Street East near the eastern boundary of the Project site, and East Avenues R-9 and R-10 near the northeast boundary of the Project site provide motorists with distant views of the mountains that are mostly unobstructed. Additionally, three private residences on the north side

of East Avenue R-9 face south toward vacant land where the Parcel 4 development is proposed and have unobstructed scenic views of the mountains. All other residences in the vicinity of the Project site have views that are blocked by walls or do not have prominent windows facing the mountains.

Construction activities would require the use and storage of large vehicles, equipment, building materials and stockpiled soils at the Project site that would temporarily cause disruptions to scenic views of the mountains from the adjacent roadways and residences described above. However, it is anticipated that the Project Parcels would be constructed in separate, staggered phases, thereby reducing the amount of equipment that would obstruct scenic views from adjacent roadways and residences at once. Given the short-term and temporary presence of construction equipment and materials, impacts to the scenic vista of the San Gabriel Mountains would be less than significant.

The proposed development would include construction of single-, two-, and three-story buildings that would have the potential to impact scenic views of the San Gabriel Mountains from adjacent roadways and residences. However, the majority of existing residences surrounding the proposed Project site are backed by cinderblock walls that partially or completely obscure views of the surrounding area, including the San Gabriel Mountains. Furthermore, the proposed Project is situated in the RN2 Zoning District, which anticipates higher density for redevelopment and/or new higher density on the Project site and on vacant property to the north. The proposed Project would comply with the design standards applicable in the RN2 Zoning District, including building height limits, and would be consistent with existing surrounding development. Accordingly, impacts would be less than significant.

4.1b 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 nearest designated State Scenic Highway is SR 2, approximately 16 miles southeast of the Project site.[4] Therefore, the proposed Project would not have the potential to impact scenic resources within a State Scenic Highway. No impact would occur.

4.1c If in a non-urbanized area, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The proposed Project would combine 45 undeveloped parcels into five parcels and develop them with residential uses and a public park. The Project site is surrounded by single-family residences to the north, east, and south, and although the proposed Project would have a higher density, the residential uses would be consistent with the surrounding environment. Landscaping would comply with the design standards provided in the PMC to maintain consistency with residences around the site. This would include mixed landscaping and hardscaping in lieu of fences as well as shared common areas. The proposed Project would not degrade the existing visual quality at the site or surrounding areas and impacts would be less than significant.

4.1d Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed Project is located in a partially developed, moderately urbanized environment. The Project site is surrounded by single-family residential development to the north, east, and south. Existing outdoor lighting in areas around the proposed Project site include streetlights along East Avenue R-8, 29th Street East and East Avenue R-12, and from the surrounding residential buildings. The proposed Project would develop new exterior lighting in the building, parking, and landscaped areas. The proposed Project would be required to comply with PMC Chapter 17.86.030, which requires lighting to be under 15 feet in height. New residences and streets would require nighttime lighting equivalent to the existing developments. Lighting would be focused on the ground and directed away from other residences. Glare can occur when sunlight or artificial light reflects off reflective surfaces, like glass. The General Plan and PMC do not outline specific glare or window regulations. The proposed Project would use standard building materials, so it would not be a significant source of glare compared to surrounding residential areas. Sufficient night lighting in residential neighborhoods is encouraged in General Plan

[4] Caltrans, 2019, California State Scenic Highway System Map, <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa> (Accessed July 13, 2023).

Goal Land Use and Community Design Element Goal LUD-7. Furthermore, landscaping such as trees reduces the amount of direct light that reaches buildings, which also would decrease glare. Because the proposed Project would comply with the City's lighting regulations, impacts related to lighting and glare would be less than significant.

4.2 Agricultural and Forestry Resources

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
e) 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?				X
f) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
g) 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))?				X
h) Result in the loss of forest land or conversion of forest land to non-forest use?				X
i) 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?				X

Impact Analysis

4.2a Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non agricultural use?

4.2b Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

4.2c 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))?

4.2d Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

4.2e Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. According to the California Department of Conservation Farmland Mapping and Monitoring Program, the Project site is identified as "Other Land" which is not suitable for livestock grazing or any agricultural facilities.[5] Thus, the Project site has no Prime, Unique Farmland, or Farmland of Statewide or Local Importance and there would be no impact on agricultural resources. The Project site is zoned RN2, which does not permit agricultural uses. The closest area of Prime Farmland is located approximately 3.25 miles northeast of the Project site on USAF Plant 42 property in unincorporated Los Angeles County. Los Angeles County does not participate in the Williamson Act program; therefore,

[5] California Department of Conservation, Farmland Mapping and Monitoring Program, California Important Farmland Finder, <https://maps.conservation.ca.gov/DLRP/CIFF/> (Accessed July 13, 2023).

the proposed Project would not conflict with this law.[6] According to the California Department of Fish and Wildlife (CDFW) California Forests and Timberlands Map, Palmdale does not have any forest land zones; the nearest public lands with forests are south of the City.[7] As the proposed Project would have no conflict with zoning for agricultural use or any Williamson Act contracts, would not conflict with forest land or timberland zoning, result in the loss of forest land, or the conversion of forest land or timberland zoning, result in the loss of forest land, or the conversion of farmland or forest land to non-agricultural or non-forestland use, there would be no impact.

[6] California Department of Conservation, The Williamson Act Status Report 2020-21, Page 5, <https://www.conservation.ca.gov/dlrp/wa/Documents/stats_reports/2022%20WA%20Status%20Report.pdf> (Accessed July 13, 2023).
[7] California Department of Fish and Wildlife, California Forests and Timberlands Map, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109917&inline> (Accessed July 26, 2023).

4.3 Air Quality

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Impact Analysis

4.3a Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The federal Clean Air Act (CAA), as amended (42 USC § 7401 et seq.) requires the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for six pollutants, referred to as "criteria pollutants." These pollutants include ozone (O3), particulate matter (particulate matter 10 microns or less in diameter [PM10] and particulate matter 2.5 microns or less in diameter [PM2.5]), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). The CAA requires each State to determine whether areas within their jurisdiction are attaining the NAAQS. Areas that meet or exceed the NAAQS are designated as being in "attainment" and areas that do not meet the NAAQS are designated as being in "nonattainment." States with nonattainment areas are required to prepare and submit to the EPA a State Implementation Plan (SIP) for achieving the NAAQS. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas. Similarly, California has established the California Ambient Air Quality Standards (CAAQS). The CAAQS have been established for ten criteria pollutants: the six federal criteria pollutants and sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility reducing particles. State law requires preparation of an air quality attainment plan for areas designated as being in nonattainment of the CAAQS and/or NAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within the Mojave Desert Air Basin (MDAB), and is under the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD). The AVAQMD is currently in nonattainment of the CAAQS for O_3 and respirable particulate matter (PM10) and the NAAQS for 8-hour O_3. To reduce such emissions, the AVAQMD drafted the 2023 Federal 70 ppb (parts per billion) Ozone Attainment Plan (AQMP). The primary purpose of the AQMP is to identify, develop, and implement strategies and control measures to meet the 2015 8-hour O_3 NAAQS.[8] The AQMP is a regional and multi-agency effort involving the AVAQMD, the MDAQMD, the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the EPA. The AQMP's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's growth projections and the Regional Transportation Plan and Sustainable Communities Strategy (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. The proposed Project is subject to the AVAQMD's AQMP and Federal Conformity Guidelines.

The determination of consistency with the AQMP is defined by the following criteria:

[8] AVAQMD. Federal 70 ppb Ozone Attainment Plan. 2023.

Consistency Criterion No. 1: The Project would not increase the severity or frequency of a violation to a federal or state ambient air quality standard.

Consistency Criterion No. 2: The Project is consistent with the local land use plans and/or population projections.

According to the AVAQMD's CEQA Guidelines, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with the CAAQS and NAAQS.

As shown in **Table 4.3-2: Project Construction Criteria Pollutant Emissions in Pounds per Day** and **Table 4.3-4: Operational Criteria Pollutant Emissions in Pounds per Day – Project Buildout**, the proposed Project would not exceed the significance thresholds established by the AVAQMD, causing an exceedance of federal or state ambient air quality standards. The proposed Project would also remain consistent with all AVAQMD rules and regulations. Therefore, the proposed Project would be consistent with the AQMP under the first criterion.

Consistency Criterion No. 2 requires a project to be consistent with local land use plans and/or population projections. The AQMP contains air pollutant reduction strategies based on SCAG's latest regional population growth forecasts. SCAG's growth forecasts, included in Connect SoCal 2020 (2020-2045 RTP/SCS), are made in consultation with local governments and with reference to their local general plans. The population, housing, and employment forecasts presented in the 2020-2045 RTP/SCS are based on the local plans and policies applicable to the specific area; these are used by SCAG in all phases of implementation and review.[9] The proposed Project is expected to develop 330 dwelling units at the Project site. The 2020-2045 RTP/SCS growth forecasts indicate that households within the City will increase from 43,800 households in 2016 to 61,800 households in 2045, an increase of 18,000 households.[10] The proposed Project would contribute 330 dwelling units towards meeting the requirements of the 2020-2045 RTP/SCS growth forecasts.

The proposed Project is located in a residential zoning district and designated for residential use in the General Plan. The proposed Project would be consistent with both the City of Palmdale's zoning code and General Plan. Accordingly, the proposed Project would be consistent with the local land use plans and/or population projections and would meet the AQMP's consistency criterion. The proposed Project would not conflict with or obstruct implementation of the applicable air quality plan and any impacts would be less than significant.

4.3b Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. The AVAQMD CEQA and Federal Conformity Guidelines provides significance thresholds for volatile organic compounds (VOC) (also referred to as reactive organic gases [ROG]), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), PM10, and PM2.5. The significance thresholds are shown in **Table 4.3-1: Antelope Valley Air Quality Management District Significance Thresholds**. The thresholds apply to both construction and operations for projects located within the AVAQMD's jurisdiction. If a project proposes development that would result in criteria pollutant emissions in excess of the established thresholds, a significant air quality impact may occur. This would warrant additional analysis to fully assess the significance of impacts.[11]

Table 4.3-1: Antelope Valley Air Quality Management District Significance Thresholds

Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Carbon Monoxide (CO)	100	548
Nitrogen Oxides (NO_x)	25	137
Volatile Organic Compounds (VOC)*	25	137

[9] Southern California Association of Governments, Connect SoCal (2020–2045 RTP/SCS), adopted September 2020, <https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176> (Accessed November 18, 2023).
[10] Southern California Association of Governments, Connect SoCal (2020–2045 RTP/SCS), Demographics and Growth Forecast adopted September 2020, <https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579> (Accessed November 18, 2023).
[11] Antelope Valley, Antelope Valley AQMD CEQA and Federal Conformity Guidelines, August 2016.

Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Sulphur Oxides (SO_X)	25	137
Particulate Matter up to 10 Microns (PM10)	15	82

** VOCs and ROGs are subsets of organic gases that are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Although they represent slightly different subsets of organic gases, they are used interchangeably for the purposes of this analysis.*
Source: Antelope Valley, Antelope Valley AQMD CEQA and Federal Conformity Guidelines, August 2016.

Construction Emissions

Construction associated with the proposed Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the MDAB include O_3-precursor pollutants (i.e., ROG and NO_X) and PM10. Emissions associated with Project construction would result from activities such as site grading, building construction, architectural coatings, materials deliveries, worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely generated by motor vehicle exhaust and ground disturbance; the volume of airborne particulate matter is largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water to suppress dust.

Construction of the proposed Project is assumed to begin in September 2025. Construction emissions were calculated using the CARB-approved California Emissions Estimator Model (CalEEMod), version 2022.1.1, which is designed to model emissions for land use development projects, based on typical construction requirements. Roadway construction was modeled using the Road Construction Emissions Model (RCEM), version 9.0.0. The construction emissions associated with roadways East Avenue R-9, East Avenue R-10, and 27th Street East are included in year 2026 emissions and construction emissions associated with construction of 28th Street East are included in year 2025 emissions. As discussed in Section 2.4, *Project Construction Activities and Phasing*, it is assumed that development of the five parcels would occur sequentially with some overlap between each subsequent phase. Overlap of emissions from construction activity at multiple parcels and roadways has been accounted for to provide a worst-case analysis (see **Appendix B: Air Quality and Greenhouse Gas Emissions Modeling Outputs** for detailed emissions data). It is assumed that all construction equipment operated during each individual phase would be operated simultaneously to provide a conservative analysis. **Table 4.3-2: Daily Project Construction Criteria Pollutant Emissions** presents the predicted maximum daily construction-generated criteria pollutant emissions for the proposed Project. **Table 4.3-3: Annual Project Construction Criteria Pollutant Emissions** provides construction emissions in tons per year. As noted in **Table 4.3-2** and **Table 4.3-3**, while it is assumed that Project construction would include compliance with AVAQMD Rule 403, Fugitive Dust Control Measures, the Project's emissions calculations do not account for compliance. By excluding these measures from the calculations, the resulting analysis provides a more conservative estimate of emissions.

Table 4.3-2: Daily Project Construction Criteria Pollutant Emissions

Construction Year	Emissions (pounds per day)*					
	ROG	NO_X	CO	SO_X	PM10	PM2.5
Construction Emissions						
Year 1 (2025)	5.96	56.90	62.99	0.12	11.61	5.62
Year 2 (2026)	43.56	56.30	67.30	0.14	8.12	2.82
Year 3 (2027)	23.13	48.11	51.56	0.09	12.07	6.92
Year 4 (2028)	50.04	9.98	15.27	0.02	0.36	0.33
AVAQMD Threshold	137	137	548	137	85	62
AVAQMD Threshold Exceeded?	No	No	No	No	No	No

** The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. To provide a more conservative analysis, the above emissions do not account for rule compliance.*
*Source: CalEEMod version 2022.1.1. Refer to **Appendix B** for model outputs.*

Table 4.3-3: Annual Project Construction Criteria Pollutant Emissions

Construction Year	Emissions (pounds per day)*					
	ROG	NO_x	CO	SO_x	PM10	PM2.5
Construction Emissions						
Year 1 (2025)	0.11	0.14	0.15	0.00	0.005	2.00
Year 2 (2026)	0.21	1.27	1.80	1.14	0.06	0.05
Year 3 (2027)	0.49	3.12	3.94	0.01	0.10	0.10
Year 4 (2028)	0.51	0.51	0.73	0.73	0.0	0.02
AVAQMD Threshold	25	25	100	25	15	12
AVAQMD Threshold Exceeded?	No	No	No	No	No	No

** The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. To provide a more conservative analysis, the above emissions do not take account for rule compliance.*

*Source: CalEEMod version 2022.1.1. Refer to **Appendix B** for model outputs.*

Project construction would also comply with AVAQMD Rules 402 (Nuisance),[12] and AVAQMD Rule 1113 (Architectural Coatings),[13] and CARB's anti-idling regulations which prohibit idling for more than five minutes; however, compliance with these rules also was not assumed when estimating the Project's construction emissions for **Table 4.3-2**, above. Therefore, the Project's maximum-day construction emissions of criteria pollutants would be even lower than reported in **Table 4.3-2** with its compliance with AVAQMD Rules 402 and 1113 and CARB's anti-idling regulations were considered.

The results summarized in **Table 4.3-2** and **Table 4.3-3** show that Project construction emissions would not exceed applicable thresholds, and construction impacts would be less than significant.

Operational Emissions

Operational emissions from the proposed Project would be associated with mobile sources (i.e., motor vehicle use) and area sources (such as the use of landscape maintenance equipment, consumer products, and architectural coatings). Energy source emissions are typically associated with electrical and natural gas (non-hearth) usage. Operational emissions associated with the proposed Project are presented in **Table 4.3-4: Daily Project Operational Criteria Pollutant Emissions**. **Table 4.3-5: Annual Project Operational Criteria Pollutant Emissions** summarizes emissions in tons per year.

As shown in **Table 4.3-4** and **Table 4.3-5**, the proposed Project would not exceed AVAQMD thresholds. Therefore, Project operations would result in less than significant long-term regional air quality impacts.

Table 4.3-4: Daily Project Operational Criteria Pollutant Emissions

Source	Emissions (pounds per day)*					
	ROG	NO_x	CO	SO_2	PM10	PM2.5
Unmitigated Emissions						
Area	10.26	0.18	18.71	<0.01	0.01	0.01
Energy	0.07	1.16	0.49	0.01	0.09	0.09
Mobile	9.88	7.22	67.58	0.13	11.22	2.91
Proposed Project Total	20.20	8.56	86.79	0.14	11.32	3.01

[12] AVAQMD Rule 402 prohibits the discharge of quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of people or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or have a natural tendency to cause injury or damage to business or property.

[13] AVAQMD Rule 1113 sets limits on the VOC content of architectural coatings.

Source	Emissions (pounds per day)*					
	ROG	NO_X	CO	SO_2	PM10	PM2.5
AVAQMD Threshold	137	137	548	137	85	62
AVAQMD Threshold Exceeded?	No	No	No	No	No	No

** Emissions were calculated using the California Emissions Estimator Model version 2022.1.1 (CalEEMod), as recommended by the AVAQMD. Worst-case seasonal maximum daily emissions are reported.*
Source: CalEEMod version 2022.1.1. Refer to ***Appendix B*** *for model outputs.*

Table 4.3-5: Annual Project Operational Criteria Pollutant Emissions

Source	Emissions (pounds per day)*					
	ROG	NO_X	CO	SO_2	PM10	PM2.5
Unmitigated Emissions						
Area	22.42	0.42	27.24	0.05	3.52	3.51
Energy	0.01	0.21	0.09	<0.01	0.02	0.02
Mobile	1.52	1.29	10.16	0.02	1.95	0.51
Proposed Project Total	23.95	1.92	37.49	0.07	5.49	4.03
AVAQMD Threshold	25	25	100	25	15	12
AVAQMD Threshold Exceeded?	No	No	No	No	No	No

** Emissions were calculated using the California Emissions Estimator Model version 2022.1.1 (CalEEMod), as recommended by the AVAQMD. Worst-case seasonal maximum daily emissions are reported.*
Source: CalEEMod version 2022.1.1. Refer to ***Appendix B*** *for model outputs.*

4.3c Would the Project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact.

Short-Term Construction Fugitive Dust Emissions

The construction phase of the proposed Project would be temporary and short-term, and the implementation of all State, federal, and AVAQMD requirements would greatly reduce pollution concentrations generated during construction activities. As shown **in Table 4.3-2** and **Table 4.3-3**, the proposed Project's construction-related criteria pollutant emissions would not exceed the applicable thresholds. The proposed Project would be required to comply with all AVAQMD rules and regulations with regard to fugitive dust emissions and would be consistent with AVAQMD guidance on this topic. Impacts to sensitive receptors during construction would be negligible and impacts would be less than significant.

Construction-Related Diesel Particulate Matter

Project construction would result in the generation of diesel particulate matter (DPM) emissions from the use of off-road diesel equipment. The amount to which sensitive receptors would be exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant (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, 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 DPM 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.

Operational Toxic Air Contaminants

The proposed Project does not include a land use that has the potential to significantly impact nearby sensitive receptors during the proposed Project's operational phase, since the proposed Project does generate trips by heavy-duty diesel trucks, which are an emitter DPM. Impacts to sensitive receptors from substantial pollutant concentrations would be less than significant.

Carbon Monoxide Hotspots

An analysis of CO "hot spots" is needed to determine whether the change in the level of service of an intersection resulting from the Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, 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. Accordingly, with the steadily decreasing CO emissions from vehicles, even busy intersections do not result in exceedances of the CO standard.

Although the AVAQMD has not established a specific numerical screening threshold for CO impacts, the South Coast Quality Management District (SCAQMD) has previously analyzed CO concentrations in their CO Hotspot Analysis. As part of the analysis, the Wilshire Boulevard and Veteran Avenue intersection, 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 parts per million (ppm), which is well below the 35-ppm Federal standard. The Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's CO Hotspot Analysis. As the CO hotspots were not experienced at the Wilshire Boulevard and Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections resulting from 3,190 additional vehicle trips attributable to the Project. The highest Existing plus Project ADT generated by the Project is 17,020 trips which is well below the 100,000 experienced at the Wilshere Boulevard and Veteran Avenue intersection. Therefore, impacts would be less than significant.

4.3d Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. Certain land uses generate a significant amount of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding.[14] The Project would not include any of the land uses that have been identified as significant odor sources.

During construction-related activities, some odors (not substantial pollutant concentrations) that may be detected are those typical of construction vehicles (e.g., diesel exhaust from grading and construction equipment). These odors would be temporary, would be typical of construction projects, and would disperse rapidly. Furthermore, odors that could be generated by construction activities are required to follow

[14] South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993.

AVAQMD Rule 402 (Nuisance) to prevent odor nuisances on sensitive land uses. Therefore, the Project would not create objectionable odors, and impacts would be less than significant.

4.4 Biological Resources

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

Impact Analysis

4.4a Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated. A Biological Resources Assessment Technical Memorandum was prepared by Rincon Consultants, Inc. (see **Appendix C**). A field reconnaissance survey of the Project site was conducted on October 4, 2022. A survey area was established for purposes of identifying potential impacts to biological resources and included the Project site and a 300-foot buffer (BRA Survey Area). The survey characterized the Project site as disturbed desert scrub with limited shrub cover, providing moderate to limited habitat for common avian, reptile, and mammalian wildlife species. No listed or sensitive species were detected during the reconnaissance survey.

The California Natural Diversity Database (CNDDB) was queried for a five mile search radius of the BRA Survey Area and the California Native Plant Society (CNPS) database was queried for the nine quadrangles in and around the BRA Survey Area. Results identified the presence of 20 special-status plant species within the areas searched. However, of the 20 species identified, none have potential to occur on the Project site

based on its location and lack of suitable habitat. Furthermore, none of these species were observed on the Project site during the field survey. Accordingly, impacts to special-status plant species are not expected to occur as a result of the proposed Project.

The CNDDB query identified 16 special-status wildlife species within five miles of the BRA Survey Area. Of these 16 species, only one species, burrowing owl (*Athene cunicularia*) has a high potential to occur. Seven species were determined to have a low potential to occur on site. **Table 4.4-1: California Special Status Species with Potential to Occur on the Project Site** identifies these species.

Table 4.4-1: California Special Status Species with Potential to Occur on the Project Site

Category	Common Name	Scientific Name	Status
Animals - Birds	Burrowing owl	*Athene cunicularia*	BLM:S; CDFW:SSC; USFWS:BCC
Animals - Birds	Foraging prairie falcon	*Falco mexicanus*	CDFW:WL
Animals - Birds	Cooper's hawk	*Accipiter cooperii*	CDFW:WL
Animals - Birds	Loggerhead shrike	*Lanius ludovicianus*	CDFW:SSC
Animals - Birds	Swainson's hawk	*Buteo swainson*	CESA: Threatened; BLM:S
Animals - Birds	Le Conte's thrasher	*Toxostoma leconte*	BLM:S; CDFW SSC ; USFWS:BCC
Animals - Mammals	San Joaquin pocket mouse	*Perognathus inornatus*	BLM:S
Animals- Mammals	Mohave ground squirrel	*Xerospermophilus mohavensis*	CESA: Threatened; BLM:S

BLM:S = Bureau of Land Management – Sensitive
CDFW:SSC = California Department of Fish and Wildlife Species of Special Concern
CDFW:WL = California Department of Fish and Wildlife Watch List
USFWS:BCC = U.S. Fish & Wildlife Service Birds of Conservation Concern
CESA = California Endangered Species Act
*Source: Biological Resources Assessment Technical Memorandum. Refer to **Appendix C**.*

The Project site was characterized as having moderately suitable habitat for burrowing owls (*Athene cunicularia*) and San Joaquin pocket mouse (*Perognathus inornatus*). The Project site contains suitable desert habitat with suitable burrows made by California ground squirrels with low levels of prey population observed (lizards, insects). Although the Project site is disturbed, burrowing owl has a high potential to occur on site based on burrow availability and open space. No burrowing owl was observed during the field survey, but CNDDB records document burrowing owl occurring two miles from the Project site in March 2006 and approximately four miles from the Project site in January 2006. In the event that burrowing owl is encountered on the Project site during construction, compliance with **Mitigation Measure (MM) BIO-1**, would reduce potential impacts to burrowing owl to less than significant.

The Project site is located approximately one mile west of the predicted occupied Mohave ground squirrel habitat range. However, the proposed Project site is located on undeveloped parcels surrounded by moderate urban development, including long established residential development and roads. In addition, the site contains active California ground squirrel colonies and Mohave ground squirrels are unlikely to compete with California ground squirrel. Accordingly, it is unlikely that the proposed Project site would support this species or provide suitable habitat.

Foraging prairie falcon, Swainson's hawk, and Cooper's hawk have a low potential to occur on the Project site. While prey species were observed on the Project site during the field survey, the site is disturbed with sparse vegetation and the quality of the site for foraging is considered to be low. Furthermore, the site does not provide suitable nesting habitat for these or the other two avian species (loggerhead shrike and LaConte's thrasher) due to a lack of suitable shrub or tree cover for nesting.

Bird nests and eggs are protected under federal and State law, including California Fish and Game Code (CFGC) Section 3503 and the Migratory Bird Treaty Act (MBTA). Some bird species nest on the ground and there is potential for construction activity to result in impacts to these species. Compliance with **MM BIO-2** and **MM BIO-3** would reduce potential impacts to nesting birds to less than significant.

Implementation of **MM BIO-1**, **MM BIO-2**, and **MM BIO-3** would mitigate potential impacts on species identified as a candidate, sensitive, or special-status species in local and regional plans, policies, or regulations or by the CDFW or USFWS. Impacts would be less than significant.

MM BIO-1

A qualified wildlife biologist shall conduct a pre-construction survey of proposed impact areas to confirm presence/absence of burrowing owl individuals no more than 14 days prior to construction. The survey methodology shall be consistent with the methods outlined in the CDFW Staff Report on Burrowing Owl Mitigation (2012). If no active breeding or wintering owls are identified, no further mitigation is required. If burrowing owl is detected on-site, the following mitigation measures shall be implemented in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012):

- The Project proponent shall hire a qualified wildlife biologist that should be on-site during initial ground-disturbing activities in potential burrowing owl habitat identified throughout the habitat assessment.
- No ground-disturbing activities shall be permitted within a buffer less than 200 meters (656 feet) from an active burrow during the breeding season, depending on the level of disturbance, unless the qualified biologist determines a reduced buffer would not adversely affect the burrowing owl(s).
- Occupied burrows shall not be disturbed during the nesting season (February 1 to August 31)
- During the nonbreeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow, depending on whether the level of disturbance is low, and if the active burrow is not directly affected by the Project activity. A smaller/larger buffer may be established by the qualified biologist following monitoring and assessments of the Project's effects on the burrowing owls. If active winter burrows are found that would be directly affected by ground disturbing activities, owls can be excluded from winter burrows according to recommendations made in the Staff Report on Burrowing Owl Mitigation (2012). Additionally, if burrowing owls are found on-site, a qualified biologist shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW Staff Report on Burrowing Owl Mitigation (2012) for CDFW review and approval prior to the commencement of disturbance activities on-site.
- Burrowing owls shall not be excluded from burrows until a Burrowing Owl Exclusion Plan is developed based on the recommendations made in Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW Staff Report on Burrowing Owl Mitigation (2012). The Burrowing Owl Exclusion Plan shall be submitted to CDFW for review and approval prior to the commencement of disturbance activities on-site.
- Prior to passive relocation, the Project proponent shall be responsible for identifying compensatory mitigation at a ratio of 1:1 for lost breeding and/or wintering habitat. Mitigation shall be implemented on- or off-site including permanent conservation and management of burrowing owl habitat through the recordation of a conservation easement, funding of a non-wasting endowment, and implementation of a Mitigation Land Management Plan based on the CDFW Staff Report on Burrowing Owl Mitigation (2012) and CDFW guidance. Mitigation lands shall be identified through coordination with CDFW and on, adjacent, or proximate to the impact site where possible and where habitat is suitable to support burrowing owl. If required, compensatory mitigation shall be completed prior to completion of Project construction.
- When a qualified biologist determines that burrowing owls are no longer occupying the Project site and passive relocation is complete, construction activities may begin. A final letter shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.

MM BIO-2

To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and CFGC, activities related to the project, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 31). If construction must begin within the breeding season, then a preconstruction nesting bird survey shall be conducted no more than three (3) days prior to initiation of ground disturbance and vegetation-removal activities. The nesting bird pre-construction survey shall be conducted within the Project site, plus a 300-foot buffer (500-foot for raptors), on foot, and within

inaccessible areas (i.e., private lands) afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California desert communities. If nests are found, an avoidance buffer (which is dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or suitable other means to clearly mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting period. No ground-disturbing or other work activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

MM BIO-3

Prior to the start of Project activity (including vegetation clearing and grading) that occurs within the Project footprint, a qualified biologist shall present a Wildlife Environmental Workers Awareness Program (WEAP) for all construction personnel. The Project biologist or their designee shall attend one (1) preconstruction meeting to administer the WEAP. Topics to discuss include sensitive species that may be encountered in the project area, photographs to aid in identification of sensitive species, the laws and codes that regulate these species, and the protection measures that must be followed to avoid and minimize impacts. If new construction personnel are added to the Project, the contractor shall ensure that the new personnel receive the mandatory training before starting work. The subsequent training of personnel may include a video of the initial training and/or the use of written materials rather than in-person training by a qualified biologist.

4.4b Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. The proposed Project site is located on a portion of undeveloped, disturbed desert scrub land surrounded by urban development. The Project site shows signs of frequent human activity and the presence of native plant species is very limited. No sensitive plant communities were identified in the BRA Survey Area during the field survey. Therefore, the Project would not have a substantial adverse effect on any sensitive natural communities and impacts would be less than significant.

4.4c Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. Five man-made depressions with potential for ponding caused by frequent Off-Highway Vehicle (OHV) recreational use were observed on the Project site during the field survey. In addition, sheet flow stormwater run-off was also observed in the southwestern portion of the Project site at the cross section of East Avenue R-12 and 27th Street East. However, no riparian vegetation, water channels, or ponding water was observed during the site survey. According to the National Wetlands Inventory Surface Waters and Wetlands Database, there are no wetlands or riparian habitats found on or near the proposed Project site. The nearest wetlands (riverine and freshwater emergent wetlands) are found approximately 1.75 miles southwest of the Project site.[15] Therefore, impacts on riparian and wetland habitat due to stormwater runoff would be less than significant.

4.4d Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The proposed Project site is in a moderately urbanized environment and is surrounded by residential development to the north, east, and south, and undeveloped land to the north and west. The proposed Project site is also surrounded by East Avenue R-9 to the north, 29th Street East to the east, East Avenue R-12 to the south, and 26th Street East to the west. Given the isolated nature of the site from extended, intact, undisturbed natural habitat areas and/or vegetated corridors, it provides limited opportunities for wildlife movement and habitat connectivity. The site is not within any mapped or known CDFW California Essential Habitat Connectivity area. Furthermore, according

[15] United States Fish and Wildlife. National Wetlands Inventory. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper> (Accessed July 12, 2023).

to the CDFW Biogeographic Information and Observation System (BIOS) Habitat Connectivity Viewer, the Project site would not be part of the wildlife movement corridor, nor does it serve as a wildlife nursery site. Therefore, there would be no impact.[16]

4.4e Would the Project conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The proposed Project site is located in a moderately urbanized area with minimal vegetation. As previously discussed, the proposed Project would not affect any protected biological resources. There are currently no trees located on the proposed Project site or on the surrounding streets. There are creosote bushes and assorted weeds on the Project site that would be removed as part of the proposed Project and replaced with new landscaping including trees. The City of Palmdale Joshua Tree and Native Desert Vegetation Ordinance (PMC Chapter 14.04) states that appropriate action must be taken to protect and preserve desert vegetation, particularly Joshua trees. The field survey results indicate that the Project site does not support Joshua trees or remnants of Joshua trees. The proposed Project would not include tree removal. Therefore, the Project would not conflict with any ordinance protecting biological resources such as a tree preservation policy or ordinance and there would be no impact.

4.4f Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project site is located within the West Mojave Habitat Conservation Plan (WMHCP) planning area. The WMHCP is a habitat conservation plan adopted by the Bureau of Land Management (BLM) in 2006. Although the WMHCP was developed in cooperation with other public agencies, including Los Angeles County, the plan was only adopted by the BLM and accordingly is only applicable to public lands under BLM jurisdiction.[17] Because the WMHCP has not been adopted by the County, and is therefore not applicable to the Project site, the Project would not conflict with its provisions.

The Project is located within the boundaries of the West Mojave Coordinated Management Plan (WMP) administered by the BLM in cooperation with the City of Palmdale. The Project site is not located in the Conservation Areas identified in the WMP.

As discussed under Impact 4.4e, the City of Palmdale Joshua Tree and Native Desert Vegetation Ordinance (PMC Chapter 14.04) is intended to protect and preserve desert vegetation, particularly Joshua trees. The field survey results indicate that he Project this site does not support Joshua trees or remnants of Joshua trees. Therefore, the proposed Project would not conflict with the ordinance.

The Conservation Element of the City's General Plan includes policies intended to protect sensitive habitats (Goal CON-1 Protect Significant Ecological Areas) and comply with the requirements of the WMP for protection of State and federally listed species (Policy CON-1.3 West Mojave Plan). The WMP and related City policies identified in the General Plan Update, focus on protection of protection of desert tortoise and Mohave ground squirrel. The proposed Project site does not provide habitat for either of these species, would not be considered a Significant Ecological Area based on its disturbed nature, and accordingly would not conflict with the WMP or relevant policies in the City's General Plan.

The Project site is not located within any other adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.[18] Therefore, the Project would have no impact.

[16] California Department of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). <https://apps.wildlife.ca.gov/bios6/?bookmark=648> (Accessed August 1, 2023)
[17] County of Los Angeles, 2014. Los Angeles County General Plan Update Draft EIR. <https://planning.lacounty.gov/wp-content/uploads/2022/11/gp_2035_deir.pdf> (Accessed October 4, 2023).
[18] California Department of Fish and Wildlife. NCCP Plan Summaries. <https://wildlife.ca.gov/conservation/planning/nccp/plans> (Accessed October 13, 2023).

4.5 Cultural Resources

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

Impact Analysis

4.5a Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. The proposed Project site is vacant and has been historically undeveloped. According to the Cultural Resources Assessment prepared by Rincon Consultants, Inc. (see **Appendix D**), historical topographic maps and aerial imagery depict the Project site as undeveloped land. The records search, background search, and field survey did not identify any historical resources within the Project site. Therefore, the Project would not result in a substantial adverse change to the significance of a historical resource. As such, implementation of the Project would result in no impact to historical resources pursuant to § 15064.5.

4.5b Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant With Mitigation Incorporated. The field survey resulted in the identification of two historic-period archaeological resources. However, no evidence is present that the resources are associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage or that it is associated with the lives of persons important in the past. In addition, the resources do not embody any distinctive characteristics. The two historic-period archaeological resources do not meet the minimum criteria to be considered eligible for listed on the California Register of Historical Resources (CRHR). Due to the potential discovery of surficial historic-period archaeological materials, however low, for encountering intact subsurface archaeological deposits, the proposed Project would be required to comply with **MM CUL-1**. Accordingly, through compliance with MM CUL-1, the proposed Project's potential impacts to archeological resources would be mitigated to less than significant.

Mitigation Measure

MM CUL-1

In the event that archaeological resources are unexpectedly encountered during project construction activities, work within 60 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. Work on the other portions of the project outside of the 60-foot buffer may continue during the evaluation period. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for California Register of Historical Resources (CRHR) eligibility may be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CCR Guidelines § 15126.4(b)(3)(c).

If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to consulting Tribes for review and comment, as detailed within MM TCR-1. The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The Lead Agency shall review and approve the treatment plan and archaeologist testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per CCR Guidelines § 15126.4(b)(3)(c).

4.5c Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact with Mitigation Incorporated. No human remains are known to be present within the Project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code (HSC) § 7050.5 states that no further disturbances shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC § 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission, which will determine a most likely descendant (MLD). As described under Impact 4.5b, there is limited potential for the presence of archaeological resources on the proposed Project site. Due to the potential discovery of human remains, however low, the proposed Project would be required to comply with **MM CUL-2**. Compliance with State law, including the requirements of HSC § 7050.5, and **MM CUL-2**, the proposed Project's potential impacts to human remains would be mitigated to less than significant.

Mitigation Measure

MM CUL-2

In the event that human skeletal remains or funerary objects are encountered at the project site during construction or the course of any ground disturbance activities, all such activities within 100 feet shall halt immediately, pursuant to HSC § 7050.5, which requires that no further ground disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition pursuant to PRC § 5097.98. If the remains are determined to be of Native American descent, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. Inadvertent discoveries of human remains and/or funerary object(s) shall be subject to California State Health and Safety Code Section 7050.5, and the subsequent disposition of those discoveries shall be decided by the Most Likely Descendant (MLD), as determined by the Native American Heritage Commission (NAHC), should those findings be determined as Native American in origin.

4.6 Energy

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Impact Analysis

4.6a Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The proposed Project is required to comply with California's Energy Efficiency Standards established in Title 24, Part 6, of the CCR. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated by the California Energy Commission on an approximately three-year cycle to allow consideration and possible incorporation of new energy efficiency technologies and methods.

Part 11 of the Title 24 Building Standards Code is referred to as the CALGreen Code. The purpose of the CALGreen Code is to improve public health, safety and the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental quality. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings, which include requirements for energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.

The proposed Project would comply with the applicable Energy Efficiency Standards provisions (Part 6) of Title 24 and the CALGreen Code (Part 11) and would install energy- and water- efficient appliances. The Project would comply with the current standards at the time of permit approval by the City. Those standards would be no less stringent than the 2022 Building Energy Efficiency Standards, which improved upon the 2019 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 Building Energy Efficiency Standards went into effect January 1, 2023.[19]

Construction

The energy consumption associated with construction of the proposed Project includes primarily diesel fuel consumption from on-road hauling trips and off-road construction diesel equipment, and gasoline consumption from on-road worker commute and vendor trips. Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers, and heating, ventilation, and air conditioning [HVAC]) would be powered by a generator. The amount of electricity used during construction would be minimal; typical demand would stem from the use of electrically powered hand tools and several construction trailers by managerial staff during the hours of construction activities. The majority of the energy used during construction would be from diesel use. This analysis relies on the construction equipment list and operational characteristics, as stated in **Section 4.3, Air Quality** and **Section 4.8, Greenhouse Gas Emissions** as well as in **Appendix B** of this IS/MND. **Table 4.6-1: Estimated Energy Use During Project Construction** quantifies the construction energy consumption during construction of the proposed Project. Energy Calculation Results are presented in **Appendix E**.

[19] California Energy Commission, 2022 Building Energy Efficiency Standards <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency> (Accessed July 16, 2023).

Table 4.6-1: Estimated Energy Use During Project Construction

Source	Project Construction Usage	Los Angeles County Annual Energy Consumption	Percentage of Countywide Consumption
Diesel Use	**Gallons**		
On-Road Construction Trips*	14,637	532,570,627	0.003%
Off-Road Construction Equipment**	157,441	532,570,627	0.030%
Construction Diesel Total	172,078	532,570,627	0.032%
Gasoline	**Gallons**		
On-Road Construction Trips*	53,085	3,536,229,368	0.002%
Electricity Use	**Megawatt Hours (MWh/year)**		
Water Consumption	21.01	68,484,956	0.00003%

**On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 in Los Angeles County.*
***Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (hp)-hour from USEPA.*
Abbreviations: CalEEMod: California Emission Estimation Model; EMFAC: Emission Factor Model; kWh: kilowatt-hour.
Sources: AWMA, 1992; DOE 2016; USEPA 1996; CEC 2022.

In total, construction of the proposed Project would consume approximately 172,048 gallons of diesel and 53,085 gallons of gasoline. The proposed Project's fuel from the entire construction period would constitute approximately 0.032 percent of Countywide diesel and approximately 0.002 percent of Countywide gasoline consumption. The proposed Project would consume approximately 21.01MWh/year for construction water which would constitute approximately 0.00003 percent of Countywide consumption.

There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state. In addition, some incidental energy conservation would occur during construction through compliance with State requirements 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 CARB engine emissions standards.

The CEQA Guidelines Appendix G and Appendix F criteria requires the proposed Project's effects on local and regional energy supplies and on the requirements for additional capacity to be addressed. A less than one percent increase in construction fuel demand is not anticipated to trigger the need for additional capacity. Fuel consumption is based on a conservative construction phasing and conservative estimates for annual construction fuel consumption. Longer phases would result in lower construction intensity and a lower annual fuel consumption, resulting in lower annual demand on energy supplies. Additionally, use of construction fuel would cease once the proposed Project is fully developed. As such, Project construction would have a nominal effect on the local and regional energy supplies. Therefore, it is expected that construction fuel consumption associated with the proposed Project would not be inefficient, wasteful, or unnecessary. The proposed Project would not substantially affect existing energy or fuel supplies, or resources and new capacity would not be required. Impacts would be less than significant.

Operations

Energy consumption would include building electricity, water, and fuel usage from on-road vehicles. Note that this energy resources analysis is consistent with the analysis presented in Section 4.3, Air *Quality*, and Section 4.8, *Greenhouse Gas Emissions*. Quantifications of operational energy consumption for the proposed Project are provided in **Table 4.6-2: Annual Energy Consumption During Project Operations**.

Table 4.6-2: Annual Energy Consumption During Project Operations

Source	Project Construction Usage	Los Angeles County Annual Energy Consumption	Percentage Increase Countywide
Electricity Use	**Megawatt Hour/Year (MWh/year)**		
Area*	1,474	68,484,956	0.0022%
Water	104		0.0002%
Natural Gas Use	**Therms/Year**		
Area	45,910	2,880,994,891	0.0016%
Diesel Use	**Gallons/Year**		
Mobile**	29,965	532,570,627	0.0056%
Gasoline Use	**Gallons/Year**		
Mobile**	233,943	3,536,229,398	0.0066%

** The electricity and natural gas usage are based on project-specific estimates and CalEEMod defaults.*

*** Calculated based on the mobile source fuel use based on vehicle miles traveled (VMT) and fleet-average fuel consumption (in gallons per mile) from EMFAC2021 for operational year 2025.*

Therms = 100,000 British thermal units (BTU), or approximately 29.3 kWh.

Abbreviations: CalEEMod: California Emission Estimation Model; EMFAC: California Air Resources Board Emission Factor Model; kBTU: thousand British Thermal Units; kWh: kilowatt-hour

Operational uses implemented as part of the proposed Project would annually consume approximately 1,578 MWh of electricity, 45,910 therms of natural gas, 29,965 gallons of diesel, and 233,943 gallons of gasoline.

Southern California Edison (SCE) provides electricity to the Project area. Total electricity demand in SCE's service area is forecast to increase by approximately 19,000 gigawatt hours (GWh) (19 billion kWh) between 2016 and 2030.[20] The proposed Project's anticipated electricity demand (approximately 1,578 MWh) would be nominal compared to overall demand in SCE's service area. Therefore, the projected electrical demand would not significantly impact SCE's level of service.

By 2025, the proposed Project's first year of construction, Los Angeles County's annual gasoline fuel use is anticipated to be 3,536,229,368 gallons and diesel fuel use is anticipated to be 532,570,627 gallons. The operational use of gasoline and diesel associated with the proposed Project would represent 0.0056 percent of future gasoline use and 0.0066 percent of future diesel use in the County.

The Project design and building materials would comply with the 2022 Building Energy Efficiency Standards, which took effect on January 1, 2023, and/or applicable future Building Energy Efficiency Standards depending on when construction permits are issued. Title 24 standards require energy conservation features in new construction (e.g., high- efficiency lighting, high-efficiency HVAC systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures). The proposed Project would be required to adhere to CALGreen Code and any applicable City policy regarding on-site renewable resources and other green building policy measures. Prior to issuance of a building permit, the City of Palmdale would review and verify that the proposed Project plans demonstrate compliance with all current building standards required by Title 24, CALGreen Code, and the City of Palmdale.

None of the proposed Project's energy use would exceed one percent of Los Angeles County use. Therefore, Project operations would not substantially affect existing energy or fuel supplies or resources. The proposed Project would comply with applicable energy standards and new capacity would not be required. Impacts would be less than significant.

4.6b 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 State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Project development would not cause inefficient, wasteful, and unnecessary energy consumption.

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

The proposed Project would 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. The project is consistent with the Global Warming Solutions Act of 2006 Assembly Bill (AB) 32, which requires California to decrease GHG emissions statewide to 1990 levels by 2020. Potential impacts would be less than significant.

SCAG's 2020-2045 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 of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15. The project is consistent with regional strategies to reduce passenger VMT. As seen in SCAG's 2020-2045 RTP/SCS Exhibit 3.4, the proposed Project is proximate to identified job centers in Los Angeles County.

The proposed Project entails a residential development near major schools, commercial retail, grocery stores, and employment opportunities, which would reduce vehicles miles traveled and promote alternative modes of transportation. 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 and would not interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets. Potential impacts would be less than significant.

4.7 Geology and Soils

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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.				X
ii. Strong seismic ground shaking?			X	
iii. Seismic-related ground failure, including liquefaction?			X	
iv. Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
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?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Impact Analysis

4.7ai Would the Project directly or indirectly cause potential substantial adverse effects, including the risks of loss, 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? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones, known as "Alquist-Priolo Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). There are no Holocene-active faults known to cross the Project site, and the Project site is not located within an Alquist-Priolo Earthquake Fault Zone.[21] According to the Geologic and Soils Hazards Evaluation Report prepared by Rincon Consultants Inc. (see **Appendix F**), the closest zone of required investigation is the Cemetery Fault, located approximately 0.5 miles southwest of the Project site. Therefore, the proposed Project would not expose people or structures to adverse effects involving rapture of a known earthquake fault, and there would be no impact.

4.7aii Would the Project directly or indirectly cause potential substantial adverse effects, including the risks of loss, or death involving strong seismic ground shaking?

Less Than Significant Impact. As previously discussed, the Project site is not located within a Alquist-Priolo Earthquake Fault Zone. However, there are earthquake faults surrounding the Project site. Southern California, including the City of Palmdale, has numerous seismic faults with potential to subject areas to earthquake and seismic-related hazards. According to the City's General Plan Safety Element, the City's proximity to the San Andreas Fault makes it susceptible to the highest level of earthquake hazard risk related to ground shaking. The fault is capable of producing earthquakes of magnitude 8.0 or greater. The intensity of the ground shaking on site would depend upon the earthquake's magnitude, distance to the epicenter, and geology of the area between the site and epicenter.

The proposed Project would be subject to regulatory controls addressing potential seismic hazards. PMC Chapter 8.04, Adoption of Health, Safety, and Technical Construction Codes, incorporates the California Building Standards Commission (CBSC) most recent 2022 California Building Code (CBC), including standards that address seismic resistance. CBSC design standards correspond to the level of seismic risk in a given location and are intended to protect public safety and minimize property damage and specify design requirements. The proposed Project would be subject to compliance with all applicable regulations in the PMC and the CBSC, potential impacts concerning exposure of people or structures to potential adverse effects involving strong seismic ground shaking would be less than significant.

4.7aiii Would the Project directly or indirectly cause potential substantial adverse effects, including the risks of loss, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant Impact. 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. For liquefaction to occur, three criteria must be met: underlying loose, coarse-grained (sandy) soils, a groundwater depth of approximately 25 feet, and a potential for seismic shaking from nearby large-magnitude earthquakes.

According to the City's General Plan Safety Element, the majority of Palmdale consists of low relative liquefication susceptibility zones. The nearest liquefaction zone is located 0.69 miles south of the Project site. Furthermore, due to soil conditions and depth of groundwater at the Project site (reported to be approximately 227 feet below ground surface), the liquefication hazard potential is considered low. According to the Geologic and Soils Hazard Evaluation Report (see **Appendix F**), the Project site overlies Quaternary-aged alluvium composed of gravel,

[21] California Department of Conservation, Alquist-Priolo Investigation Reports, Alquist-Priolo Earthquake Fault Zones, <https://maps.conservation.ca.gov/cgs/informationwarehouse/apreports/> (Accessed July 12, 2023).

sand, and silt; generally, course grained fractions are not susceptible to liquefaction. Therefore, the Project is unlikely to be at risk of liquefication, and impacts would be less than significant.

4.7aiv Would the Project directly or indirectly cause potential substantial adverse effects, including the risks of loss, or death involving landslides?

No Impact. Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. The Project site is not located within an Earthquake Induced Landslide Zone.[22] According to the Geologic Hazards Evaluation Report (see **Appendix F**), the closest mapped historical landslide is approximately 4.25 miles to the southwest and the San Gabriel Mountains are approximately two miles to the southwest. Therefore, the proposed Project would not directly or indirectly cause potential adverse effects involving landslides and there would be no impact.

4.7b Would the Project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Grading and earthwork activities during proposed Project construction could potentially expose soils to short-term erosion of wind and water. A significant impact may occur if a project exposes large areas to the erosional effects of wind and water for a protracted period of time. Project construction would require compliance with PMC Chapter 8.04, which requires a stormwater management plan with details of protective measures. Therefore, impacts would be less than significant.

4.7c Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

4.7d 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. Expansive soils typically feature high percentages of clay with a capacity of holding large amounts of water and can frequently be identified by determining the level of soil plasticity. High levels of plasticity are associated with the ability of soil mineral content to absorb water. Expansive soils are characterized by the soil's "Shrink-swell potential" and can damage building and structural foundations via the different movement of soil. Shrink-swell potential of a soil can be quantified as its linear extensibility percent (LEP), which is based on the change in length of a sample as moisture content is decreased. According to the Geology and Soils Hazard Evaluation Report (see **Appendix F**), the Project site is in an area predominantly containing Rosamond loam, Adelanto, and Hesperia series soils in the southeast and northeast corners of the site. Rosamond loam has a reported LEP of 3.4. The Adelanto and Hesperia soils have a LEP of 1.1 and 1.5, respectively. Therefore, there is a low to moderate risk of expansive soils and impacts would be less than significant.

4.7e Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed Project's wastewater would discharge to the local sanitary sewer line for conveyance to a sewer system. The proposed Project would not utilize septic tanks or alternative wastewater disposal systems and there would be no impact.

4.7f Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant With Mitigation Incorporated. There are no unique geologic features near the Project site. Therefore, the proposed Project would not impact unique geological features.

The Project site is vacant and would include limited excavation. Accordingly, there is less likelihood of disturbing subsurface materials. According to U.S. Department of Agriculture National Resources Conservation Service (NRCS) Web Soil Survey (WSS), the Project site's bedrock parent material consists of Rosamond loam, with minor areas of Adelanto and Hesperia series soils in the southeast and northeast

[22] California Department of Conservation, Earthquake Zones of Required Investigation, <https://maps.conservation.ca.gov/cgs/eqzapp/app/> (Accessed July 12, 2023).

corners of the site, respectively. Rosamond loam, Adelanto and Hesperia consists of deep, well drained soils that formed in material weathered mainly from granitic alluvium.[23]

To address potential impacts to paleontological resources, the Project would be required to implement **MM GEO-1**, which requires a qualified paleontological monitor to be retained for the purposes of evaluating any inadvertent discovery of paleontological resources. Therefore, following implementation of **MM GEO-1**, the Project's potential impacts to paleontological resources would be mitigated to be less than significant level.

Mitigation Measures

MM GEO-1

In the event paleontological resources are encountered during construction, the City shall be immediately informed of the discovery. All work shall cease in the area of the find, and a qualified paleontologist who meets the Society of Vertebrate Paleontology (SVP) standards for Qualified Professional Paleontologists, shall be engaged for purposes of assessing the find. All paleontological resources identified on the Project site shall be assessed and treated in a manner determined by the qualified paleontologist. The qualified paleontologist shall be empowered as necessary to halt or divert ground disturbing activities.

[23] USDA Natural Resource Conservation Service, Web Soil Survey, Soil Reports. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> (Accessed July 13, 2023).

4.8 Greenhouse Gas Emissions

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

Impact Analysis

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 that is retained is proportional to the concentration of GHGs in the atmosphere. As more GHGs are released into the atmosphere, GHG concentrations increase and the atmosphere retains more heat, increasing the effects of climate change. Six gases were identified by the Kyoto Protocol 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).

Approximately 80 percent of the total heat stored in the atmosphere is caused by CO_2, CH_4, and N_2O. These three gases are emitted by human activities and natural sources. Each of the GHGs affects climate change at different rates and persists in the atmosphere for varying lengths of time. The relative measure of the potential for a GHG to trap heat in the atmosphere is called global warming potential (GWP).[24] The GWP was developed to allow 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 are also emitted 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 are electric power, which is used to pump the water supply (e.g., aqueducts, wells, pipelines) and disposal and decomposition of municipal waste in landfills.[25]

[24] USEPA, Greenhouses Gases, Understanding Global Warming Potentials, <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials> (Accessed November 12, 2023).
[25] California Air Resources Board, Climate Change Scoping Plan, 2008

4.8a Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Construction of the Project would result in direct emissions of CO_2, N_2O, and CH_4 related to the operation of construction equipment, and the transport of materials and construction workers to and from the Project site. T**able 4.8-1: Antelope Valley Air Quality Management District GHG Significance Threshold** presents the AVAQMD GHG threshold.

Table 4.8-1: Antelope Valley Air Quality Management District GHG Significance Threshold

Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Greenhouse Gas (CO_2e)	100,000	548,000

Source: Antelope Valley, Antelope Valley AQMD CEQA and Federal Conformity Guidelines, August 2016.

Total GHG emissions generated during all phases of construction are presented in **Table 4.8-2: Construction Greenhouse Gas Emissions**. The CalEEMod outputs are contained in **Appendix B**. As shown in **Table 4.8-2**, Project construction would result in a total of 535.69 $MTCO_2e$ (approximately 17.85 $MTCO_2e$/year when amortized over 30 years). Therefore, construction GHG emissions associated with the project would be below the AVAQMD GHG threshold, and construction GHG impacts would be less than significant.

Table 4.8-2: Construction Greenhouse Gas Emissions

Construction	$MTCO_2e$ Per Year
Construction GHG Emission (2025)	41
Construction GHG Emission (2026)	94
Construction GHG Emission (2027)	304
Construction GHG Emission (2028)	96
Total Construction GHG Emission	**535.69**
30-Year Amortized Construction	17.85
AVAQMD Threshold	90,718
AVAQMD Threshold Exceeded?	**No**

*Source: CalEEMod version 2022.1.1. Refer to **Appendix B** for model data outputs.*

Operational GHG Emissions

Operational or long-term emissions would occur over the life of the proposed Project. GHG emissions would result from direct emission sources such as Project-generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power over the life of the Project, the energy required to convey water to, and wastewater from, the Project site, the emissions associated with solid waste generated from the Project site, and any fugitive refrigerants from air conditioning or refrigerators. **Table 4.8-3: Total Project Greenhouse Gas Emissions** summarizes the total GHG emissions (amortized construction and operational emissions) associated with proposed Project. As shown, the Project would generate approximately 2,729.06 $MTCO_2e$/year. This level is below the AVAQMD GHG thresholds. Thus, the Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

Table 4.8-3: Total Project Greenhouse Gas Emissions

Emissions Source	$MTCO_2e$ per Year
Construction Amortized over 30 Years	18
Area Source	234
Energy	601
Mobile	1,970
Waste	77
Water & Wastewater	39
Refrigeration	0.40
Total Project Emissions*	**2,729**
AVAQMD Threshold	90,718
AVAQMD Threshold Exceeded?	**No**

**Totals may be slightly off due to rounding.*

*Source: CalEEMod version 2022.1.1. Refer to **Appendix B** for model data outputs.*

4.8b Would the Project conflict with applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact.

Greenhouse Gas Reduction Plan Compliance

The City adopted a Climate Action Plan (CAP) as part of the Sustainability, Climate Action, and Resilience Element to the 2022 General Plan update. The analysis is focused on analyzing the consistency of the proposed Project with the City's CAP. In addition, the 2022 CARB Scoping Plan, SCAG's 2020-2045 RTP/SCS, Senate Bill (SB) 32, and Title 24 are also analyzed for consistency.

Palmdale CAP

The Sustainability, Climate Action, and Resilience Element of the General Plan serves as the CAP for the City of Palmdale. This General Plan Element provides the City's greenhouse gas reduction and sustainability strategies. The CAP sets GHG reduction targets consistent with State of California policy (40 percent below 1990 levels by 2030 [SB 32] and carbon neutrality by 2045 [Executive Order (E.O.) B-55-18]). The CAP includes several goals and policies directed at reduction of greenhouse gas emission that are relevant to the proposed Project**. Table 4.8-4: Palmdale CAP Consistency**, analyzes the proposed Project's consistency with the applicable goals and policies of the CAP.

Table 4.8-4: Palmdale CAP Consistency

CAP Goal		Project Consistency	
Goal SCR-3	Green and decarbonized buildings for new construction and major renovations.		
	SCR-3.1 Energy Efficient New Construction. Integrate CALGreen Tier 1 and Tier 2 green building and energy efficiency standards into new construction and major remodels.	Consistent	The proposed Project would incorporate CALGreen standards.
	SCR-3.3 Solar and Storage. Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sq. ft.	Consistent	While photovoltaic panels and battery storage are not a part of the proposed Project design, the proposed Project does not include features that would preclude their inclusion at a later time.
Goal SCR-4	Reduced greenhouse gas emissions from transportation (SB 379, EO N-79-20).		
	SCR-4.1 Bike Facilities. Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes.	Consistent	The Project contains complete streets design features that encourage walking and biking in the area. This includes plans for shared bicycle lanes to be located along 30th Street East. The proposed Project would contribute to the City's bicycle infrastructure, by providing bicycle parking and new travel lanes marked for shared automobile and bicycle use.
Goal SCR-7	Open spaces designed to provide multiple climate and sustainability functions.		
	SCR-7.1 Tree Planting in Public Spaces. Plant additional trees on streets, parks, and other public spaces to sequester carbon, provide shade, contribute to stormwater management, provide habitat, and enhance community character.	Consistent	The Project site is devoid of trees and vegetated with creosote bushes and assorted scrub plants. The proposed Project would include new landscaping that would include numerous trees. Trees would be planted at regular intervals along proposed Project streets and in parking areas, as well as in the proposed parks and throughout the residential areas.

Source: City of Palmdale General Plan, Sustainability, Climate Action, and Resilience Element, (2023).

As shown in **Table 4.8-4**, the proposed Project would be consistent with the applicable goals and policies of the CAP. Therefore, the proposed Project would not conflict with the City of Palmdale's CAP.

SCAG 2020-2045 RTP/SCS Consistency

SCAG's 2020-2045 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 E.O. 5-03-05 and E.O. B-30-15.

The 2020-2045 RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The 2020-2045 RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The 2020-2045 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 CAA requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the 2020-2045 RTP/SCS is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. **Table 4.8-5: Regional Transportation Plan/Sustainable Communities Strategy Consistency** analyzes the proposed Project's consistency with the 2020-2045 RTP/SCS.

SCAG Goals		Project Consistency	
GOAL 1:	Encourage regional economic prosperity and global competitiveness.	N/A:	This is not a project-specific policy and is therefore not applicable.
GOAL 2:	Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent:	The Project includes improvement, expansion, and extension of existing roadways serving the Project site and development of new roadways, improving mobility and accessibility in the Project area.
GOAL 3:	Enhance the preservation, security, and resilience of the regional transportation system.	N/A:	This is not a transportation improvement project and 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 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 existing transportation routes and freeways. Location of the project within 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 does not exceed regional thresholds. The Project 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 policy 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 policy 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 involves development of a community of mixed housing types serving a range of income levels that would provide diverse housing options that would be served by the

SCAG Goals		Project Consistency	
			Antelope Valley Transit Authority (AVTA).
GOAL 10:	Promote conservation of natural and agricultural lands and restoration of habitats.	N/A:	This Project is located within a suburban area and is not located on agricultural lands.

Source: Southern California Association of Governments, Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy, 2020.

Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts. The goals stated in the 2020-2045 RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in **Table 4.8-5**, the proposed Project would be consistent with the stated goals of the 2020-2045 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.

Consistency with the CARB 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 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 § 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 (ZE) 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. Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include:

- Implementing SB 100 (achieve 100 percent clean electricity by 2045)
- Achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II
- Implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicle (ZEV) buses and trucks

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, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. 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.

GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in California, most of the electricity that powers homes is derived from natural gas combustion. Therefore, energy saving measures, such as Title 24, reduces GHG emissions from the power generation facilities by reducing load demand.

CARB Scoping Plan Appendix D, Local Actions

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.[26] CARB specifically states that Appendix D does not address other land uses (e.g., industrial).[27] However, CARB plans to explore new approaches for other land use types in the future.[28]

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 and mitigation measures that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

CARB Scoping Plan Appendix D notes that residential and mixed-use projects that meet the following three priority areas are "clearly" consistent with the State's goals and projects that have these key project attributes should accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals. Appendix D also notes that lead agencies may determine, with adequate additional supporting evidence, that projects that incorporate some, but not all, of the key project attributes are consistent with the State's climate goals.[29]

- **VMT Reduction.** The Scoping Plan notes that to be consistent with the VMT reduction attribute, projects should be located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer); do not result in the loss or conversion of natural and working lands; consist of transit-supportive densities (minimum of 20 residential du/ac); and consist of a minimum of 20 percent affordable units. The proposed Project is surrounded by existing suburban uses, does not result in the loss of natural and working lands, has a density of up to 23 du/ac, and would include 152 affordable units out of the total 330 units (46 percent).

The proposed Project would include the CARB Scoping Plan Appendix D key residential and mixed-use project attributes as design features, including requiring low-water landscaping and requiring energy conserving appliances. It should be noted that the transportation section (Section 4.17, *Transportation*) of the Palmdale 2045 General Plan Update Final EIR included a comprehensive analysis of potential VMT impacts as required under CEQA Guidelines § 15064.3. Based on the proposed land uses, the proposed Project would be consistent with the City's recently adopted Palmdale 2045 General Plan update. The VMT analysis in the Palmdale 2045 General Plan Update Final EIR demonstrated that the 2045 General Plan would reduce the total VMT per service population in comparison to existing conditions.

The proposed Project would be subject to compliance with all building codes in effect at the time of construction, which would include energy conservation measures mandated by Title 24 of the California Building Standards Code – Energy Efficiency Standards. Because Title 24 standards require energy conservation features in new construction (e.g., high- efficiency lighting, high-efficiency HVAC systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures), they indirectly regulate and reduce GHG emissions. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The most recent 2022 standards went into effect January 1, 2023.

Further, the proposed Project would be subject to compliance with the AVAQMD's proposed GHG threshold and would not interfere with the State's goals of reducing GHG emission. The project would comply with the CBC provisions designed to reduce GHG emissions. Approximately

[26] California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 21, November 2022.
[27] *Id*. at Page 4, November 2022.
[28] *Id*. at Page 21, November 2022.
[29] *Id*. at Page 23, November 2022.

94 percent of the proposed Project's emissions would be from energy and mobile sources, which would be further reduced by 2022 Scoping Plan implementation. In addition, approximately 72 percent of the proposed Project's total emissions are from mobile sources that would decline in the future due to statewide measures including the reduction in the carbon content of fuels, CARB's advanced clean car program, CARB's mobile source strategy, fuel efficiency standards, cleaner technology, and fleet turnover. Additionally, SCAG expects implementation of its RTP/SCS to help California reach its GHG reduction goals, with reductions in per capita transportation emissions of 19 percent by 2035.[30] The project is a residential project close to local-serving commercial uses and AVTA stops, thereby potentially reducing the need to travel long distances. The project would not interfere with the State's efforts to reduce GHG emissions in 2030.

Concerning E.O. S-3-05 goals for 2050, it is not currently possible to quantify all emissions savings from future regulatory measures because government agencies have not yet developed the measures. Just as the proposed Project's GHG emissions would decrease over time from the known regulations that the State would phase in over time, it can be anticipated that Project operations would benefit from all applicable measures enacted by State lawmakers to reach the goal of an 80 percent reduction below 1990 levels by 2050. This percentage reduction in the level of GHG emissions is what the State's GHG regulators believe the State needs to achieve in order to stabilize GHG-induced temperature increases and limit GHG impacts in California's environment. The basis for the analysis included in this Initial Study is generally the Consultant's knowledge about current GHG emissions regulations and its prediction of GHG impacts, to the extent possible, based on scientific and factual data. Further analysis would be speculative; therefore, in compliance with CEQA, this Initial Study provides no further analysis or conclusions concerning the proposed Project's long-term GHG impacts.

In addition, the proposed Project would be subject to compliance with applicable building codes and AVAQMD rules and regulations during the construction and operational phases and, therefore, would not interfere with the State's goals of reducing GHG emissions. Therefore, the proposed Project would not conflict with an applicable plan, policy, or regulation (e.g., Title 24, AB 32, and SB 32) adopted to reduce GHG emissions. Impacts would be less than significant.

[30] Southern California Association of Governments, Connect SoCal 2020–2045 RTP/SCS, September 3, 2020, p. 9.

4.9 Hazards and Hazardous Materials

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
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?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

Impact Analysis

4.9a 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 use of equipment that requires potentially hazardous fuels, and temporary transport, use, disposal, and/or storage of hazardous materials like paint, lubricant, and degreasers. During operations, periodic use of hazardous materials such as chemicals for cleaning and herbicides for landscaping may be used for maintenance of the Project site. Hazardous materials could accidentally be spilled or otherwise released into the environment and expose workers, the public, and/or the environment to potentially hazardous conditions. However, the proposed Project would comply with local, State, and federal regulations that concern the disposal, transport, use, and storage of hazardous materials during construction and operational activities. Further, construction contractors would be required to implement best management practices (BMPs) for handling hazardous materials during construction activities, including following manufacturers' recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials; avoiding overtopping construction equipment fuel tanks; routine maintenance of construction equipment; and proper disposal of discarded containers of fuels and other chemicals.

Additionally, the Department of Toxic Substances Control (DTSC) hazard tracking system reports that a site assessment was conducted in 2004 and found no past uses of contaminants or potential concerns.[31] Because no development has occurred at the Project site since then and the proposed Project would be subject to hazardous materials regulations, impacts from transport, use, and disposal of hazardous materials would be less than significant.

4.9b 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 is currently vacant and has no history of development. The site is not in a Methane Gas Mitigation Zone.[32] A less than significant impact from transport, use, and disposal of hazardous materials for the environment and public reduces the potential for upset or accident conditions that release hazardous material. Following BMPs for handling hazardous materials would ensure that accidental releases would be cleaned and disposed of in compliance with applicable federal, State, and local standards. Accordingly, impacts would be less than significant.

4.9c 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?

No Impact. The closest school is Cactus Middle School, approximately 0.5 miles northeast of the Project site. Therefore, the proposed Project would not generate hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school and there would be no impact.

4.9d 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 it create a significant hazard to the public or the environment?

No Impact. The DTSC Hazardous Waste and Substances Site List (the Cortese List) identifies hazardous materials release sites, pursuant to Government Code § 65962.5. There are no Cortese sites in the vicinity of the Project site.[33] Additionally, review of the State Water Resources Control Board (SWRCB) GeoTracker database did not indicate any open hazardous materials cleanup sites or permitted hazardous materials generators in the vicinity of the Project site.[34] Therefore, there would be no impact.

4.9e For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project site is located approximately 3.2 miles south of the Palmdale Regional Airport. The Los Angeles County Airport Land Use Commission has adopted a comprehensive Airport Land Use Plan (ALUP) for the County's public use airports, including Palmdale Regional Airport. The ALUP establishes a Planning Boundary/Airport Influence Area for Palmdale Regional Airport. Because the Project site is not located within the airport's Planning Boundary/Airport Influence Area, the proposed Project would have no impact related to safety hazards or excessive noise from airports.

4.9f Would the Project impair implementation of or physically interfere with an emergency response plan or emergency evacuation plan?

Less Than Significant Impact. Evacuation routes have been established by the City of Palmdale.[35] The nearest evacuation route is Avenue S, south of the Project site. Construction could temporarily limit street access or disrupt traffic flow through lane closures in the immediate vicinity of the proposed Project. However, Project construction would not physically interfere with the established evacuation routes.

[31] Department of Toxic Substances Control, EnviroStor, <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=27+street+east+palmdale> (Accessed July 19, 2023).
[32] Methane Gas Mitigation and Oil Well Map, <https://www.arcgis.com/apps/mapviewer/index.html?webmap=3e86512f36074526931deb22c1b91092> (Accessed July 13, 2023).
[33] DTSC's Hazardous Waste and Substances Site List, Site Cleanup (Cortese List), <https://dtsc.ca.gov/dtscs-cortese-list/> (Accessed July 14, 2023).
[34] State Water Resources Control Board GeoTracker Database. < https://geotracker.waterboards.ca.gov/> (Accessed November 23, 2023).
[35] County of Los Angeles, Department of Public Works, Disaster Route Maps, <https://pw.lacounty.gov/dsg/DisasterRoutes/map/Palmdale.pdf> (Accessed January 25, 2024).

Furthermore, temporary construction would not reduce street use for emergency services or responses. Additionally, a Construction Management Plan would be implemented to minimize any temporary pedestrian and traffic impacts. The contractor would implement the Construction Management Plan, which would ensure safe pedestrian access and vehicle travel in general, and emergency vehicle access throughout the construction period. Thus, the proposed Project would not conflict with the City's emergency response or evacuation plans and any impact would be less than significant.

4.9g Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. Based on Figure 13.8 in the Palmdale General Plan Safety Element, Palmdale Fire Hazard Areas Related to General Plan Land Use and Public Facilities, the Project site is not located in a zone with moderate, high, or very high fire hazards[36]. The nearest location with a Very High Fire Hazard Severity Zone (VHFSZ) is located outside the City of Palmdale boundary, approximately 2.2 miles southwest of the City line. Additionally, by following local and State building codes, the proposed Project would not expose people or structures to significant wildland fires risk. Therefore, the impact would be less than significant.

[36] City of Palmdale, *City of Palmdale General Plan 2045*, Chapter 13: Safety Element. Page 344. <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635311bdf7cddb1b01941440/1666388437627/PalmdaleGPU_Ch13_10322.pdf> (Accessed July 14, 2023).

4.10 Hydrology and Water Quality

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the projects may impede sustainable groundwater management of the basin?			X	
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.			X	
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv. Impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Impact Analysis

4.10a Would the Project violate water quality or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Project construction activities would necessitate grading and preparation of the existing ground surface. These activities have the potential to result in displacement of soils and erosion due to wind and water exposure and the inadvertent release of construction-related chemicals and materials such as concrete, asphalt, fuels, oils, solvents, and paints. According to the Hydrology and Water Quality Evaluation prepared by Rincon Consultants, Inc. (see **Appendix G**), stormwater runoff from the Project site would discharge to the City's municipal stormwater sewer system (MS4). The MS4s receiving waters, Amargosa and Anaverde Creeks, are not jurisdictional waters of the United States (WOTUS) as defined in Section 402 of the Clean Water Act. Since stormwater runoff from the Project site would not discharge to WOTUS, the proposed Project would likely not be subject to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which only applies to projects which discharge into a WOTUS. To demonstrate that the Project site would not discharge to WOTUS, the Project applicant must submit a Notice of Non-Applicability and No Discharge Technical Report to the SWRCB. However, proposed Project design would be required to comply with PMC Chapter 8.04 and the City's Stormwater Management Plan (SWMP), which require the implementation of construction BMPs designed to reduce erosion and stormwater runoff. Project construction would incorporate erosion-control and sediment-control BMPs to prevent erosion and control potential construction-related pollutants. Compliance

with the PMC and SWMP would ensure that proposed Project construction would not violate water quality standards or otherwise substantially degrade surface or groundwater quality.

Regarding long-term operations, the proposed Project would be required to comply with PWD standards, PMC Chapter 14.05, and the SWMP, including preparation of a Street Improvement Plan, a Hydrology and Hydraulics Study, a Landscape Design Plan, and a Soil Management Report. These documents would be required to describe and document the stormwater BMPs that would be incorporated into the proposed Project design. Through compliance with the above-described requirements, construction and operation of the proposed Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, impacts would be less than significant.

4.10b 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 currently vacant and lacks impervious surfaces. Project development would increase impervious surface across the entire Project site. According to the Hydrology and Water Quality Evaluation (see **Appendix G**), data provided by the USGS indicates that the nearest monitoring well, located approximately 2,600 feet to the north, reported a groundwater depth of approximately 227 feet below ground surface on March 2022.

The proposed Project would connect to the City's water supply, managed by PWD. Roughly 40 percent of the City's water is derived from groundwater with the remaining 60 percent imported via the State Water Project or supplied by the local Little Rock Reservoir. The Project site is within the Antelope Valley Groundwater Basin. The Antelope Valley Groundwater Basin is considered a very low priority basin and is currently exempt from the requirements of the Sustainable Groundwater Management Act (SGMA) because the Project site is also within the Mojave Basin Area (MBA), which is an adjudicated area. Adjudicated areas are exempt from SGMA because an Adjudication Judgement serves the same purpose of SGMA, which is to achieve and maintain sustainable groundwater conditions.

Due to the regional and local depth of groundwater and the typical relatively shallow grading and foundation excavation depths, groundwater dewatering is not anticipated during construction of the proposed Project. Furthermore, water used for construction activities, such as cleaning, dust suppression, concrete mixing, would be short-term and minimal. Based on the relatively short-term and minimal construction-related water needs, and the diversified sources of the PWD's water supplies, construction-related water use would not substantially lower groundwater levels in the Antelope Valley Groundwater Basin.

For long-term operation of the proposed Project, in accordance with the Adjudication Judgement for the MBA, water purveyors, including the PWD, are subject to the annual Free Production Allowance (FPA), which is the amount of water that each party within the MBA is allowed to pump for the respective year. Any groundwater from the adjudicated MBA that is provided by PWD for the proposed Project would come from PWD's annual FPA, which is subject to the management and oversight of the Watermaster. Therefore, operational water demands associated with the proposed Project would not adversely affect groundwater supply. Furthermore, proposed Project operation could potentially interfere with groundwater recharge through the creation of new impervious surfaces. The impervious surfaces would be managed through Project compliance with low impact development (LID) goals and policies presented in the General Plan. Additionally, the Project would comply with PMC Chapter 14.05, which establishes provisions for water and stormwater management BMPs to minimize runoff and maximize infiltration to recharge groundwater. Project operation would incorporate BMPs, including friable soil for all planted landscapes, low-water plants in Landscape Design Plans, and efficient water use measures in irrigation design plans, all of which require City approval. Compliance with PMC Chapter 14.05 would reduce the use of groundwater and maximize infiltration and recharge. Therefore, groundwater impacts from operational activities would be less than significant.

4.10c Would the Project substantially alter the existing drainage pattern of the site or area, including through the alterations of the course of stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

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

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

iv. Impede or redirect flood flows?

Less Than Significant Impact. The proposed Project would not alter the course of any streams or rivers as there are no water bodies of this type on the Project site. Project development would increase impervious surfaces across the Project site, potentially increasing the amount of surface runoff. However, as discussed above for Impact 4.10a, the proposed Project would be required to comply with PWD standards, the PMC, and the City's SWMP, which require the preparation of a Street Improvement Plan, a Hydrology and Hydraulics Study, a Landscape Design Plan, and a Soil Management Report. These documents would be required to describe and document the stormwater BMPs that would be incorporated into the Project design that would prevent erosion, siltation, or flooding on- or offsite and would not contribute runoff that would exceed the capacity of the existing stormwater drainage system. Furthermore, Project runoff would be used onsite or discharged to the existing public storm drain through onsite stormwater pipes. Accordingly, impacts to the existing drainage pattern of the Project site would be less than significant.

4.10d Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?

Less Than Significant Impact. As described in the Hydrology and Water Quality Evaluation (see **Appendix G**), the Project site is located in an area of minimal flood hazard, outside the 100-year floodplain, outside the tsunami hazard area, and is not within a seiche zone. The Project site is in close proximity to the Lake Palmdale Dam. The risk of dam failure at Lake Palmdale is unlikely; however, in the event that inundation does occur, limited amounts of hazardous materials that are typical of residential projects would be released from the Project site. Therefore, Project impacts related to the release of pollutants from inundation would be less than significant.

4.10e Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The Project site is within the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB) Basin Plan, which identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses, together known as water quality standards. The proposed Project would not degrade water quality in a manner that would interfere with the beneficial uses of local surface water as established by the Basin Plan. As described in the discussion for Impact 4.10a, Project implementation of construction and post-construction BMPs as required in the PMC and the City's SWMP would reduce pollutants in stormwater runoff; therefore, the proposed Project would also not violate water quality standards or degrade surface water quality and would be consistent within the Lahontan RWQCB Basin Plan.

Furthermore, as described for Impact 4.10b, the Project site is within the adjudicated MBA, and the Adjudication Judgement of the MBA serves the same purpose as a groundwater management plan. Since the proposed Project would be served by the PWD, who is in turn allocated a sustainable allotment of groundwater, the proposed Project would not conflict with the Judgement. Therefore, for the reasons stated above, the proposed Project would not conflict with a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

4.11 Land Use Planning

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				X
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?			X	

Impact Analysis

4.11a Would the Project physically divide an established community?

No Impact. Examples of projects that could physically divide an established community include new freeways or highways that traverse an established neighborhood. The proposed Project site is currently undeveloped and is devoid of structures. Therefore, the proposed Project would not physically divide an established community and no impact would occur.

4.11b 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.

General Plan

The proposed Project site has a General Plan Land Use designation of RN2. This land use designation is intended for grouped housing such as townhouses, condominiums, and apartments with on-site recreation and open space. The RN2 land use designation has an allowable density of 10 to 20 du/ac.

The proposed Project would include a range of housing types composed of 152 affordable walkup apartments, 84 market-rate apartments, 60 townhomes, and 34 cottages and is consistent with the intended use of the RN2 land use designation. The Project would utilize California's density bonus law to increasing the maximum residential density from 20 du/ac to 23 du/ac.

Table 4.11-1 General Plan Consistency describes the proposed Project's consistency with applicable policies of the City's General Plan.

:

Goal	Policy	Consistency
Goal LUD-1 Complete Neighborhoods where residents can reach daily amenities, local retail, services, parks, and public facilities within a short 20-minute walk.	**LU Policy 1-1 Balanced land uses.** Maintain a balanced land use patten to support a broad range of housing choices, retail businesses, employment and cultural institutions, entertainment spaces, and other supportive uses within long established Palmdale neighborhoods and new growth areas.	**Consistent:** The proposed Project would develop a currently vacant area with a land use consistent with and complimentary of surrounding development. The proposed Project would support a range of housing choices, including apartments, townhouses, condominiums, and cottages.

:

Goal	Policy	Consistency
	LU Policy 1-2 New complete neighborhoods. Facilitate the construction of new mixed-use neighborhoods that are well connected to services, transit, amenities, public buildings, and parks and recreational facilities.	**Consistent:** The proposed Project would develop a currently vacant area with a land use consistent with and complimentary of surrounding development. The proposed Project would include a variety of landscaped and open space areas, which would total approximately 2.95 acres. As described in Section 2.3.1, Parcel 5 would be developed as a two-acre public park. Parcels 1, 3, and 4 would feature pocket parks accessible to the public. Parcel 2 would include play areas, connecting the street to the interior of each parcel development.
Goal EHC-6 Promote neighborhoods with a range of housing opportunities that provide housing opportunities for people of all ages, abilities, socio-economic status, family structure, and size.	**EHC-6.2 Housing diversity.** Encourage a variety of housing types developed at range of densities to serve varying household types, including, but not limited to, single-family attached and detached accessory dwelling units, multi-family apartments, townhomes, duplexes, triplexes, quadplexes and condominiums.	**Consistent.** The proposed Project would incorporate a variety of housing types developed at various ranges of density including apartments, townhomes, and cottages.
Goal EHC-7 A City that preserves and expands its supply of affordable housing.	**EHC-7.3 Vacant and underutilized land.** Identity vacant and underutilized land, including publicly owned land, suitable for affordable housing.	**Consistent.** The proposed Project would develop a currently vacant and underutilized area and develop a range of housing types, including 152 units of affordable housing.
Goal EHC-10 Encourage neighborhoods with a range of opportunities to exercise, including parks and recreational facilities	**EHC 10.2 Access to open space.** Plan for new parks and increase access to existing and future parks, trails, and open spaces, especially in disadvantaged communities.	**Consistent.** The proposed Project would develop an underutilized area and develop a range of housing types and a variety of landscaped and open space areas, which would total approximately 2.95 acres, improving access to open space.
Goal PR-1 Provision of adequate park and recreation facilities to meet the needs of all existing and future residents.	**PR 1-2 Park location.** Ensure that park sites are located equitably throughout the city, to maximize access to parks and residents within a 20-minute walking distance.	**Consistent:** The proposed Project would develop an underutilized area and develop a range of housing types and an approximately 2.95 acres of open space areas that would be within a 20-minute walking distance for new residents of the proposed Project and existing residents of the surrounding community.
Goal SCR-3 Green and decarbonized buildings for new construction and major renovations.	**SCR-3.1 Energy Efficient New Construction.** Integrate CALGreen Tier 1 and Tier 2 green building and energy efficient standards into new construction and major remodels.	**Consistent.** The proposed Project would incorporate CALGreen Code standards.

Zoning

The Project site is zoned RN2, which is "intended for grouped housing such as small-lot single-family residential, townhouses, condominiums, and apartments with on-site recreation and open space allowing a density range of 10 to 20 dwelling units per acre."[37] The proposed Project proposes a range of housing types composed of 152 affordable walkup apartments, 84 market-rate apartments, 60 townhomes, and 24 cottages. The Project would utilize California's density bonus law to increase the maximum residential density from 20 du/ac to 23 du/ac. This is consistent with the PMC which complies with the requirements of State law regarding density bonuses for affordable housing.[38]

Therefore, based on the analyses above, the proposed Project would not 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, and impacts would be less than significant.

[37] City of Palmdale, PMC Section 17.33.010 < https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/64de9083b184884ca0705f29/1692307595388/PalmdaleTitle17.pdf>(Accessed November 15, 2023).
[38] *Id.* at Sec. 17.25.020.

4.12 Mineral Resources

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				X
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?				X

Impact Analysis

4.12a Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. Palmdale is within a California Department of Conservation designated Mineral Resource Zone, the Palmdale Production Consumption Region, with 1,103 square miles of land.[39] The Surface Mining and Reclamation Act of 1975 (SMARA) regulates surface mining throughout the State of California and requires classification of land into mineral resource zones (MRZs) according to the area's known or inferred mineral potential.[40] Palmdale's mineral deposits include the Little Rock Fan with an area of 12 miles and the Big Rock Creek Fan with an area of 26 miles. The principal mineral deposits are 60 percent fine to coarse sand and silt and 40 percent pebbly gravel, extending northward of the San Gabriel Mountains for approximately 8 miles each.[41] The active quarries In Palmdale are approximately 3.6 miles east, 4 miles northeast, and 4 miles southeast of the Project site.[42] Because the Project site is not within a quarry zone or other area of known mineral resources there would be no impact.

4.12b 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 Project site is not designated for Mineral Resource Extraction in the Palmdale General Plan.[43] The General Plan seeks to limit the extraction of minerals in the City, and thus it is unlikely to expand areas designated for Mineral Resource Extraction. The proposed Project would not interfere with locally-important mineral resources, therefore there is no impact.

[39] City of Palmdale, City of Palmdale General Plan 2045, Chapter 11: Conservation Element, Page 285, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/6353118f7ef0434889bf9623/1666388384187/PalmdaleGPU_Ch11_10322.pdf> (Accessed July 13, 2023).
[40] California Department of Conservation, SMARA Statutes and Regulations, <https://www.conservation.ca.gov/dmr/lawsandregulations#:~:text=%E2%80%8BThe%20Surface%20Mining%20and,are%20reclaimed%20to%20a%20usable> (Accessed July 13, 2023).
[41] City of Palmdale, City of Palmdale General Plan 2045, Chapter 11: Conservation Element, Page 285, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/6353118f7ef0434889bf9623/1666388384187/PalmdaleGPU_Ch11_10322.pdf> (Accessed July 13, 2023).
[42] California Department of Conservation, Division of Mine Reclamation, Mines Online, <https://maps.conservation.ca.gov/mol/index.html> (Accessed July 13, 2023).
[43] City of Palmdale, City of Palmdale General Plan 2045, Chapter 5: Land Use Element, Page 55, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/63573567d351b544ed98d5c8/1666659697652/PalmdaleGPU_Ch05_92822_Small.pdf> (Accessed July 12, 2023).

4.13 Noise

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate 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?			X	
b) Generate of excessive ground borne vibration or groundborne noise levels?		X		
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?				X

Impact Analysis

Existing Noise Sources

The Project site is impacted by various noise sources. Mobile sources of noise, including traffic along 30th Street East, 27th Street East, 29th Street East, 25th Street East, East Avenue R-10, and East Avenue R-12 are the most common and prominent sources of noise in the Project site area. Other noticeable sources of noise on and near the Project site include existing nearby residential uses, and other urban-related activities (e.g., idling cars/trucks, pedestrians, car radios and music playing, dogs barking, etc.).

Sensitive Receptors

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses. Sensitive receptors near the Project site are depicted on **Figure 4.13-1: Noise Sensitive Receptors** and described in detail in **Table 4.13-1: Noise Sensitive Receptors**.

Figure 4.13-1: Noise Sensitive Receptors

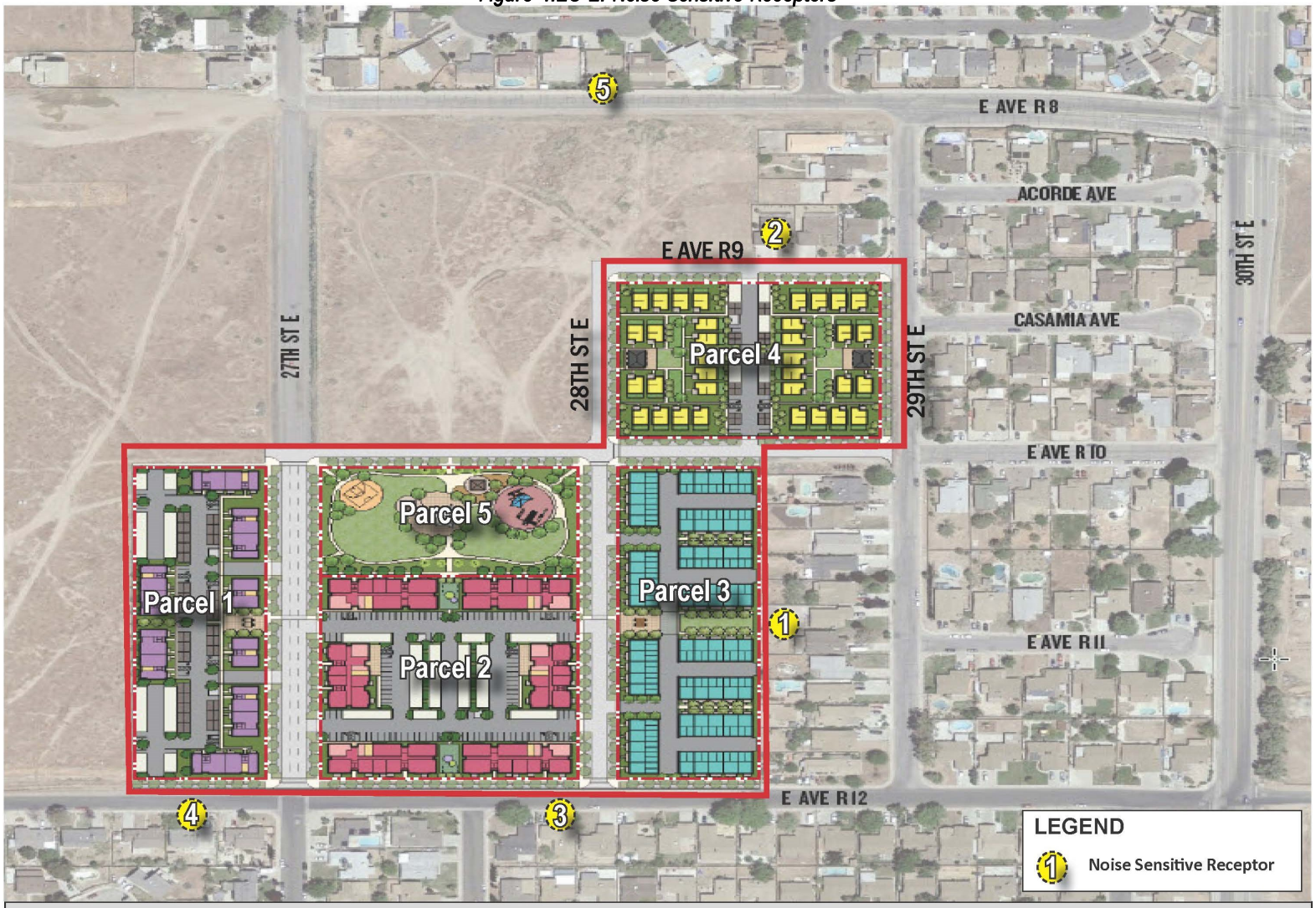

FIGURE 4.13-1: NOISE SENSITIVE RECEPTORS
Palmdale Housing Opportunity Project
Draft Initial Study/Mitigated Negative Declaration

Table 4.13-1: Noise Sensitive Receptors

Receptor Description	Distance* and Direction from the Project
Receptor 1: Single-Family Residences	20 feet east adjacent to the Project site
Receptor 2: Single-Family Residences	30 feet north
Receptor 3: Single-Family Residences	45 feet south
Receptor 4: Single-Family Residences	75 feet to the southwest
Receptor 5:Single-Family Residences	350 feet to the north

Source: Google Earth, 2023.

**Distance measured from the property line of the Project site to the nearest receptor property line.*

Applicable Thresholds

Construction Noise

On-Site Construction. Noise due to construction is regulated under PMC Section 8.28.030, which prohibits construction noise on Sunday, or any other day after 8:00 p.m. or before 6:30 a.m., in any residential zone or within 500 feet of any residence, hotel, motel or recreational vehicle park. Any construction activity outside these times would constitute an impact.

For purposes of quantifying potential construction noise at the nearby noise sensitive receptors identified in **Table 4.13-1**, a noise analysis was prepared using the U.S. Federal Transit Administration (FTA) 80 dBA L_{eq} threshold. Exceedance of the 80 dBA L_{eq} threshold.

Operational Noise

On-Site Operations. With respect to on-site operational noise, the significance criteria used in the noise analysis is the normally acceptable noise level for each land use listed in the Palmdale General Plan Noise Element Land Use Compatibility Standards shown in Table 4.13-2: Palmdale Land Use Compatibility Guidelines. For the surrounding residential uses, the normally acceptable noise levels are below 60 dBA.

Table 4.13-2: Palmdale Land Use Compatibility Guidelines

Land Use Category	Community Noise Exposure (Ldn or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential-Low Density Single-Family, Duplex, Mobile Homes	<60	55 – 70	70 – 75	75<
Residential Multi-Family	<65	60 – 70	70 – 75	75<
Transient Lodging-Motels and Hotels	<65	60 – 70	70 – 80	80<
Schools, Libraries, Churches, Hospitals, Nursing Homes	<70	60 – 70	70 – 80	80<
Amphitheaters, Concert Hall, Auditorium, Meeting Hall	-	50 – 70	-	65<
Sports Arenas, Outdoor Spectator Sports	-	50 – 70	-	70<
Playgrounds, Neighborhood Parks	<70	-	68 – 75	72<
Golf Courses, Riding Stables, Water Recreation, Cemeteries	<75	-	70 – 80	80<
Office Buildings, Business Commercial, Professional, and Mixed-Use Developments	<70	68 – 78	75<	-
Industrial, Manufacturing, Utilities, Agriculture	<75	70 – 80	75<	-

CNEL = Community Noise Equivalent Level; Ldn = Day/Night Average; NA = Not Applicable

Normally Acceptable: Specified Land Use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special insulation requirements.

Conditionally Acceptable: Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features are included in the design.

Normally Unacceptable: New construction or development should generally be discouraged. A detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

Clearly Unacceptable: New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Source: City of Palmdale, General Plan, Chapter 16 Noise, 2022.

Off-Site Operations. There are no applicable city noise regulations that apply to off-site traffic (i.e., vehicles traveling on public roadways). Typically, when traffic noise levels are below the normally acceptable level listed in the land use compatibility guidelines, the traffic noise would be considered less than significant. In general, a traffic noise increase of less than 3 dBA is barely perceptible to people, while a 5 dBA increase is readily noticeable. Generally, traffic volumes on Project area roadways would have to approximately double for the resulting traffic noise levels to increase by 3 dBA. Therefore, permanent increases in ambient noise levels of less than 3 dBA are considered to be less than significant when noise levels are above normally acceptable levels for the surrounding land uses.

Vibration

Structural Damage. Heavy construction equipment (e.g., a large bulldozer) would generate a vibration level of up to 0.089 inch/second Peak Particle Velocity (PPV) at a distance of 25 feet from the equipment[44]. With respect to potential building damage, FTA provides potential building damage criteria varies from 0.12 PPV (inch/second) for buildings that are extremely susceptible to vibration to 0.50 PPV (inch/second) for reinforced-concrete, steel or timber buildings.[45] There are residences surrounding the construction site. This evaluation uses the FTA architectural damage criterion for continuous vibrations of 0.2 in/sec peak particle velocity (PPV) at non-engineered timber and masonry buildings for all other adjacent structures.

Human Annoyance. In accordance with Caltrans guidance for human annoyance, a threshold of 0.04 in/sec PPV is utilized in this analysis.[46]

4.13a Would the Project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact.

Construction

On-Site Construction Noise

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation). Noise generated by construction equipment, including earth movers and material handlers, can reach high levels. During construction, exterior noise levels could affect noise-sensitive uses near the construction site. Construction activities would include excavation and grading, building construction, architectural coating, and paving. Noise levels associated with individual construction phases during each Project phase are listed in **Table 4.13-3: Project Construction Phase Noise Levels**.

It should be noted that the values shown in **Table 4.13-3** are modeling equipment operating at full power and represent worst case scenarios. Construction noise was calculated for each proposed Project parcel separately. Each Project parcel construction phase accounts for each piece of equipment's usage factor, or the fraction of time that the equipment would be in use at full power over a specific period of time. Other primary sources of acoustical disturbance may include random incidents, which would last less than one minute (such as dropping of materials or the hydraulic movement of machinery lifts). Following the FTA's methodology for quantitative construction noise assessments, construction noise was predicted at the nearest noise-sensitive receptors consistent with the Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM) and the methodologies in the FTA Transit Noise and Vibration Impact Assessment Manual.[47] Following FTA methodology, when calculating construction noise, all equipment is assumed to operate at the center of each parcel, as equipment would operate throughout the parcel and not at a fixed location for extended periods of time.[48] Therefore, the distance used in the

[44] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, 2018, Table 7-4, <www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>.
[45] *Id.*
[46] California Department of Transportation , Transportation and Construction Guidance Manual, 2013, Table 20, <https://www.contracosta.ca.gov/DocumentCenter/View/34120/Caltrans-2013-construction-vibration-PDF?bidId=>.
[47] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.
[48] *Id.*

RCNM model was measured from the center of the Project construction area to the closest sensitive receptors shown in **Figure 4.13-1: Sensitive Receptors**.

Table 4.13-3: Project Construction Phase Noise Levels

Project Parcel	Receptor Location			Maximum Modeled Exterior Noise Level (dBA L_{eq})**	Noise Threshold (dBA Leq)***	Exceeded?
	Closest Sensitive Receptor	Construction Phase	Distance (feet)*			
Parcel 1	Sensitive Receptor 4	Grading	390	68.0	80	No
Parcel 2	Sensitive Receptor 3	Site Preparation/Paving	280	72.7	80	No
Parcel 3	Sensitive Receptor 1	Site Preparation/Paving	140	78.7	80	No
Parcel 4	Sensitive Receptor 2	Paving	210	73.3	80	No
Parcel 5	Sensitive Receptor 1	Grading	320	69.7	80	No
R-9, and R-10 Roadway Improvement	Sensitive Receptor 1	Drainage	350	70.8	80	No
27th Street Roadway Improvement	Sensitive Receptor 4	Drainage	420	69.2	80	No
28th Street Improvement	Sensitive Receptor 1	Drainage	260	73.0	80	No

** Distance is from the nearest receptor to the main construction activity area on the Project site. Not all equipment would operate at the closest distance to the receptor.*

*** Modeled noise levels conservatively assume the simultaneous operation of all pieces of equipment.*

**** The FTA Noise and Vibration Manual establishes construction noise standards of 80 dBA L_{eq} (8-hour) for residential uses.*

*Source: Federal Highway Administration, Roadway Construction Noise Model, 2006. Refer to **Appendix H** for noise modeling results.*

Construction of the proposed Project parcels and roadways would overlap, and noise would compound to higher levels. **Table 4.13-4: Overlapping Project Construction Noise Levels** shows the estimated maximum overlapping exterior construction noise levels at the nearest receptors to the Project site.[49] Noise measurement and calculation results are presented in **Appendix H**.

Table 4.13-4: Overlapping Project Construction Noise Levels

Receptor	Overlapping Phases	Highest Overlapping Noise Level at Receptor Property Line (L_{eq})*	Noise Threshold (dBA L_{eq})**	Exceeded?
1	28th Street Improvement and Parcel 3 site preparation	79.6	80	No
2	Parcel 3 Building Construction, R9 and R10 Roadway Improvements, and Parcel 4 Site Preparation	73.63		No

[49] For predicted construction noise levels for all construction phases, see Appendix H.

Receptor	Overlapping Phases	Highest Overlapping Noise Level at Receptor Property Line (L_{eq})*	Noise Threshold (dBA L_{eq})**	Exceeded?
3	Parcel 1 Building Construction, Parcel 2 Site Preparation, Site 5 Site preparation	73.5		No
4	Parcel 1 Building Construction, Parcel 2 Site Preparation, and Parcel 5 Site Preparation	72.8		No
5	Parcel 3 Building Construction, R9 and R10 Roadway Improvements, and Parcel 4 Site Preparation	68.8		No

** Per the methodology described in the FTA Noise and Vibration Manual (September 2018), distance is measured from the property line of the receptor to the center of the Project construction site.*

*** The FTA Noise and Vibration Manual establishes construction noise standards of 80 dBA Leq(8-hour) for residential uses and 90 dBA Leq(8-hour) for commercial and industrial uses.*

*Source: Federal Highway Administration, Roadway Construction Noise Model, 2006. Refer to **Appendix H** for noise modeling results for each construction phase.*

As shown in **Table 4.13-4**, Project construction noise would not exceed the FTA's 80 dBA Leq residential use threshold. Construction-related noise would be temporary and would not result in a permanent increase in ambient noise levels in the area. Construction activities would also be prohibited between the hours of 8:00 p.m. and 6:30 a.m. Monday through Saturday and at any time on Sunday. For all of these reasons, the proposed Project would not result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the proposed Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies during construction. Construction noise impacts would be less than significant, and no mitigation measures are required.

Off-Site Construction Noise

In addition to on-site construction noise, the proposed Project would generate mobile source noise from delivery/haul trucks and construction workers traveling to and from the Project site during the proposed Project's construction. Delivery trucks and construction workers are expected to arrive at the Project site before construction starts and leave when construction ends, and thus, would not overlap with operation of the proposed Project's construction equipment. In addition, construction workers would come from various directions to the Project site. According to modeling assumptions included in the air quality and GHG emissions analyses (see **Appendix B**), there would be up to a maximum of 126 daily trips accessing the Project site during the building construction phase of Parcel 3. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and vehicle mix do not also change) would result in a noise level increase of 3 dBA. Based on the traffic data provided by Fehr & Peers, the lowest ADT experienced by a nearby roadway is 580 daily trips on 29th Street East from East Avenue R-10 to East Avenue R-12. Therefore, the addition of 126 daily construction trips would not double the existing traffic volume per day, and construction related traffic noise would not be noticeable and would not create a significant noise impact.

Operations

The Project proposes developing new residential uses, open spaces/parks, and roadways. The primary noise sources associated with the proposed Project would include parking/vehicle access and trash/recycling pickup, residential/park activity, mechanical equipment, landscape maintenance, and off-site traffic noise.

On-Site Parking/Vehicle Access and Trash/Recycling Pickup

All parking associated with the proposed Project would be enclosed within private residential parking garages and/or be located surrounding the proposed buildings in carports and unenclosed parking spaces. The exterior parking area located closest to sensitive receptors would be

located on Parcel 1, approximately 70 feet away from Receptor 4 across East Avenue R-12 and would be shielded by Project buildings. Similarly, trash/recycling pick-up would occur within appropriate parking areas and is not anticipated to occur close to sensitive receptors. Typical sound levels from parking lot activities (e.g., a car door slamming, engine ignition, and cars in motion) and trash/recycling pick up would be shielded by various structures and trees from nearby receptors. These noises are typical of a residential neighborhood. Noise levels generated by Project parking, vehicle access, and trash/recycling pickup would not result in the generation of a substantial permanent increase in ambient noise levels in the vicinity of the Project in excess of the normally acceptable standards established in the local general plan. Impacts would be less than significant.

On-Site Mechanical Equipment Noise

The Project would include mechanical equipment that would be located at each of the buildings. Mechanical equipment (e.g., HVAC equipment) typically generates noise levels of approximately 52 dBA at 50 feet.[50] Due to the attenuation of noise within the building and the distance to the closest sensitive receptor, Project mechanical equipment would not result in the generation of a noise levels in excess of the 60 dBA normally acceptable standard established in the local general plan. Therefore, the proposed Project would result in a less than significant noise impacts related to the operation of on-site mechanical equipment.

Residential/Park Activity

The Project proposes including multiple housing options with one public park in Parcel 5, "pocket parks" located on Parcels 1, 3, and 4, and play areas located on Parcel 2 that would connect the interior of the parcel to the street. Although programmed events are not anticipated, potential outdoor noise levels from gatherings in the park have been calculated. Noise from park visitors talking at a raised level would range from approximately 58 dBA to 65 dBA at a distance of 3 feet.[51] As a conservative analysis, it is assumed that the park would be at full capacity and that two-third of the visitors would be adults and one-third would be children. Of the adults, half would be talking simultaneously (assuming approximately half of the occupants talking and the other half listening), and all of the children would be speaking. According to the California Fire Code Section 1004, Table 1004.5, *Maximum Floor Area Allowances per Occupant*, the occupancy load for business areas is 150 SF per occupant. The proposed park would be approximately 2 acres (87,120 SF), allowing for a maximum occupant load of 581 persons. The closet sensitive receptor to the park would be Receptor 1 and noise levels from the park would reach 50.5 dBA, which would be below the 60 dBA normally acceptable threshold established by the General Plan.

All other outdoor spaces would not be of sufficient size to support large occupant loads and serve as passive open space for residents. In addition, residential noise is generated by residences to the north, east, and south of the Project site under existing conditions. Therefore, stationary noise levels from the Project would not result in a noticeable increase in ambient existing noise levels and would remain consistent with the applicable standards established General Plan.

Landscape Maintenance

Development and operation of the Project includes new landscaping that would require periodic maintenance. Noise generated by a gasoline-powered lawnmower is estimated to be approximately 70 dBA at a distance of five feet. The closest sensitive receptor (Receptor 1) would be located approximately 20 feet away from the Project site. At that distance, noise generated by landscape maintenance would reach 58 dBA and would be below the 60 dBA normally acceptable threshold established by the City's General Plan.

Off-Site Traffic Noise

Implementation of the proposed Project would generate increased traffic volumes along nearby roadway segments. According to the Transportation Assessment prepared by Fehr & Peers (2023), the proposed Project would generate 3,190 additional daily trips that would result in noise increases on Project site area roadways. Traffic noise levels for roadways primarily affected by the Project were calculated using the FHWA's Highway Noise Prediction Model (FHWA-RD-77-108). Traffic noise modeling was conducted for conditions with and without the

[50] Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, Noise Navigator Sound Level Database with Over 1700 Measurement Values, July 6, 2010
[51] American Journal of Audiology Vol.7 21-25 October 1998. doi:10.1044/1059-0889(1998/012).

Project, based on traffic volumes from the Transportation Assessment. As shown in **Table 4.13-5: Existing and Project Traffic Noise Levels**, Existing Plus Project traffic-generated noise levels on Project site area roadways would range between 47.2 dBA CNEL and 67.7 dBA CNEL at 100 feet from the roadway centerline, and the proposed Project would result in a maximum increase of 5.7 dBA CNEL along East Avenue R-10. Increases in traffic noise would not result in increases beyond normally acceptable levels (see Applicable Thresholds section under Impact 4.13a or increase above the 3 dBA perceptible threshold. Therefore, impacts would be less than significant.

Table 4.13-5: Existing and Project Traffic Noise Levels

Roadway Segment	Existing		Existing Plus Project		Project Change from Existing Conditions	Significant Impact?
	ADT	dBA CNEL*	ADT	dBA CNEL*		
30th Street East						
East Avenue R-8 to East Avenue R-12	8,870	62.8	9,740	63.2	0.4	No
27th Street East						
Project Site to East Avenue R	870	50.1	1,060	50.9	0.8	No
29th Street East						
East Avenue R-10 to East Avenue R-12	580	46.0	770	47.2	1.2	No
25th Street East						
East Avenue R to East Avenue S	16,630	67.6	17,020	67.7	0.1	No
East Avenue R-10						
Project Site to 30th Street East	210	41.6	790	47.3	5.7	No[1]
East Avenue R-12						
Project Site to 30th Street East	2,690	57.4	3,660	58.8	1.4	No

** Traffic noise levels remain below the normally acceptable noise compatibility threshold for residential uses.*
ADT = average daily trips; dBA = A-weighted decibels; CNEL= Community Equivalent Noise Level
Traffic noise levels are at 100 feet from the roadway centerline.
Source: Based on traffic data provided by Fehr & Peers, 2023.

4.13b Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact with Mitigation Incorporated.

Construction

On-Site Construction Vibration

Increases in ground-borne vibration levels attributable to the proposed Project would be primarily associated with short-term construction-related activities. Project construction would have the potential to result in varying degrees of temporary ground-borne vibration, depending on the specific construction equipment used and the operations involved.

The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the

FTA guidelines show that a vibration level of up to 0.50 in/sec is considered safe and would not result in any construction vibration damage and a vibration level of 0.04 in/sec PPV is distinctly perceptible for humans[52].

Receptors susceptible to building damage include all adjacent structures, located at approximately 20 feet from the Project site. Receptors susceptible to human annoyance include residential receptors located at approximately 20 feet from the Project site. This evaluation uses the FTA architectural damage criterion of 0.2 in/sec peak particle velocity (PPV) at non-engineered timber and masonry buildings and human annoyance criterion of 0.04 in/sec PPV in accordance with Caltrans guidance.

Table 4.13-6: Typical Construction Equipment Vibration Levels lists the reference vibration levels for typical construction equipment (measured at 25 feet). The ground-borne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in **Table 4.13-6**, based on FTA data, vibration velocities from typical heavy construction equipment that would be used during Project construction range from 0.003 to 0.089 in/sec PPV at 25 feet from the source of activity.

Table 4.13-6: Typical Construction Equipment Vibration Levels

Equipment	Reference Level PPV at 25 Feet (in/sec)	PPV at 20 Feet (in/sec)	PPV at 45 Feet (in/sec)	PPV at 77 Feet (in/sec)
Vibratory Roller	0.210	**0.293**	**0.087**	0.039
Large Bulldozer	0.089	**0.124**	0.037	0.016
Loaded Trucks	0.076	**0.106**	0.031	0.014
Small Bulldozer/Tractors	0.003	0.004	0.001	0.001
FTA Threshold	**0.20**	**0.20 / 0.04**	**0.20 / 0.04**	**0.20 / 0.04**
Exceeds Thresholds?	--	**Yes / Yes**	**No / Yes**	**No / No**

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

** Equipment not anticipated to be required at this distance*

*1. **MM NOI-1** states that large bulldozers and loaded trucks are required to operate at a distance of 45 feet or more from sensitive receptors and rollers are required to operate at a distance of 77 feet or more from sensitive receptors to ensure vibration impacts remain below the Caltrans 0.2 PPV in/sec and 0.04 PPV in/sec thresholds.*

As shown in **Table 4.13-6**, at a distance of 20 feet, construction equipment vibration velocities would be above the FTA's 0.20 and Caltrans' 0.04 in/sec PPV thresholds for structural damage and human annoyance thresholds. At a distance of 45 feet, construction equipment vibration velocities would be above Caltrans' 0.04 in/sec PPV threshold for structural damage and human annoyance thresholds. Therefore, at these distances, impacts would be potentially significant. With incorporation of **MM NOI-1**, construction equipment vibration velocities would be below the FTA's 0.20 and the Caltrans's 0.04 in/sec PPV thresholds for structural damage and human annoyance threshold. MM NOI-1 states that large bulldozers and loaded trucks are prohibited from operating less than 45 feet away from sensitive receptors and vibratory rollers shall be prohibited from operating less than 77 feet away from sensitive receptors. With incorporation of **MM NOI-1**, impacts would be reduced to less than significant.

Off-Site Construction Vibration

As regards construction trucks, Project construction would involve truck travel along nearby roadways, generating vibration events with each passing truck. According to the FTA's Transit Noise and Vibration Impact Assessment, a truck rarely creates vibration levels that exceed 70 VdB (equivalent to 0.012 in/sec PPV) when they are on roadways.[53] Multiple trucks traveling along the roadway would increase the frequency of vibration events but would not affect the vibration velocity experienced by receptors. Therefore, vibration impacts associated with off-site construction of the proposed Project would be less than significant.

[52] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.
[53] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.

Operations

With respect to vibration-generating activities, operation of the proposed Project would primarily involve personal automobiles used by residents and visitors accessing the housing parking lots or parks, and occasional trucks providing deliveries of supplies. Due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. As mentioned previously, trucks rarely create vibration levels that exceed 70 VdB (equivalent to 0.012 in/sec PPV) when they are on roadways.[54] Therefore, operation of the proposed Project would result in less than significant ground-borne vibration impacts.

Mitigation Measure

MM NOI-1

The operation of construction equipment that generates high levels of vibration, such as large bulldozers and loaded trucks, shall be prohibited within 45 feet of existing residential uses in the Project area. The operation of vibratory rollers within 77 feet of existing residential uses shall be prohibited.

4.13c For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project site is located approximately 3.2 miles south of the Palmdale Regional Airport. Palmdale Regional Airport is subject to the Los Angeles County Airport Land Use Plan, which identifies the airport influence areas for Los Angeles County airports. The Project site is not located within the Palmdale Regional Airport's Planning Boundary/Airport Influence Area. The Airport Influence Area includes the Airport Land Use Plan Noise Contour, which establishes the area susceptible to noise levels that would exceed the annoyance threshold for noise (defined as >65 CNEL for commercial airports) for the Palmdale Regional Airport[55] or any private or public airport.[56] Therefore, no impacts would occur.

[54] Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.
[55] Los Angeles County, Airport Land Use Commission, Palmdale Regional Airport, Airport Influence Area Map, May 13, 2003.
[56] Los Angeles County Airport Land Use Commission, Los Angeles County Airport Land Use Plan, Airport Influence Area figures, adopted December 19, 1991, revised December 4, 2004.

4.14 Population and Housing

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Impact Analysis

4.14a Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The proposed Project would develop multi-family and single-family residential uses, consistent with the General Plan Land Use Element and existing zoning. The proposed Project would include 330 dwelling units consisting of 152 affordable walkup apartments, 84 market rate apartments, 60 townhomes, and 34 cottages. Approximately 32 percent of the Project's residential dwelling units are designated as low-income units and approximately 14 percent are designated as very low income units.

Based on the City's average household size of 3.61, the 330 dwelling units would result in a population increase of approximately 1,191 residents.[57] The SCAG growth forecasts estimate the City's population to reach 207,000 persons by 2045, representing a total increase of 23 percent from 158,600 persons in 2016. The proposed Project's anticipated population growth (1,191 persons) would represent approximately 0.5 percent of the City's anticipated 2045 population, and approximately 2.4 percent of the City's anticipated growth between 2016 and 2045.[58] Thus, the proposed Project's estimated population growth would be within regional growth projections for the City. It is assumed that construction labor for the proposed Project would be provided by the existing local workforce in Palmdale and in the surrounding communities. Therefore, the proposed Project is not anticipated to result in substantial population growth due to an increase in workforce.

Potential population growth impacts are also assessed based on a project's consistency with adopted plans that have addressed growth management from a local and regional standpoint. According to the General Plan, the Project site is designated RN2 and allows a maximum height of 40 feet and 20 du/ac. The proposed Project would be consistent with the RN2 land use designation. The tallest buildings would have a maximum height of 35 feet, one story buildings would have a height of 17 feet, and garages and carports would have a height of 13 feet. The Project would utilize California's density bonus law to increase the maximum residential density from 20 du/ac to 23 du/ac.

Overall, although the proposed Project may result in direct population growth from future residents relocating to the City, the proposed Project would not induce substantial unplanned population growth exceeding regional population projections. Therefore, the proposed Project would not induce substantial unplanned population growth and impacts would be less than significant.

[57] U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates, Households and Families, Average Household Size, Published 2021. <https://data.census.gov/table?t=Families+and+Living+Arrangements:Housing&g=160XX00US0655156&tid=ACSST5Y2021.S1101> (Accessed July 14, 2023).
[58] Southern California Association of Governments, Connect SoCal Demographics and Growth Forecast, September 2020. <https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?> (Accessed July 13, 2023).

4.14b Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site is currently undeveloped and would not displace any existing housing. The proposed Project would provide a mix of housing types serving a range of income levels. The Project would designate 32 percent of dwelling units as low-income units and approximately 14 percent as very low income units. Thus, the proposed Project would provide additional housing within the City as an infill development on a currently underutilized vacant site. Therefore, Project implementation would not displace existing people or housing and no impact would occur.

4.15 Public Services

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

Impact Analysis

4.15a Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physical 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. Fire services are contracted through the LACoFD, with five stations in the City. The closest station is Station #131, located approximately 0.25 miles south of the Project site; followed by Station #37 on 38318 9th Street East, located 2 miles northwest; Station #93 on 5624 East Avenue R, located 3 miles northeast; Station #24 at 1050 West Avenue P, located 4.5 miles northwest; and Station #136 on 3650 Bolz Ranch Road, located 7.5 miles northwest of the Project site. Palmdale's General Plan Public Facilities, Services, and Infrastructure Element outlines fire service response time targets to be 4-6 minutes and to maintain a 2-mile proximity of fire stations to existing and newly developed areas[59]. Because there are two fire stations within 2 miles of the Project site, the Project meets this goal. The Palmdale General Plan Safety Element outlines compliance with SB 99 and AB 747 evacuation legislation for residential developments with at least two points of ingress and egress.

The proposed Project would increase fire service demand in the proposed housing development. However, the proposed Project would comply with LACoFD requirements for emergency access, fire lanes, fire protection and site building standards, and fire flow. It is required that developments located in VHFSZ include a fuel modification program.[60] The Project site is not located in one of Palmdale's VHFSZ. According to the Los Angeles County Code of Ordinances, fire hydrants for buildings other than one- and two- family dwellings, and Group R-3 buildings, fire hydrants must be spaced within 300 feet of each other.[61] For one- and two- family dwellings, fire hydrants must be spaced within 450 feet. The Project would comply with these regulations and other requirements in the 2022 California Fire Code and 2022 California Building Standards Code. According to the PMC Chapter 3.42, the City would collect a Fire Facilities Impact Fee, which is imposed to support upgrading fire facilities with City and population growth.[62] The Project would pay this fee after the City Council establishes an amount upon

[59] City of Palmdale, City of Palmdale General Plan 2045, Chapter 12: Public Facilities, Services, and Infrastructure Element, Page 308, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635735a300604d1901630920/1666659752003/PalmdaleGPU_Ch12_10322_Small.pdf> (Accessed July 12, 2023).
[60] City of Palmdale, City of Palmdale General Plan 2045, Chapter 13: Safety Element, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635311bdf7cddb1b01941440/1666388437627/PalmdaleGPU_Ch13_10322.pdf> (Accessed July 13, 2023).
[61] Los Angeles County, Los Angeles County Code of Ordinances, Title 32 Appendix C105. May 25, 2021. <https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances/379113?nodeId=TIT32FICO_APXC > (Accessed July 13, 2023)
[62] City of Palmdale, Palmdale Municipal Code, Chapter 3.42. <https://www.codepublishing.com/CA/Palmdale/#!/html/Palmdale03/Palmdale0342.html> (Accessed July 13, 2023)

final inspection or certificate of occupancy, which would offset the additional services required for 1,191 new residents. Therefore, the proposed Project would have a less than significant impact on fire protection services.

4.15b Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physical 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. Police protection services are also contracted through Los Angeles County via the Sheriff's Department (LASD). The Palmdale Sheriff's Station is located on 750 East Avenue Q, approximately 2.5 miles northwest of the Project site, and contains a 7,800 square foot jail. The Public Facilities, Services, and Infrastructure Element in Palmdale's General Plan identifies response time goals of under six minutes and crime rates below State averages.[63] The proposed Project would comply with Palmdale's zoning and land use laws and would not result in substantial unplanned population growth; therefore, the Project would not substantially impact service, response time, or other police protections. Therefore, the proposed Project would have a less than significant impact on police protection.

4.15c Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?

Less Than Significant Impact. The City of Palmdale has three school districts, two K-8 districts, Westside and Palmdale School District, and one high school district, Antelope Valley Union High School District, as well as three charter schools.[64] Palmdale School District had an enrollment of 17,805 in 2021-2022 for 18 schools,[65] Westside School District serves almost 9,000 students in 13 schools,[66] and 21,911 students for 2023 across 12 schools in the high school district,[67] resulting in approximately 50,000 students in the area. The City contains more than 40 public schools and 12 private schools. Cactus Middle School is approximately 0.5 miles northeast of the Project site, Joshua Hills Elementary is 0.6 miles southeast, and Palmdale High School is 0.7 miles north.

The proposed Project's 330 dwelling units could increase student enrollment in the area but would not significantly increase the need for school facilities. The proposed Project would be required to pay an impact fee to school districts in compliance with Senate Bill 50 requirements for new development. The proposed Project would also comply with Government Code § 65997, which requires that statutory fees must adequately mitigate environmental effects of school facilities. Therefore, the proposed Project would have a less than significant impact on schools.

4.15d Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physical altered governmental facilities, the construction of which could

[63] City of Palmdale, City of Palmdale General Plan 2045, Chapter 12: Public Facilities, Services, and Infrastructure Element, Page 308, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635735a300604d1901630920/1666659752003/PalmdaleGPU_Ch12_10322_Small.pdf> (Accessed July 12, 2023).
[64] City of Palmdale, City of Palmdale General Plan 2045, Chapter 12: Public Facilities, Services, and Infrastructure Element, Page 302, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635735a300604d1901630920/1666659752003/PalmdaleGPU_Ch12_10322_Small.pdf> (Accessed July 12, 2023).
[65] Palmdale School District. <https://www.palmdalesd.org/> (Accessed July 12, 2023).
[66] Westside Union School District, <https://www.westside.k12.ca.us/> (Accessed July 12, 2023).
[67] Antelope Valley Union High School District <https://www.publicschoolreview.com/california/antelope-valley-union-high-school-district/602820-school-district> (Accessed July 12, 2023).

cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?

Less Than Significant Impact. Palmdale currently has 22 developed community parks totaling approximately 368 acres.[68] Available parklands reach about 45 percent of the target five acres of public park per 1,000 residents.[69] The proposed Project would house 1,191 residents, increasing use of the City's parks. However, the proposed Project would introduce approximately 2.95 acres of open space, including a public park and small resident-serving pocket parks and playgrounds. This would bring Palmdale's total public parks to 23 and provide parkland in one of the future park priority areas (Future Park 23) identified in the Parks, Recreation, and Open Space Element of the Palmdale General Plan. Furthermore, the Palmdale General Plan Land Use Element Goal LUD-1.3 sets a target that residents are within 20 minutes or less walking distance to parks.[70] The closest parks to the Project site are Joshua Hills Park 0.75 miles southeast and William J. McAdam Park 0.75 miles north.

The proposed public park is envisioned to include plaza pavilions, restrooms, playgrounds, a multipurpose ball court, an open lawn area, a walking path, and public bike parking. The total park area, including the public park, pocket parks, and play areas would be approximately 2.95 acres or 21 percent of the total Project area. As discussed above, the proposed Project would not result in unplanned population growth and is consistent with Palmdale's zoning. Thus, the proposed Project would have less than significant impacts to parks.

4.15e Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physical 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?

No Impact. Other public facilities typically include services like public libraries. In Palmdale, civic and governmental uses, public facilities such as schools and libraries, and private institutions such as places of worship and private clubs account for about 1.5 percent of the City's Planning Area, or almost 300 total parcels. There are more than 100 governmental facilities (such as libraries, maintenance yards, City offices, fire/sheriff stations, flood control facilities, landfill, and other similar uses).[71] Palmdale City Library, located at 700 East Palmdale Boulevard, is 2.25 miles northwest of the Project site. As previously discussed, the population is expected to increase by approximately 1,191 residents with the addition of 330 dwelling units and an average household size of 3.61 in the City. This population growth would increase the use of other public facilities including libraries. The Project would pay a Public Facilities Development Impact Fee outlined in PMC Chapter 3.45 to compensate for the increased demand on library facilities from residential development.[72] As a result, the proposed Project is not expected to increase Palmdale's population substantially, and there would be no impact.

[68] City of Palmdale, Draft City of Palmdale Parks Master Plan Findings Presentation to City Council, <https://s3-us-west-2.amazonaws.com/mysocialpinpoint/uploads/redactor_assets/documents/c856228a7b7a345df6567d61b7f2b788d65f1511e1257e107abb32d2d112dcdf/86815/Revised_Palmdale_CA_Findings_Summary_PPT_11.2.23.pdf> (Accessed January 22, 2024).
[69] City of Palmdale, City of Palmdale General Plan 2045, Chapter 10: Parks, Recreation, and Open Space Element, Page 354, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635735818ddd3e69388454c0/1666659733004/PalmdaleGPU_Ch10_10322_Small.pdf> (Accessed July 12, 2023).
[70] City of Palmdale, City of Palmdale General Plan 2045, Chapter 5: Land Use Element, Page 75, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/63573567d351b544ed98d5c8/1666659697652/PalmdaleGPU_Ch05_92822_Small.pdf> (Accessed July 12, 2023).
[71] City of Palmdale, City of Palmdale General Plan 2045, Chapter 5: Land Use Element, Page 55, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/63573567d351b544ed98d5c8/1666659697652/PalmdaleGPU_Ch05_92822_Small.pdf> (Accessed July 12, 2023).
[72] City of Palmdale, Palmdale Municipal Code, Chapter 3.45. <https://www.codepublishing.com/CA/Palmdale/#!/html/Palmdale03/Palmdale0345.html> (Accessed July 13, 2023).

4.16 Recreation

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
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?			X	

Impact Analysis

4.16a 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?

4.16b Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. The proposed Project would develop a community of single- and multi-family housing on currently undeveloped land. As previously discussed, the population is expected to increase by approximately 1,191 residents with the addition of 330 dwelling units and an average household size of 3.61 in the City. This population growth would increase the use of existing recreation facilities, neighborhood, and regional parks. However, the proposed Project would introduce approximately 2.5 acres of public park space and small resident-serving pocket parks and playgrounds that would offset some use of existing park facilities. The closest existing parks to the Project site are Joshua Hills Park 0.75 miles southeast and William J. McAdam Park 0.75 miles north. Because of their convenience, it is assumed that new residents would be more likely to use the new park facilities developed as part of the proposed Project. It is unlikely that construction employees of the proposed Project would use the parks or other public facilities in the area. Regardless, the Project would pay a Public Facilities Development Impact Fee outlined in PMC Chapter 3.45 to compensate for the increased demand on recreational facilities due to the new residential development.[73] In addition, it is unlikely that the proposed Project would house a large enough number of people to substantially deteriorate these types of facilities. Therefore, impacts to recreational resources would be less than significant.

[73] City of Palmdale, Palmdale Municipal Code, Chapter 3.45. <https://www.codepublishing.com/CA/Palmdale/#!/html/Palmdale03/Palmdale0345.html> (Accessed July 13, 2023).

4.17 Transportation

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

Impact Analysis

4.17a Would the Project conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. The proposed Project is an infill single- and multi-family residential development. The proposed land use is consistent with the current General Plan land use designation for the Project site and is identified as a permissible use under the PMC.

Public transit service in the proposed Project area is provided by the AVTA. The nearest AVTA Bus Route 3 is located approximately 1,340 feet south from the Project site on East Avenue S and 27th Street East. AVTA Bus Route 2 is located approximately 2,539 feet north of the Project site on 27th Street East and East Avenue R. Project construction may result in temporary lane closures along East Avenue R-8, 29th Street East, East Avenue R-12, and 27th Street East. However, Routes 2 and 3 are of sufficient distance from the proposed Project site that temporary lane closures would be unlikely to affect the ability of Route 2 and 3 to operate. Furthermore, the City requires that the applicant develop a traffic control plan, stamped by a professional civil or traffic engineer as part of the Project permit application.[74] Developers are also required to coordinate new development with the AVTA.

Regional access to the site is provided via SR 14, that runs north-south approximately 2.8 miles west of the proposed Project site. Local access to the proposed Project site is provided via SR 138, East Avenue S, and 25th Street East. The proposed Project would include the development of new roadway access within Parcels 1 through 4 from 27th Street East, which is currently a paved but unmarked road, connecting East Avenue R-8 with East Avenue R-12. A new thoroughfare, 28th Street East, would be developed, extending from East Avenue R-12, south of the proposed Project site, to a new road, East Avenue R-9, located along the northern edge of Parcel 4. 28th Street East would be developed as a four-lane thoroughfare featuring two 8-foot parking or drop off lanes and two 12-foot travel lanes. Project construction may result in a temporary lane closure of 27th Street East, East Avenue R-8 and East Avenue R-12.

No bicycle facilities are currently present along East Avenue R-9, East Avenue 29th Street East, East Avenue R-12. and 27th Street East. According to the City of Palmdale 2045 General Plan Update, the Bicycle Transportation Plan (2018 draft) provides recommendations for an extensive network of bicycle facilities, mostly proposed bicycle facilities along arterial roads.[75] The proposed Project includes plans for shared

[74] City of Palmdale, Traffic Control Requirements. <https://www.cityofpalmdaleca.gov/DocumentCenter/View/441/Traffic-Control-Requirements-PDF> (Accessed October 11, 2023).
[75] Rincon Consultants, Inc. July 2022. City of Palmdale 2045 General Plan Update Draft Environmental Impact Report. https://www.cityofpalmdaleca.gov/DocumentCenter/View/11872/Palmdale-General-Plan-Public-Draft-Environmental-Impact-Report-PDF (Accessed October 24, 2023).

bicycle lanes along 30th Street East. These planned lanes would not conflict with the proposed bicycle network. The proposed Project would contribute to the City's bicycle infrastructure by providing bicycle parking and new travel lanes marked for shared automobile and bicycle use.

There are no existing sidewalks surrounding the proposed Project site. The proposed Project would develop two, six-foot sidewalks along 27th Street East and two, six-foot sidewalks on 28th Street East. The new sidewalks would be compliant with the Americans with Disabilities Act (ADA).

As previously discussed, a Construction Management Plan would be implemented to minimize any temporary pedestrian and traffic impacts. The contractor would implement the Construction Management Plan, which would ensure safe pedestrian access and vehicle travel in general, and emergency vehicle access throughout the construction period. As the proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, impacts would be less than significant.

4.17b Would the Project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?

Less Than Significant Impact. CEQA Guidelines § 15064.3 provides regulations on determining the significance of transportation impacts. To assist in determining the appropriate level of study for transportation impacts, the Palmdale 2045 General Plan Update Final EIR (SCH# 2021060494) analyzed the potential for environmental impacts, including transportation. The transportation section (Section 4.17, *Transportation*) of the EIR included a comprehensive analysis of potential VMT impacts as required under CEQA Guidelines § 15064.3. Based on the land uses proposed with the Project, the proposed Project would be consistent with the City's recently adopted Palmdale 2045 General Plan update. The VMT analysis in the Palmdale 2045 General Plan Update Final EIR demonstrated that the 2045 General Plan would reduce the total VMT per service population in comparison to existing conditions. Therefore, the proposed Project is consistent with the General Plan and no further VMT analysis is required.

Implementation of the proposed Project would generate increased traffic volumes along nearby roadway segments. According to the ADT volumes provided in the traffic analysis prepared by Fehr & Peers (see **Appendix I**), the proposed Project would increase the ADT volume in the nearby roadway segments (**Table 4.17-1: Existing and Future Project ADT**). As noted, 25th Street East and East Avenue R to East Avenue S has the highest existing ADT of the surrounding segments, with 16,630 ADT. The proposed Project would increase the number of trips on this street segment by 390 to 17,020 ADT. Future 2045 ADT plus Project ADT would increase trips to 18,230 along the street segment. While the proposed Project would increase traffic volumes on the Project site's surrounding street segments, the proposed Project would increase access to single-and multi-family housing on an undeveloped site, consistent with the City's General Plan. Therefore, impacts would be less than significant.

Table 4.17-1: Existing and Future Project ADT

Street Segments	Existing ADT	Number of Project Trips	Existing plus Project ADT	Future 2045 ADT	Future 2045 plus Project ADT
30th Street East - East Avenue R-8 to East Avenue R-12	8,870	870	9,740	9,510	10,380
27th Street East - Project Site to East Avenue R	870	190	1,060	940	1,130
29th Street East – East Avenue R-10 to East Avenue R-12	580	190	770	630	820
25th Street East - East Avenue R to East Avenue S	16,630	390	17,020	17,840	18,230
East Avenue R-10 – Project Site to 30th Street East	210	580	790	220	800
East Avenue R-12 – Project Site to 30th Street East	2,690	970	3,660	2,890	3,860

Source: Fehr & Peers, 2023.
Data sources and methodology summarized below:

Existing ADT for 30th Street East and 25th Street East from Palmdale General Plan Update and Program EIR, Appendix D Traffic Report, February 2022.
Existing ADT for remaining segments from StreetLight data; average daily weekday traffic volumes from February and March 2022.
Number of Project trips based on expected trip distribution using daily trip generation estimate of 1,931 vehicles.
Daily trip generation from Palmdale Housing Opportunity Project VMT Assessment Memorandum, Fehr & Peers, June 2023.
Future 2045 ADT based on General Plan Traffic Report traffic volume growth estimates for roadway segments in vicinity of Project site; average growth of 7.3%.

4.17c Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. Vehicular access would be provided via the development of new roadway access and internal driveways within Parcels 1 through 4. The currently unpaved 27th Street East, which is currently a paved but unmarked road, connecting East Avenue R-8 with East Avenue R-12, would be developed as a five lane, 80-foot wide thoroughfare, featuring two 8-foot parking or drop off lanes, two 12-foot travel lanes, and a central 12-foot two-way turning lane. The two travel lanes would be marked with shared lane markings, or sharrows, indicating shared automobile/bicycle use. The proposed Project would include the development of two six-foot sidewalks and two eight-foot parkways on 27th Street East. A new thoroughfare, 28th Street East, would be developed, extending from East Avenue R-12, south of the proposed Project site, to a new road, East Avenue R-9, located along the northern edge of Parcel 4. 28th Street East would be developed as a four-lane thoroughfare featuring two 8-foot parking or drop off lanes and two 12-foot travel lanes. The proposed Project would include the development of two six-foot sidewalks and two four-foot parkways on 28th Street East. East Avenue R-10 would be extended west from where it meets 29th Street East to 27th Street East. The proposed Project roadways and internal driveways would be constructed pursuant to LACoFD standards, and the proposed Project would not result in substantially increased hazards. No impact would occur.

4.17d Would the Project result in inadequate emergency access?

Less Than Significant Impact. Emergency access is determined by the number of private and public access points, the width of the access point, and internal roadways serving a Project site. As described for Impact 4.17c, primary vehicular access to the Project site is proposed via internal driveways within Parcel 1 through 4. Pedestrian access from the sidewalk would be provided from new sidewalks on 27th Street East and 28th Street East. The proposed Project would meet applicable design standards and emergency access standards as required by the City of Palmdale Public Works Department and the LACoFD. Additionally, according to the General Plan, the City has established the Local Hazard Mitigation Plan (LHMP)[76] that establishes mitigation strategies related to local and regional hazards. As previously discussed, a Construction Management Plan would be implemented to minimize any temporary pedestrian and traffic impacts. The contractor would implement the Construction Management Plan, which would ensure safe pedestrian access and vehicle travel in general, and emergency vehicle access throughout the construction period. Therefore, adequate emergency access to the proposed Project site would be provided. Impacts would be less than significant.

[76] City of Palmdale Local Hazard Mitigation Plan <https://www.cityofpalmdaleca.gov/1064/Local-Hazard-Mitigation-Plan#:~:text=To%20help%20ensure%20that%20the,Floods%2C%20dam%20failure%20and%20inundation> (Accessed January 22, 2024).

4.18 Tribal Cultural Resources

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k); or			X	
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 Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Impact Analysis

4.18ai 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 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);

Less Than Significant Impact. As concluded in **Section 4.5, Cultural Resources**, the Project site is vacant and undeveloped and does not contain any national, State, or locally-designated historic resources. Therefore, the Project would have a less than significant impact, and no mitigation is required.

4.18aii 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 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 Resource 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 Incorporated. As discussed in the Cultural Resources Assessment (see **Appendix D**), the South Central Coastal Information Center (SCCIC) did not identify any previously recorded cultural resources within the Project site or a 0.5-mile radius surrounding the Project site. Furthermore, the results of the Native American Heritage Commission (NAHC) record search of the Sacred

Lands File were negative for tribal cultural resources within the Project site. Nonetheless, the potential for significant pre-contact cultural resources to be discovered exists.

Regulatory Framework

AB 52 TRIBAL CONSULTATIONS

Because this project is a CEQA action, it requires an offer of tribal consultation under Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1). AB 52 is applicable to projects that have filed a Notice of Preparation (NOP) of an Environmental Impact Report (EIR) or notice of a Mitigated Negative Declaration (MND) or Negative Declaration (ND) on or after July 1, 2015. The law requires lead agencies to initiate consultation with California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project and have requested such consultation, prior to determining the type of CEQA documentation that is applicable to the project (i.e., EIR, MND, ND). Significant impacts to "tribal cultural resources" are considered significant impacts to the environment.

For "tribal cultural resources," PRC §21074, enacted and codified as part of a 2014 amendment to CEQA through AB 52, provides the statutory definition as follows:

"Tribal cultural resources" are either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    A. Included or determined to be eligible for inclusion in the California Register of Historical Resources.

    B. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

To determine if such resources exist, under AB 52 (PRC §21080.3.1) lead agencies must consult with tribes that request consultation and must make a reasonable and good faith effort to mitigate the impacts of a development on such resources to a less than significant level. AB 52 allows tribes 30 days after receiving notification to request consultation and the lead agency must then initiate consultation within 30 days of the request by tribes.

The City of Palmdale is undertaking AB 52 consultation with interested tribes. Based upon this consultation, the following mitigation measures have been applied to the project and are anticipated to reduce any impacts to a less than significant level.

Mitigation Measures

MM TCR-1

Consulting Tribes shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with the consulting Tribe(s), and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor(s) to be present that represents the consulting Tribe(s) for the remainder of the project, to observe all remaining ground-disturbing activities including, but not limited to, clearing, grading, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, auguring, blasting, stripping topsoil or similar activity, and archeological work, should the Tribe(s) elect to place a monitor on-site.

MM TCR-2

Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Lead Agency for dissemination to consulting Tribes. The Lead Agency shall, in good faith, consult with the consulting Tribe(s) throughout the life of the project.

MM TCR-3

The Lead Agency and/or applicant shall, in good faith, consult with the consulting Tribes(s) on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.

4.19 Utilities and Service Systems

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
b) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
c) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
d) 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 projected demand in addition to the provider's existing commitments?			X	
e) 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?			X	
f) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Impact Analysis

4.19a Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

i) Water

Less Than Significant Impact. During construction of the proposed Project, water would be required for dust control and equipment cleaning. It is anticipated that all water would be imported during construction of the proposed Project and connections to the City's water infrastructure would not be required.

A utilities analysis was completed in support of the proposed Project and is included in **Appendix J: Utility Infrastructure Technical Report**. The proposed Project site is situated in an area of existing residential development. Currently, there is an existing water main consisting of an 8-inch main along 29th Street East and a 10-inch main along Avenue R12. Construction of the proposed Project would include installation of water distribution lines along the periphery of the proposed Project site. Water lines would be installed along 27th Street East, East Avenue R-10, 28th Street East, and East Avenue R-9. Installation would primarily involve trenching to place the lines below the surface. Installation would include development of on-site water distribution improvements and off-site work would be associated with connections to the public water main, new fire hydrant(s), and upgrades as required by PWD, the City, and LACoFD.

Construction of these facilities has been analyzed as part of the proposed Project throughout this Initial Study and analysis indicates that impacts would be less than significant. Furthermore, PWD has provided a will serve letter indicating that the existing water infrastructure is sufficient to provide service to the proposed Project (see **Appendix J**). Prior to ground disturbance, the proposed Project contractors would coordinate with the PWD to identify the locations and depth of all lines. The PWD would be notified in advance of proposed ground disturbance activities to avoid water lines and minimize disruption of water service. A Construction Management Plan would be implemented to minimize any temporary interruptions to pedestrian and vehicle traffic in the proposed Project area. The Construction Management Plan would ensure safe pedestrian access and vehicle travel in general, and emergency vehicle access throughout the construction period. Accordingly, construction of new and expanded water facilities would not cause significant environmental effects and impacts would be less than significant.

ii) Wastewater Treatment

Less Than Significant Impact. During construction of the proposed Project, the contractor would install portable restrooms. The portable restrooms used during construction would not contribute to wastewater flows in the City's wastewater system. In addition, the contractor would install hand washing stations which are anticipated to utilize imported water. Construction of the proposed Project would not require connections to the City's wastewater infrastructure and would not alter existing wastewater generation. Any construction-related wastewater generated during construction of the proposed Project would occur incrementally and be temporary in nature. Only a nominal amount of wastewater would be generated compared to the existing rate of wastewater generated.

Wastewater collection and treatment for the cities of Palmdale and Lancaster are provided by the Los Angeles County Sanitation Districts (LACSD). Collection is provided through a network of 104 miles of trunk sewers, which are all designed to provide wastewater conveyance through gravity flow. The Palmdale Water Reclamation Plant (WRP) is located in the City of Palmdale and is operated by the LACSD, District 20, serving a population of approximately 150,000 people. The WRP currently provides primary, secondary, and tertiary treatment for approximately 12,000 acre feet a year (AFY) of wastewater generated in and around the City. In 2012, the Palmdale WRP was expanded to reach its current treatment capacity of 12 million gallons per day (MGD).[77] All wastewater treated at the Palmdale WRP is treated to tertiary level and used, discharged, or stored within the PWD service boundaries.

The proposed Project site is situated in an area of existing residential development. As discussed in **Appendix J**, the City currently provides sanitary sewer service to this area via a sewer main system in the surrounding streets. Available records indicate that there is an existing 8-inch vitrified clay pipe (VCP) main along Avenue R-12 flowing east and an existing 10-inch VCP main along 29th Street East, flowing North.

The proposed Project will require construction of on-site wastewater infrastructure and potential minor upgrade of existing off-site wastewater infrastructure to serve the proposed development.

Construction of these facilities has been analyzed as part of the proposed Project throughout this Initial Study and analysis indicates that impacts would be less than significant. Construction impacts associated with wastewater infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of wastewater infrastructure will be limited to on-site wastewater distribution, and minor off-site work associated with connections to the public main. No upgrades to the public main are

[77] Los Angeles County Sanitation Districts. Palmdale Water Reclamation Plant. <https://www.lacsd.org/services/wastewater-sewage/facilities/palmdale-water-reclamation-plant >(Accessed July 13,2023).

anticipated. The Construction Management Plan would reduce any temporary pedestrian and traffic impacts and would ensure safe pedestrian access and vehicle travel in general, and emergency vehicle access throughout the construction period. Accordingly, construction of new and expanded water facilities would not cause significant environmental effects and impacts would be less than significant.

iii) Stormwater Drainage

Less Than Significant Impact. A 90-inch reinforced concrete box culvert runs the length of 30th Street East. Pursuant to the PMC Section 3.38.010, the Project would be required to construct drainage facilities in accordance with the City of Palmdale master drainage plan and/or pay drainage fees that will be used to construct drainage facilities pursuant to the master drainage plan. Therefore, construction of new and expanded stormwater facilities would not cause significant environmental effects and impacts would be less than significant.

iv) Electric Power, Natural Gas, and Telecommunications

Less Than Significant Impact. The proposed Project site is surrounded by existing residential development that is currently served by electric power, natural gas, and telecommunications lines. The proposed Project would require installation of these utilities to serve the proposed development. Installation would be limited to the Project site with minor off-site work associated with establishing electrical and telecommunications connections. The proposed Project would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities. Accordingly, construction of new and expanded electric power, natural gas, and telecommunications lines would not cause significant environmental effects and impacts would be less than significant.

4.19b 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 Project site is served by PWD. PWD's service area covers approximately 29,440 acres (46 square miles) with a distribution system encompassing approximately 400 miles of pipeline, multiple well sites, booster pumping stations, and water storage tanks maintaining a total storage capacity of over 50 million gallons.[78]

A utilities analysis was completed in support of the proposed Project and is included in **Appendix J: Utility Infrastructure Technical Report**. Water usage for the proposed Project was calculated using the LACSD wastewater load factors associated with distinct land uses. As shown in **Table 4.19-1: Estimated Project Water Consumption – Parcel 1: Market Rate Walkup Apartments**, at full build out, Parcel 1 would have a total water demand of 17,676 gallons per day (GPD) or approximately 19.80 AFY.

Table 4.19-1: Estimated Project Water Consumption – Parcel 1: Market Rate Walkup Apartments

Proposed Land Use	Unit Type	Number of Units	Total Average Square Footage	Water Consumption Rate (GPD)*	Total (GPD)	Total (AFY)
Residential (Type A)	One-Bedroom	36	20,736	168	6,048.00	6.77
	Two-Bedroom	18	15,552	222	3,996.00	4.48
	Three-Bedroom	18	18,468	276	4,968.00	5.56
Residential (Type B)	Two-Bedroom	12	10,368	222	2,664.00	2.98
Parcel 1 Total Water Consumption					17,676.00	19.80

SF =square feet; gpd = gallons per day; afy = acre feet per year

** Water consumption rates are assumed as 120 percent of the wastewater generation rates.*

Source: Kimley-Horn and Associates, Inc., 2023.

Table 4.19-2: Estimated Project Water Consumption – Parcel 2: Affordable Walkup Apartments presents total water consumption for Parcel 2. At full build out, Parcel 2 would have a total water demand of 31,692 GPD or approximately 35.50 AFY.

[78] Palmdale Water District. 2020 Urban Water Management Plan. <https://www.palmdalewater.org/wp-content/uploads/2021/10/PWD_Final_2020_UWMP.pdf> (Accessed July 12, 2023).

Table 4.19-2: Estimated Project Water Consumption – Parcel 2: Affordable Walkup Apartments

Building Type	Unit Type	Number of Units	Total Average Square Footage	Water Consumption Rate (GPD)*	Total (GPD)	Total (AFY)
Type A	One Bedrooms	52	27,768	168	8,736.00	9.79
	Two Bedrooms	28	22,960	222	6,216.00	6.96
	Three Bedrooms	28	28,952	276	7,728.00	8.66
Type B	One Bedrooms	24	12,816	168	4,032.00	4.52
	Two Bedrooms	10	8,200	222	2,220.00	2.49
	Three Bedrooms	10	10,340	276	2,760.00	3.09
Parcel 2 Total Water Consumption					31,692.00	35.50

SF =square feet; gpd = gallons per day; afy = acre feet per year

** Water consumption rates are assumed as 120 percent of the wastewater generation rates.*

Source: Kimley-Horn and Associates, Inc., 2023.

Table 4.19-3: Estimated Project Water Consumption – Parcel 3: Townhomes presents total water consumption for Parcel 3. At full build out, Parcel 3 would have a total water demand of 15,264 GPD or approximately 17.10 AFY.

Table 4.19-3: Estimated Project Water Consumption – Parcel 3: Townhomes

Building Type	Unit Type	Number of Units	Total Average Square Footage	Water Consumption Rate (GPD)*	Total (GPD)	Total (AFY)
Two-Story Units	Two Bedrooms	24	32,304	222	5,328.00	5.97
Three Story Units	Three Bedrooms	36	79,812	276	9,936.00	11.13
Parcel 3 Total Water Consumption					15,264.00	17.10

SF =square feet; gpd = gallons per day; afy = acre feet per year

** Water consumption rates are assumed as 120 percent of the wastewater generation rates.*

Source: Kimley-Horn and Associates, Inc., 2023.

Table 4.19-4: Estimated Project Water Consumption – Parcel 4: Cottages presents total water consumption for Parcel 4. At full build out, Parcel 4 would have a total water demand of 9,384 GPD or approximately 10.51 AFY.

Table 4.19-4: Estimated Project Water Consumption – Parcel 4: Cottages

Building Type	Unit Type	Number of Units	Total Average Square Footage	Water Consumption Rate (GPD)[1]	Total (GPD)	Total (AFY)
Two-Story Cottages	Three Bedrooms	34	36,074	276 gpd/1,000 SF	9,384	10.51

SF =square feet; gpd = gallons per day; afy = acre feet per year

** Water consumption rates are assumed as 120 percent of the wastewater generation rates.*

Source: Kimley-Horn and Associates, Inc., 2023.

Parcel 5 would be developed as a two-acre public park. The park included as part of the proposed Project would place no demands on potable water supplies.

Table 4.19-5: Total Building Development Plan provides a summary of total anticipated water demand for the proposed Project at full build out. At full build out, the proposed Project is anticipated to consume 74,016 GPD or 82.91 AFY.

Table 4.19-5: Total Building Development Plan

Parcel	Total (GPD)	Total (AFY)
Parcel 1	17,676	19.80
Parcel 2	31,692	35.50
Parcel 3	15,264	17.10
Parcel 4	9,384	10.51
Proposed Project Total Water Consumption	74,016	82.91

The PWD's 2020 Urban Water Master Plan (UWMP) projects water supplies for normal and single and multiple dry years to 2045. For 2045, the UWMP forecasts a total water supply of 35,375 AFY under normal year conditions, 22,225 AFY under single dry year conditions, and 25,665 AFY under multiple dry year conditions. PWD forecasts a total water demand of 26,250 AFY in 2045. PWD anticipates having adequate supplies to meet total water demand during normal years. PWD anticipates that during single-dry year conditions, demand will exceed existing sources of water supply starting in 2030 and during multiple-dry year conditions demands will exceed supplies starting in 2045. However, PWD has identified sources of additional water that in combination with existing sources will allow it to meet demand.[79] As shown in **Table 4.19-5**, the total water consumption anticipated by the proposed Project at full build out would be 82.91 AFY. This does not represent a substantial amount of water in comparison to overall demand. Based on the UWMP, the combination of existing and additional identified water sources will provide sufficient supply to meet demand, including for the proposed Project. Accordingly, the proposed Project would have sufficient available water supplies during normal and single dry and multiple dry years and any impact would be less than significant.

4.19c Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. As shown in **Table 4.19-6: Wastewater Demand Generation**, the proposed Project would generate approximately 61,680 GPD of wastewater. The Palmdale WRP has a design capacity of 12 MGD. Accordingly, the WRP has adequate capacity to treat the wastewater produced by the proposed Project and impacts would be less than significant.

Table 4.19-6: Wastewater Demand Generation

Parcel	Proposed Land Use	Bedrooms	Total Units	Wastewater Demand Rates	Total (GPD)
1	Residential	1	36	140	5,040
		2	30	185	5,550
		3	18	230	4,140
2	Residential	1	76	140	10,640
		2	38	185	7,030
		3	38	230	8,740
3	Residential	2	24	185	4,440
		3	36	230	8,280
4	Residential	3	34	230	7,820
				Total Wastewater Demand	**61,680**

[79] Palmdale Water District. 2020 Urban Water Management Plan.< https://www.palmdalewater.org/wp-content/uploads/2021/10/PWD_Final_2020_UWMP.pdf> (Accessed July 13, 2023).

4.19d 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?

4.19e Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The City of Palmdale contracts with Waste Management to manage solid waste disposal and recycling in the City, including the Project site. The waste collected from the City is diverted to the Antelope Valley Recycling and Disposal Facility, located in Palmdale.

The Project site is currently vacant and undeveloped. Therefore, there would be no waste from demolition and limited waste generated by Project construction. Pursuant to AB 939, the State of California, through the CALGreen Code, requires that at least 65 percent of waste produced by construction and demolition (C&D) projects be diverted from landfills through recycling, salvage, or deconstruction. The City requires a C&D management Plan as a means of documenting project compliance with the CALGreen Code and PMC Section 8.06, *Recycling and Diversion of Construction and Demolition (C&D) Waste*.

When operational, the proposed Project would accommodate approximately 1,191 persons. The California Department of Resources and Recovery (CalRecycle), keeps statistics on waste generated per capita by employees and residents dating back to 1989. **Table 4-19.7: Solid Waste Generation** shows the amount of solid waste what would be produced by Project Operations. Per the most recent data available (2017), residents typically dispose of 5.2 pounds of solid waste per day[80]. Assuming this rate, 1,191 residents would generate on average approximately 6,193 pounds of solid waste daily or 2,260,518 pounds or 1,130.26 tons per year.

Table 4.19-7: Solid Waste Generation

Proposed Land Use	Number of Residents	Waste Generation Rate (lbs/day)	Total Waste Generated (lbs/year)*	Tons per Year
Housing	1,191	6,193	2,260,518	1,130.26

Lb/lbs = pound/pounds
Source: CalRecycle. California's Statewide Per Resident, Per Employee, and Total Disposal Since 1989. <https://calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/disposal/> (accessed July 13, 2023).

As of 2017, the Antelope Valley Public Landfill had a remaining capacity of 17.91 million tons[81]. In comparison, the operations within the proposed Project would produce an estimated 1,130.26 tons of waste per year. This would represent less than 0.01 percent of the remaining landfill capacity at the Antelope Valley Public Landfill. Accordingly, the proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, and impacts would be less than significant.

[80] CalRecycle. California's Statewide Per Resident, Per Employee, and Total Disposal Since 1989. <https://calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/disposal/> (accessed July 13, 2023).
[81] CalRecycle SWIS Facility/Site Activity Details, Antelope Valley Public Landfill. (Accessed July 12, 2023).

4.20 Wildfire

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
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?				X
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?				X

Impact Analysis

4.20a Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. While temporary lane closures and street access may be limited due to construction, the proposed Project would follow all LACoFD requirements for emergency access, fire lanes, and fire protection. As discussed in Impact 4.9f, evacuation routes have been established by the City. The nearest evacuation route is Avenue S, south of the Project site. Construction could temporarily limit street access or disrupt traffic flow through lane closures in the immediate vicinity of the proposed Project. However, proposed Project construction would not physically interfere with the established evacuation routes. Because Palmdale's transportation network has low vulnerability and the proposed Project would comply with all evacuation and emergency regulations, the Project would have a less than significant impact on emergency response and evacuation plans.

4.20b Would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. As mentioned previously, the five parcels in the proposed Project site are relatively flat. Southern California experiences seasonal wind patterns, known as the Santa Ana Winds, that typically occur between October and April.[82] The effects of these winds are felt primarily within the South Coast Air Basin east of the San Gabriel Mountains; therefore, the Project site in Palmdale is minimally affected by these winds. As described for Impact 4.9g, the Project site is not located in a VHFSZ. Thus, slope, winds, and other factors that exacerbate wildfire and wildfire pollution risks would have no impact the proposed Project.

[82] City of Palmdale General Plan 2045, Safety Element, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635311bdf7cddb1b01941440/1666388437627/PalmdaleGPU_Ch13_10322.pdf> (Accessed July 26, 2023).

4.20c 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. The Project would follow all local regulations that address wildfires, including SE-2.14 in the City of Palmdale General Plan Safety Element that regulates fire hydrant spacing to ensure sufficient water supply is available to suppress wildfires.[83] Thus, the proposed Project would have no impact on installation or maintenance of infrastructure that may exacerbate fire risk or impact the environment.

4.20d Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The Project site is relatively flat, and drainage would follow City construction codes outlined in PMC Section 8.04.200, *Adoption of administrative provisions for the Palmdale Building Code, Plumbing Code, Mechanical Code, Electrical Code, Residential Code, and Green Building Code*.[84] Therefore, the proposed Project would have no impact because it would not expose people or structures to significant risks of runoff, post-fire slope instability, or drainage changes.

[83] *Id.* at page 348, <https://static1.squarespace.com/static/5c7dc93065a707492aca3e47/t/635311bdf7cddb1b01941440/1666388437627/PalmdaleGPU_Ch13_10322.pdf> (Accessed July 26, 2023).
[84] City of Palmdale Municipal Code, Chapter 8.04.200, Adoption of administrative provisions for the Palmdale Building Code, Plumbing Code, Mechanical Code, Electrical Code, Residential Code, and Green Building Code, <https://www.codepublishing.com/CA/Palmdale/#!/html/Palmdale08/Palmdale0804.html> (Accessed July 26, 2023).

4.21 Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		X		
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Impact Analysis

4.21a 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?

Based on the analyses discussed in the environmental checklist form, impacts to Aesthetics, Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire would be less than significant.

Although the Project site is disturbed, burrowing owl has a high potential to occur on site based on burrow availability and open space. No burrowing owl was observed during the field survey, but CNDDB records document burrowing owl occurring two miles from the Project site in March 2006 and approximately four miles from the Project site in January 2006. Accordingly, **MM BIO-1** would be required of the proposed Project. Bird nests and eggs are protected under State and federal law, including CFGC § 3503 and the MBTA. Some bird species nest on the ground, and there is potential for construction activity to result in impacts to these species. Accordingly, **MM BIO-2** and **MM BIO-3** would be required of the proposed Project.

The proposed Project would not 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, nor substantially reduce the number or restrict the range of a rare or endangered plant or animal. Impacts to Biological Resources would be less than significant.

The field survey conducted as part of the Cultural Resources Assessment identified surficial historic-period archaeological materials; however, these materials were determined to neither meet the minimum criteria to be considered eligible for listing in the CRHR nor make a significant

contribution to the broad patterns of California's history and cultural heritage. Regardless, because archaeological resources were detected, it was determined that there would be limited potential for encountering intact subsurface archaeological deposits during Project construction due to subsurface ground disturbance. Accordingly, **MM CUL-1** would be required of the proposed Project. In addition, if cultural resources are discovered during grading activities, work within the area must be halted, and the find must be analyzed by a qualified archeologist in consultation with any consulting Tribe(s), which could include creation of a Cultural Resources Monitoring and Treatment plan as outlined in **MM TCR-1**, **MM TCR-2** and **MM TCR-3**.

Although paleontological resources were not identified on the Project site, there could be potential for inadvertent discovery during Project construction due to subsurface ground disturbance. Accordingly, **MM GEO-1** would be required of the proposed Project.

Analysis indicates that vibrations from use of construction equipment may exceed established thresholds. Accordingly, **MM NOI-1** would be required of the proposed Project.

Accordingly, the proposed Project would not 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. The proposed Project would result in either "No impact," "Less Than Significant Impact," or "Less Than Significant Impact with Mitigation" to the environmental resource topics discussed in the Initial Study.

4.21b 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 the past projects, the effects of other current projects, and the effects of probable future projects.)

The proposed Project would not produce impacts that combined with the effects of the past projects, the effects of other current projects, and the effects of probable future projects would be cumulatively considerable because the potential adverse impacts of the proposed Project were determined to be less than significant or less than significant with incorporation of mitigation identified in the environmental checklist form.

4.21c Does the Project have environmental effects which will cause substantial adverse effects on human beings, directly or indirectly?

As discussed in Section 4.0, *Evaluation of Environmental Impacts*, the proposed Project would not cause adverse effects to people, as specifically discussed in the impact discussions pertaining to air quality, geology and soils, hazards and hazardous materials, noise, population and housing, recreation, and wildfire. All impacts associated with the proposed Project, including the impacts to people discussed in these sections were identified as having "No Impact," "Less Than Significant Impact," or "Less Than Significant Impact with Mitigation." Accordingly, the proposed Project would not cause substantial direct or indirect adverse effects on human beings.

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