

**Tentative Tract Map 60148**  
DRAFT INITIAL STUDY /  
MITIGATED NEGATIVE DECLARATION

---

*Prepared for:*

CITY OF PALMDALE  
38250 SIERRA HIGHWAY  
PALMDALE, CA 93550

*Prepared by:*

Tetra Tech, Inc.  
301 E. Vanderbilt Way, Suite 450  
San Bernardino, California 92408

March 2022

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Applicant: Pacific Communities Builder, Inc.  
1000 Dove Street, Suite 300  
Newport Beach, California 92660

Applicant's Representative: Tetra Tech, Inc.  
301 E. Vanderbilt Way, Suite 450  
San Bernardino, California 92408  
Attn: Stephanie Pacheco

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Mr. Richard Drury, Ms. Komalpreet Toor, Ms. Stacey Osborne  
Lozeau Drury, LLP  
1939 Harrison Street, Suite 150  
Oakland, CA 94612

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## **1. INTRODUCTION**

### **A. Purpose and Background of the Initial Study**

Pursuant to Section 15063 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations, Section 15000 et seq.), this Initial Study is a preliminary environmental analysis prepared by Tetra Tech for use by the CEQA Lead Agency (City of Palmdale) as a basis for determining whether an Environmental Impact Report (EIR), a Negative Declaration (ND), or a Mitigated Negative Declaration (MND) is required for the project. The California Department of Fish and Wildlife (CDFW) is California Trustee Agency for the State's fish, wildlife and plant resources. Joshua tree (*Yucca brevifolia*) a Candidate Species for listing by the California Endangered Species Act (CESA), are present at the site. As a result, the CDFW in its trustee capacity, is identified for this project as a responsible agency under CEQA. The project will require a permit for take of Joshua trees under CESA and Fish and Game Code. The State CEQA Guidelines require that an Initial Study contain a project description with the environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the name of persons who prepared the study.

Lead Agency

City of Palmdale  
Economic and Community Development Department  
Planning Division  
38250 Sierra Highway  
Palmdale, California 93550

### **B. Technical Studies**

The following technical studies were prepared in support of the proposed single-family residential development:

C.A. Singer & Associates, Inc.

2004 Phase I Cultural Resources Study, Pacific Sage II (TTM 60148) [Appendix C-1]

Adams Streeter Civil Engineers

2022a Preliminary Hydrology Study, Pacific Sage II, Tract No. 060148, Palmdale, CA [Appendix E]

2022b Preliminary Sewer Area Study, Pacific Sage II, Tract No. 060148, Palmdale, CA [Appendix F]

GeoTek, Inc.

2021 Updated Geotechnical Evaluation and Infiltration Study for the Proposed Single-Family Development Tentative Tract Map No. 60148-Pacific Sage II Project Northwest Corner of Avenue R-8 and 45<sup>th</sup> Street East Palmdale, Los Angeles County, California [Appendix D]

Los Angeles County Sanitation Districts

2021 Will Serve Letter for Tentative Tract Map No. 60148 dated 11 May 2021 [Appendix I]

Paleo Solutions, Inc.

2021 Cultural Resources Impact Analysis for the Pacific Mesquite Development (TTM 60148) Project, City of Palmdale, Los Angeles County, California [Appendix C-2]

RCA Associates, Inc

2021a Desert Vegetation Preservation Plan, City of Palmdale, California, Tentative Tract Map 60148 [Appendix B-2]

2021b General Biological Resources Assessment. Palmdale, Los Angeles County, California, Tentative Tract Map 60148 [Appendix B-1]

RK Engineering

2021a TTM 60148 Single Family Residential Project Air Quality and Greenhouse Impact Study City of Palmdale, California [Appendix A]

2021b TTM 60148 Single Family Residential Project Noise Impact Study City of Palmdale, California [Appendix G]

Translutions, Inc.

2021 Memorandum from Sandipan Bhattacharjee, PE, TE, AICP, ENV-SP to Ruben Hovanesian, Senior Civil Engineer to, Subject: TTM60148 Residential-VMT Analysis [Appendix H]

## **2. PROJECT DESCRIPTION**

### **A. Project Location**

The 31-acre project site is located on the northwest corner of East Avenue R-8 and 45th Street East, on six Assessor Parcel Numbers (APNs) 3023-006-028, -029, -041, -040, -057 and -049 (Figure 1). The project site is undeveloped land with residential development on the north, east, northwest, and southeast sides. Mesquite Elementary School is located on the southwest corner of the site.

## **B. Project Setting**

The project area is currently undeveloped disturbed Mojave Desert habitat with Joshua trees scattered across the landscape. The site has been disturbed by use by off-road vehicles and soil that has been stockpiled on the site in the past. The site is characterized as generally level terrain with a gentle gradient trending from south to north.

## **C. Project Characteristics**

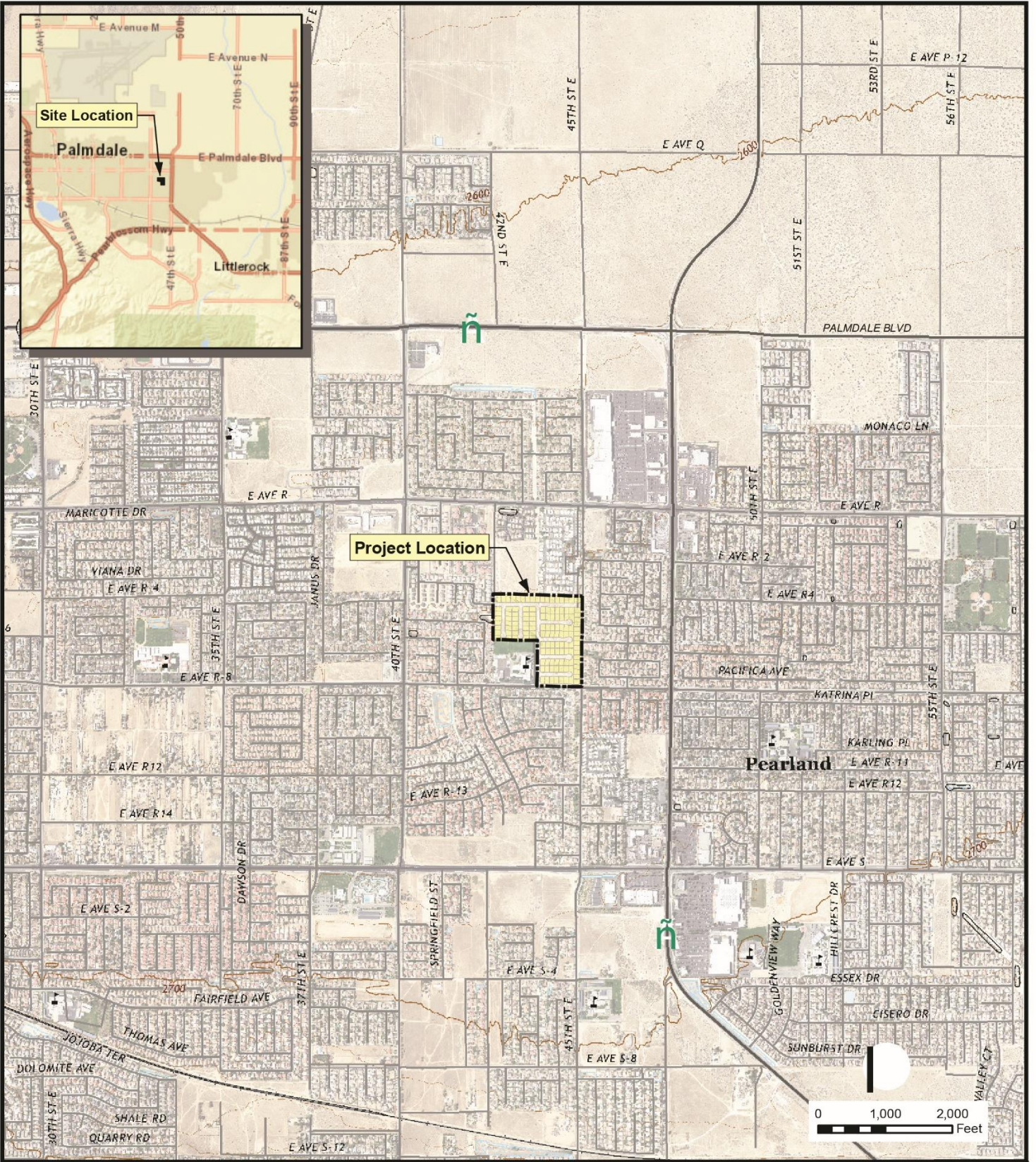
The proposed project is a request to subdivide 31 acres into 130 numbered lots including three detention basin lots, and one lettered lot for the purposes of constructing 127 single-family homes located at the northwest corner of East Avenue R-8 and 45th Street East (APNs 3023-006-028, -029, -041, -040, -057 and -049). Each lot would be a minimum 7,000 square feet in size. The detention basin lots for the development will be located in the northwest corner of the site. Construction activities are expected to consist of site preparation, grading, building construction, paving and architectural coatings. The project is expected to require the import of approximately 1,800 cubic yards of earthwork material during construction. Soils that have been stockpiled on the site would also be incorporated into the earthwork during site development. On-site renewable photovoltaic energy installations in the form of solar panels would be included for each dwelling. Construction of the project is estimated to begin in 2022. The project is anticipated to be complete in 2025. It is anticipated that construction activities would be scheduled in compliance with the City of Palmdale Municipal Code Title 8, Chapter 8.28.

## **D. Regulatory Requirements, Permits, and Approvals**

The following permits and approvals will be required from the City of Palmdale.

- A Native Desert Preservation Plan.
- Stormwater Pollution Prevention Plan (SWPPP) General Permit.
- Encroachment Permit.
- A Dust Plan to be reviewed and approved by the Antelope Valley Air Quality Management District (AVAQMD).
- Permits from the City of Palmdale:
  - Solar Permit for solar panels installed at each residence.
  - Fire Sprinkler Permit.
  - Grading Permit.
  - Permits for sewer, water, dry utilities, walls and fences, landscape.
  - Building Permit.
  - Electrical, Mechanical and Plumbing Permits





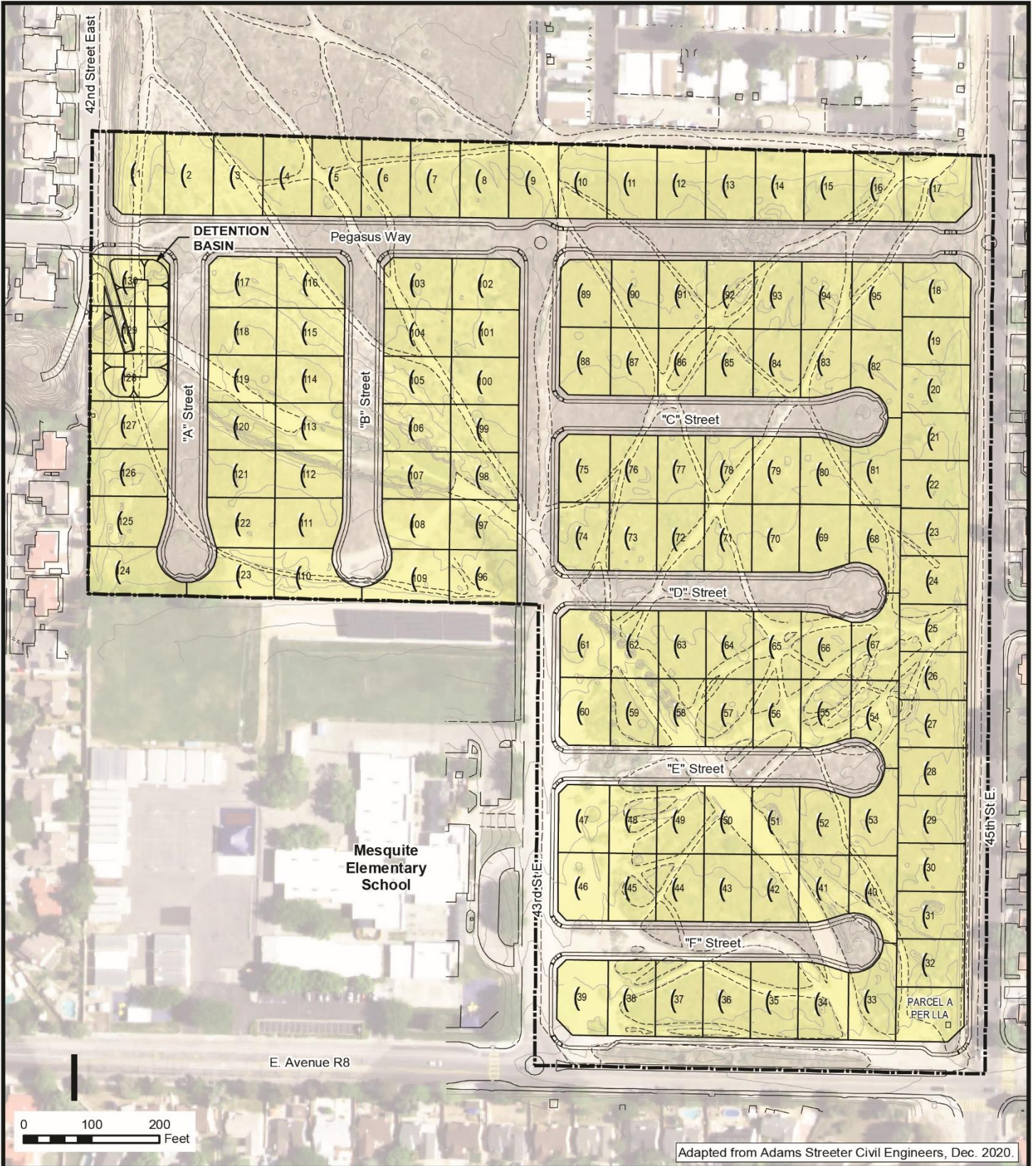
 Tentative Tract Boundary

CITY OF PALMDALE  
TENTATIVE TRACT MAP 060148

**Figure 1**  
**Site Location Map**







Adapted from Adams Streeter Civil Engineers, Dec. 2020.

CITY OF PALMDALE  
TENTATIVE TRACT MAP 060148

### Figure 2 Site Plan



- Tentative Tract Boundary
- Tentative Tract Lots

### **3. ENVIRONMENTAL CHECKLIST**

#### **A. Background**

**1. Project Title:**

Tentative Tract Map 60148, Initial Study/Mitigated Negative Declaration, Palmdale, California

**2. Lead Agency Name and Address:**

City of Palmdale  
Economic and Community Development Department  
Planning Division  
38250 Sierra Highway  
Palmdale, CA 93550

**3. Contact Person and Phone Number:**

Sarah Stachnik, Assistant Planner  
City of Palmdale  
Economic and Community Development Department  
Planning Division  
38250 Sierra Highway  
Palmdale, CA 93550  
(661) 267-5207

**4. Project Location:**

The proposed project is a request to subdivide 31 acres into 130 numbered lots including three detention basin lots, and one lettered lot for the purposes of constructing 127 single-family homes located at the northwest corner of East Avenue R-8 and 45th Street East (APNs 3023-006-028, -029, -041, -040, -057 and -049). The project site is undeveloped land with residential development on the north, east, northwest, and southeast sides. Mesquite Elementary School is located on the southwest corner of the site.

**5. Project Applicant's Name and Address:**

Pacific Communities Builder, Inc.  
1000 Dove Street, Suite 300  
Newport Beach, California 92660

**6. Existing Land Use / Zoning / General Plan:**

	<b>CURRENT LAND USE</b>	<b>ZONING</b>	<b>GENERAL PLAN DESIGNATION</b>
SITE	Vacant Land	R-1-7,000 (Single-family Residential, minimum lot size of 7,000 square feet)	SFR-3 (Single family residential, 3.1-6 dwelling units per acre)
NORTH	Vacant Land / Residential Development	R-3 (Multiple residential) / R-2 (Medium residential)	MFR (Multifamily residential, 10.1 to 16 units per acre) / MHDR (Medium high density residential, 30 to 50 dwellings per acre)
SOUTH	Residential Development, across East Avenue R-8	R-1-7,000 (Single-family Residential, minimum lot size of 7,000 square feet)	SFR-3 (Single family residential, 3.1-6 dwelling units per acre)
WEST	Elementary School / Residential Development	PF (Public Facility) / R-1-7,000 (Single-family Residential, minimum lot size of 7,000 square feet)	PF (Public Facility) / SFR-3 (Single family residential, 3.1-6 dwelling units per acre)
EAST	Residential Development, across 45 <sup>th</sup> Street East	R-1-7,000 (Single-family Residential, minimum lot size of 7,000 square feet)	SFR-3 (Single family residential, 3.1-6 dwelling units per acre)

**7. Description of Project:**

The proposed project is a request to subdivide 31 acres into 130 numbered lots including three detention basin lots, and one lettered lot for the purposes of constructing 127 single-family homes located at the northwest corner of East Avenue R-8 an 45th Street East (APNs 3023-006-028, -029, -041, -040, -057 and -049). Proposed lots range in size from 7,000 square feet to 9,666 square feet. Three lots in the northwest corner of the site would be used as detention basins for the development. The project would include construction of associated infrastructure including roads, sidewalks and utilities. Access to the site would be from a new road, Pegasus Way, which would connect 42nd Street East on the west side of the site with 45th Street East on the east side of the site. From 42nd Street East, and from the north side of the site, there would be six cul-de-sacs within the development providing access to most lots. Residences on the eastern side of the development would be constructed to face 45th Street East. Access to the site from the south would be from East Avenue R-8 (Figure 2).



**8. Surrounding Land Uses and Setting:**

The project is proposed within the City of Palmdale on a site that is undeveloped, disturbed desert habitat with residential development on the north, east, northwest and southeast sides. Mesquite Elementary School is located on the southwest corner of the site. East Avenue R-8 is located south of the site with residential development beyond. The east side of the site is bounded by 45th Street East, with residential development beyond. A portion of the western side of the site is bounded by 42nd Street East, with Mesquite Elementary School and residential development beyond.

## **B. Environmental Factors Potentially Affected**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact”, as indicated by the checklist on the following pages. Potentially significant impacts that are mitigated to “Less Than Significant” are not shown here.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                  | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources        | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology and Soils           | <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards and Hazardous Materials    |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning              | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                       | <input type="checkbox"/> Population and Housing             | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                  | <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Utilities and Service Systems      |
| <input type="checkbox"/> Tribal Cultural Resources   | <input type="checkbox"/> Wildfire                           | <input type="checkbox"/> Mandatory Findings of Significance |

### C. Determination

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

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a significant effect(s) 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, if the effect is a “potentially significant impact” or “potentially significant unless mitigated”. 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, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Megan Taggart  
Planning Manager



## **D. Evaluation of Environmental Impacts**

Each of the responses in the following environmental checklist considers the whole action involved, including project-level, cumulative, on-site, off-site, indirect, construction, and operational impacts. A brief explanation is provided for all answers and supported by the information sources cited.

1. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone).
2. A “Less Than Significant Impact” applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.
3. A “Less Than Significant Impact With Mitigation Incorporated” applies when the proposed project would not result in a substantial and adverse change in the environment after additional mitigation measures are applied.
4. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect is significant. If there are one or more “Potentially Significant” entries when the determination is made, an EIR is required.

#### 4. ENVIRONMENTAL ANALYSIS

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

#### Project Impacts and Mitigation Measures

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

**No Impact.** Scenic vistas and view corridors in the City of Palmdale are identified in the Environmental Resources Element of the City’s General Plan. The General Plan identifies the following Scenic Routes: Barrel Springs Road, Tierra Subida Avenue, Sierra Highway south of Avenue S, Elizabeth Lake Road, Pearblossom Highway, Bouquet Canyon Road, Godde Hill Road, and the Antelope Valley Freeway south of Rayburn Road (Exhibit ER-1 of the City of Palmdale General Plan). The closest scenic route (Pearblossom Highway) is more than 1.5-milesouth of the project. As the project does not bound Pearblossom Highway, it would not likely be visible to the driving public and would not change the view from the Highway. Adjacent roads surrounding the project site have not been identified as a scenic vista or view corridor in the City’s General Plan. Views of the open mountains surrounding the Antelope Valley are available from the project site and roadways in the vicinity. These views would generally continue to be available following construction of the proposed project. Furthermore, the proposed project would be subject to City review to ensure conformance with existing design regulations (project setbacks, height, scale, landscaping, etc.) and compatibility with surrounding land uses. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** The project site does not contain any rock outcroppings, trees or buildings (historic or otherwise) and is not located along a scenic highway. The project site is characterized as disturbed desert habitat with residential/public facility developments on all sides. While Joshua tree plants are present at the site, there is no scenic highways that abut the project area. Therefore, a less than significant impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** The visual character of the project site would be altered as it would change from disturbed desert habitat to a residential development. To some, the elimination of Joshua trees plants may degrade visual character or quality of public views. The project area has been identified in the General Plan Land Use Map as Single Family Residential (SFR-3, Single Family Residential, 3.1 to 6 dwelling units per acre) (City of Palmdale 1993). The residential development will be required to conform to existing design regulations such as setbacks and landscaping. Residential development of the site is also compatible with surrounding residential land uses. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

- d) *Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

**Less than Significant Impact.** The residences and new streets would require nighttime lighting, similar to what is provided in adjacent residential developments. Light standards associated with new streets would be deflected away from adjacent properties and focused downward. The increase in night lighting would not adversely affect nighttime views in the local area. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>II AGRICULTURE AND FORESTRY RESOURCES.</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the Project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Project Impacts and Mitigation Measures**

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

**No Impact.** Land is designated by the California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP) as one of the following as it relates to agriculture: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land, and Other Land. A review of the Farmland Map for Los Angeles County has designated the project site “Other Land” (California Department of Conservation 2017). This designation has been defined by the California Department of Conservation as “land not included in any other mapping category”. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, and no impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** The project site is not zoned for agricultural use and is not under a Williamson Act contract. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

- c-d) *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? Result in the loss of forestland or conversion of forestland to non-forest use?*

**No Impact.** As there are no forests or timberlands located within the City of Palmdale, the proposed project would not result in the rezoning of forest or timberland. No loss of forest land or the conversion of forest land to non-forest land would occur. Therefore, no impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** As previously indicated, a review of the Farmland Map for Los Angeles County has designated the project site "Other Land" (California Department of Conservation 2017). This designation has been defined by the California Department of Conservation as "land not included in any other mapping category". Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, and no impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>III AIR QUALITY.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

RK Engineering

2021a TTM 60148 Single Family Residential Project Air Quality and Greenhouse Impact Study City of Palmdale, California [Appendix A]

### Environmental Setting

An analysis of potential air quality impacts from the proposed project was completed for construction and operation of the proposed project (RK Engineering Group, Inc. 2021a). The Federal Clean Air Act (§ 7602) defines air pollution as any agent or combination of such agents, including any physical, chemical, biological, or radioactive substance which is emitted into or otherwise enters the ambient air. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution.

The project site is located within the Antelope Valley Air Quality Management District (AVAQMD) and the Mojave Desert Air Basin (MDAB). The nearest ambient air quality monitoring station is the Lancaster-Division Street Monitoring Station, located at 43301 Division Street, in the City of Lancaster. Sensitive receptors are considered residences, schools, daycare centers, playgrounds and medical facilities. The nearest sensitive land uses are considered the residential homes located adjacent to the project site to the north, south, northwest, and east of the site and the Mesquite Elementary School located to the west of the site. As such, sensitive receptors are located within 25 meters (approximately 80 feet) of the project site (RK Engineering Group, Inc. 2021a).

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health and include the following.

- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO<sub>2</sub>)
- Ozone (O<sub>3</sub>)
- Fine Particulate Matter (PM<sub>10</sub>)
- Ultra Fine Particulate Matter (PM<sub>2.5</sub>)
- Sulfur Dioxide (SO<sub>2</sub>)
- Lead (Pb)
- Volatile Organic Compounds (VOCs)
- Toxic Air Contaminants (TACs)

The Federal Clean Air Act, which was last amended in 1990, requires the US Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for criteria pollutants considered harmful to public health and the environment. The State of California has also established additional and more stringent California Ambient Air Quality Standards (CAAQS) in addition to the seven criteria pollutants designated by the federal government.

Ambient Air Quality Standards (AAQS) are designed to protect the health and welfare of the populace with a reasonable margin of safety. The standards are divided into two categories, primary standards and secondary standards. Primary standards are implemented to provide protection for the “sensitive” populations such as those with asthma, or children and elderly. Secondary standards are to provide protection against visible pollution as well as damage to the surrounding environment, including animals, crops, and buildings. Table 1 lists Federal and State Ambient Air Quality Standards.

Table 1 Federal and State Ambient Air Quality Standards <sup>1</sup>

Pollutant	Averaging Time	California Standards <sup>2</sup>	National Standards <sup>2</sup>	
		Concentration	Primary	Secondary
<b>Ozone (O<sub>3</sub>)</b>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	—	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.070 ppm (137 µg/m <sup>3</sup> )	
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>	24 Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	—	
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>	24 Hour	—	35 µg/m <sup>3</sup>	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>
<b>Carbon Monoxide (CO)</b>	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	—
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	—
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )	—	—
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	100 ppb (188 µg/m <sup>3</sup> )	—
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	75 ppb (196 µg/m <sup>3</sup> )	—
	3 Hour	—	—	0.5 ppm (1,300 µg/m <sup>3</sup> )
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )	0.14 ppm (for certain areas) <sup>11</sup>	—
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas) <sup>11</sup>	—
<b>Lead<sup>3</sup></b>	30 Day Average	1.5 µg/m <sup>3</sup>	—	—
	Calendar Quarter	—	1.5 µg/m <sup>3</sup> (for certain areas) <sup>12</sup>	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m <sup>3</sup>	
<b>Visibility Reducing Particles</b>	8 Hour	See footnote 3	<b>No National Standards</b>	
<b>Sulfates</b>	24 Hour	25 µg/m <sup>3</sup>		
<b>Hydrogen Sulfide</b>	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )		



Pollutant	Averaging Time	California Standards <sup>2</sup>	National Standards <sup>2</sup>	
		Concentration	Primary	Secondary
Vinyl Chloride <sup>12</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )		

<sup>1</sup>Source:USEPA:<https://www.epa.gov/criteria-air-pollutants/naaqs-table> and California Air Resources Board (CARB):<https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards>

<sup>2</sup>ppm=parts per million of air, by volume; µg/m<sup>3</sup>=micrograms per cubic meter; Annual=Annual Arithmetic Mean;30-day=30-day average;

<sup>3</sup>In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Several pollutants listed in Table1 are not addressed in the analysis completed for this project. Lead is not included because neither construction nor operation of the project are anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is specifically addressed. The project is not expected to generate or be exposed to vinyl chloride because proposed project development and use do not utilize the chemical processes that create this pollutant and there are no such uses in the project vicinity. The proposed project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

The Federal Clean Air Act requires the preparation of a State Implementation Plan (SIP) to ensure air quality meets the NAAQS. The California Air Resources Board (CARB) provides designations of attainment for air basins where AAQS are either met or exceeded. If the AAQS are met, the area is designated as being in "attainment". If the air pollutant concentrations exceed the AAQS, then the area is designated as being "nonattainment". If there is inadequate or inconclusive data to make a definitive attainment designation, the area is considered "unclassified". When a state submits a request to the EPA to re-designate a nonattainment area to attainment, the Clean Air Act (CAA) section 175A(a) requires that the state (or states, if the area is a multi-state area) submit a maintenance plan ensuring the area can maintain the air quality standard for which the area is to be re-designated for at least 10 years following the effective date of re-designation. Table 2 lists the attainment status for the criteria pollutants in the AVAQMD.

Table 2 AVAQMD Attainment Designation

Ambient Air Quality Standard	AVAQMD
One-hour Ozone (Federal) – standard has been revoked; this is historical information only	Proposed attainment in 2014; historical classification Severe-17
Eight-hour Ozone (Federal 84ppb (1997))	Subpart 2 Nonattainment; classified Severe-15
Eight-hour Ozone (Federal 75 ppb (2008))	Nonattainment, classified Severe-15
Eight-hour Ozone (Federal 70ppb (2015))	Expected nonattainment; classification to be determined
Ozone (State)	Nonattainment; classified Extreme
PM10 24-hour (Federal)	Unclassifiable/attainment
PM2.5 Annual (Federal)	Unclassified/attainment
PM2.5 24-hour (Federal)	Unclassified/attainment
PM2.5 (State)	Unclassified
PM10 (State)	Nonattainment
Carbon Monoxide (State and Federal)	Attainment
Nitrogen Dioxide (State and Federal)	Attainment/unclassified
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Attainment
Particulate Sulfate (State)	Unclassified
Hydrogen Sulfide (State)	Unclassified
Visibility Reducing Particles (State)	Unclassified

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

This portion of Los Angeles County is in attainment/unclassified for all NAAQS except O<sub>3</sub>, and all CAAQS, except O<sub>3</sub>, and PM<sub>10</sub> (RK Engineering Group, inc. 2021a). Applicable AVAQMD rules include, but are not limited to, those presented in Table 3. Details related to local climate and air quality for the project setting is provided in Appendix A.

Table 3 Applicable Rules

Rule/ Regulation	Title
401	Visible Emissions
402	Nuisance
403	Fugitive Dust
404	Particulate Matter – Concentration

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

**Less than Significant Impact.** The Federal CAA requires the creation of SIPs to state how they will attain or maintain NAAQS. SIPs are a compilation of new and previously approved plans, programs, district rules, state regulations and federal controls. States and local air quality management agencies prepare SIPs for approval by the USEPA. SIPs are, in part, based on regional population, housing, and employment projections reflected in local general plans.

The proposed project would be constructed in an area that is zoned for single family residential development. The site is surrounded on all sides by residential development with an elementary school on a portion of the western side of the site. In addition, because the project would comply with all applicable AVAQMD rules and regulations and would be consistent with the growth forecast in the applicable air quality and local land use planning documents, it is considered consistent with the State SIP. Therefore, the project would not conflict with or obstruct implementation of the attainment plan. Therefore, impacts would be less than significant

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (14 CCR Section 15355).

### Construction Air Quality Emissions

The proposed project would generate temporary emissions of criteria pollutants during construction. The air quality technical report provided in Appendix A provides a summary of construction sources of project-related emissions that were analyzed for the proposed project. Table 4 shows the annual tons per year (tons/year) of construction emissions and Table 5 shows daily pounds per day (lbs/day) of construction emissions generated by the project. As shown in these tables, the project's annual and daily construction emissions would be below the applicable AVAQMD thresholds of significance.

Table 4 Annual Construction Air Quality Emissions (tons/year)

Year	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2021	0.19	1.99	1.42	0.00	0.28	0.16
2022	0.34	3.07	3.12	0.01	0.40	0.18
2023	1.28	1.95	2.30	0.01	0.27	0.12
<b>Maximum<sup>1</sup></b>	<b>1.28</b>	<b>3.07</b>	<b>3.12</b>	<b>0.01</b>	<b>0.40</b>	<b>0.18</b>
AVAQMD Annual Threshold	25	25	100	25	15	12
Exceeds Threshold(?)	No	No	No	No	No	No

<sup>1</sup>Maximum annual emissions includes both on-site and off-site emissions.

Table 5 Daily Construction Air Quality Emissions (lbs/day)

Activity	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Site Preparation	3.96	40.54	21.70	0.04	9.10	5.72
Grading	4.31	47.81	31.80	0.07	5.56	3.28
Building Construction	2.95	25.69	25.05	0.07	3.25	1.54
Paving	1.76	10.22	14.97	0.02	0.63	0.50
Architectural Coating	59.61	1.39	2.90	0.01	0.42	0.16
<b>Maximum<sup>1</sup></b>	<b>59.61</b>	<b>47.81</b>	<b>31.80</b>	<b>0.07</b>	<b>9.10</b>	<b>5.72</b>
AVAQMD Daily Threshold	137	137	548	137	82	65
Exceeds Threshold(?)	No	No	No	No	No	No

<sup>1</sup>Maximum daily emission during summer and winter; includes both on-site and off-site project emissions.

### Operational Air Quality Emissions

Operational emissions occur over the life of the project and are considered “long-term” sources of emissions. Operational emissions include both direct and indirect sources. The air quality technical report in Appendix A provides a summary of operational sources of project-related emissions that were analyzed for the proposed project. Table 6 shows the annual tons per year (tons/year) of operational emissions and Table 7 shows daily pounds per day (lbs./day) of operational emissions generated by the project. As shown in these tables, the project’s annual and daily operational emissions would be below the applicable AVAQMD thresholds of significance.

Table 6 Annual Operational Air Quality Emissions (tons/year)

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	1.07	0.10	0.99	0.00	0.01	0.01
Energy	0.02	0.16	0.07	0.00	0.01	0.01
Mobile	0.30	0.70	3.97	0.01	1.28	0.35
<b>Total</b>	<b>1.39</b>	<b>0.96</b>	<b>5.03</b>	<b>0.01</b>	<b>1.31</b>	<b>0.37</b>
AVAQMD Threshold	25	25	100	25	15	12
Exceeds Threshold(?)	No	No	No	No	No	No

<sup>1</sup>Total annual emission includes both on-site and off-site sources.

Table 7 Daily Operational Air Quality Emissions (lbs/day)

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	6.20	2.25	11.47	0.01	0.23	0.23
Energy	0.10	0.89	0.38	0.01	0.07	0.07
Mobile	1.80	3.85	23.24	0.08	7.35	1.99
<b>Total</b>	<b>8.11</b>	<b>6.98</b>	<b>35.08</b>	<b>0.10</b>	<b>7.65</b>	<b>2.29</b>
AVAQMD Threshold	137	137	548	137	82	65
Exceeds Threshold(?)	No	No	No	No	No	No

<sup>1</sup>Maximum daily emission during summer or winter ;includes both on-site and off-site project emissions.

**Mitigation Measures:** No mitigation measures are necessary

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

**Less than Significant Impact with Mitigation Incorporated.** The proposed project has the potential to expose sensitive receptors to substantial pollutant concentration during construction. Mesquite Elementary School is adjacent to the west of the site and the site is surrounded by residential development.

During construction, emissions from off-road construction equipment would be generated. The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions associated with suspended particulate matter, also known as fugitive dust. Fugitive dust emissions are commonly associated with land clearing activities, cut-and-fill grading operations, and exposure of soils to the air and wind. AVAQMD Rule 403 requires that fugitive dust is controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, AVAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. To ensure compliance with the fugitive dust control measures and to reduce potential exposure of sensitive receptors to substantial pollution concentrations, **Mitigation Measure AQ-1** is recommended during construction.

With incorporation of **Mitigation Measure AQ-1**, potential significant impacts to sensitive receptors in the vicinity of the project would be reduced to less than significant. In addition to dust, toxic air contaminants (TACs) emissions during construction have the potential to impact sensitive receptors in the vicinity. The primary source of TACs associated with the project would include diesel particulate matter (DPM) emitted from the use of diesel-powered construction equipment and on-road vehicles powered by diesel engines.

The proposed project does not consist of a land use that has been identified by the AVAQMD as potentially significant generator of TACs that could cause the exposure of sensitive receptors to substantial pollutant concentrations. Therefore, since the project is not considered a substantial source of stationary pollution, the project's operational impact would be less than significant impact.

The project will also generate DPM during construction from off-road diesel equipment and trucks. Incorporation of **Mitigation Measures AQ-2 through AQ-9** would reduce the potential health risk associated with DPM during construction to the maximum extent feasible. With the implementation of the recommended mitigation measures, the project's construction impact would be less than significant. It is presumed that with the recommended mitigation measures in place, which include a requirement for Tier 4 engines for all off-road diesel equipment, that the potential short-term construction health risks will be adequately reduced to less than significant. Tier 4 engines, along with the latest national fuel standards, will yield PM reductions of over 95 percent from the typical Tier 2 and Tier 3 engines.

### **Mitigation Measures**

**AQ-1:** The project shall follow the AVAQMD rules and requirements with regards to fugitive dust control, which includes, but is not limited to the following:

- All active construction areas shall be watered two times daily.
- Speed on unpaved roads shall be reduced to less than 15 mph.
- Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
- Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.
- Access points shall be washed or swept daily.
- Construction sites shall be sandbagged for erosion control.
- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least two feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
- Replace the ground cover of disturbed areas as quickly possible.
- A construction management plan with fugitive dust control measures must be prepared and submitted to City of Palmdale prior to the start of construction.

**AQ-2:** All construction equipment shall have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.

**AQ-3:** Construction equipment shall be maintained in proper tune.

**AQ-4:** All construction vehicles shall be prohibited from excessive idling. Excessive idling is defined as five minutes or longer.

**AQ-5:** The simultaneous operation of multiple construction equipment units shall be minimized to the extent feasible.

**AQ-6:** The use of heavy construction equipment and earthmoving activity shall be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.

**AQ-7:** An electricity supply shall be established to the construction site and electric powered equipment shall be used instead of diesel-powered equipment or generators, where feasible.

**AQ-8:** Staging areas shall be established for the construction equipment as distant as possible from adjacent Mesquite Elementary School.

**AQ-9:** Haul trucks with on-road engines shall be utilized instead of off-road engines for on-site hauling.

- e) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? Odors are typically categorized as a nuisance and are regulated under AVAQMD Rule402?*

**Less than Significant Impact.** Rule 402 requires that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Land uses that commonly receive odor complaints include agricultural uses (farming and livestock), chemical plants, composting operations, dairies, fiberglass molding facilities, food processing plants, landfills, refineries, rail yards, and wastewater treatment plants. The proposed project does not contain land uses that would typically be associated with significant odor emissions. Hence, the project related odors are not expected to meet the criteria of being a nuisance and the impact would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.



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

RCA Associates, Inc

2021a Desert Vegetation Preservation Plan, City of Palmdale, California, Tentative Tract Map No. 60148 [Appendix B-2]

2021b General Biological Resources Assessment. Palmdale, Los Angeles County, California, Tentative Tract Map 60148 [Appendix B-1]

**Project Impacts and Mitigation Measures**

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

**Less than Significant with Mitigation Incorporated.** A General Biological Resources Assessment was prepared for the proposed development (RCA Associates, Inc. 2021b) and is provided in Appendix B-1. The field survey for the habitat assessment was conducted on November 24, 2020. As noted earlier, the proposed project site is undeveloped and contains scattered Joshua tree in creosote (*Larrea tridentata*) scrub habitat. In addition to the habitat assessment, focused surveys for desert tortoise (*Gopherus agassizii*), a federal and state listed endangered species, and burrowing owl (*Athene cunicularia*), a California Species of Special Concern, were conducted. The site was also evaluated for the potential to support Mohave ground squirrel (*Xerospermophilus mohavensis*), a State of California listed endangered mammal. Habitat conditions at the site were noted as being disturbed and marginal as habitat for desert tortoise. No desert tortoise or sign of desert tortoise were observed. No recent observations of Mohave ground squirrel within the region that includes the project location were noted in the literature review conducted as part of the biological assessment of the site. Based on the highly disturbed nature of the site plus the developed nature of adjacent properties to the site, the biological assessment report concluded that the site is not suitable for occupation by desert tortoise or Mohave ground squirrel.

While none were observed during the biological assessment conducted in November 2020, conditions at the site are suitable for occupation by burrowing owl. With incorporation of **Mitigation Measure BIO-1**, potential significant impacts to burrowing owl would be reduced to a less than significant level.

Joshua trees were noted within the project site. On October 21, 2019, the Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list the Joshua tree as threatened under the California Endangered Species Act (CESA). California Fish and Game Code (F&G Code) Section 2073.5 requires that the California Department of Fish and Wildlife (CDFW) evaluate the petition and submit a written evaluation with a recommendation to the Commission, which was received at the Commission's April 2020 meeting.

- Based upon the information contained in the petition and other relevant information, the CDFW determined in its 90-day evaluation that there was sufficient scientific information available to indicate that the petitioned action may be warranted. On September 22, 2020, the Commission determined that listing of Joshua tree may be warranted pursuant to F&G Code Section 2074.2 and, as a result, the Joshua tree has been designated as a candidate species under CESA. The CDFW will undertake a one-year status review of the listing of Joshua tree. After it receives the CDFW's status review, the Commission will make a final decision on listing. Candidate species are protected under CESA pursuant to F&G Code Section 2085 during the CESA listing. Because the proposed project will require removal of Joshua trees from the project area, consultation with the

CDFW will be undertaken and an Incidental Take Permit (ITP) (pursuant to Fish and Game Code, § 2080 *et seq.*) between the applicant and the CDFW will be required prior to the issuance of a grading permit.

With incorporation of **Mitigation Measure BIO-2**, potential significant impacts to Joshua tree would be reduced to less than significant.

The City of Palmdale also requires compliance with Palmdale Municipal Code (PMC) Chapter 14.04 for Joshua trees and native vegetation preservation. In compliance with PMC Chapter 14.04, a Desert Vegetation Preservation Plan has been prepared (RCA Associates, Inc. 2021a). All Joshua trees present within the project area were assessed for capability to be relocated/transplanted. With incorporation of **Mitigation Measure BIO-3**, impacts to native vegetation located at the site would be reduced to a less than significant level. This is discussed further under item e) below.

In addition, the biological assessment prepared for the project did not identify the presence of any other sensitive plant species.

Although sensitive plant species were not found on-site (except for Joshua tree), the conditions of approval for the project and the Mitigation Monitoring and Reporting Program (MMRP) and Compliance Record will be drafted to ensure avoidance or compensatory mitigation of impacts to any sensitive species that may be identified during construction activities.

#### **Mitigation Measures:**

**BIO-1:** A pre-construction presence/absence survey for burrowing owl shall be conducted within 30 days prior to any on-site ground disturbing activity. The survey shall be conducted pursuant to the recommendations and guidelines established by the California Department of Fish and Wildlife (CDFW). If, during the pre-construction survey, the burrowing owl is found to occupy the site, mitigation for potential impacts to burrowing owls shall adhere to CDFW's March 7, 2012, Staff Report on Burrowing Owl Mitigation. If burrowing owl are discovered at the site, an Avoidance Plan for burrowing owl shall be prepared by a qualified biologist that would include measures that are effective, enforceable and feasible to avoid impacts to burrowing owl. The Avoidance Plan shall be fully developed prior to implementation of project-related ground disturbance activities that includes site preparation, equipment staging and mobilization. If no burrowing owl are found during the pre-construction presence/absence survey, no further work is required.

**BIO-2:** If "take" or adverse impacts to Joshua tree cannot be avoided during project implementation, consultation with the CDFW will be undertaken and an Incidental Take Permit (ITP) (pursuant to Fish and Game Code, § 2080 *et seq.*)

will be sought. During the consultation process, if take of Joshua trees is necessary for the project to be constructed, compensatory mitigation will be required in the ITP and may include in-kind and/or in-lieu mitigations as per Fish and Game Code 2081 to offset impacts. The ITP will also specify minimization and avoidance measures and fully mitigate any impacts to Joshua trees. No take of Joshua trees will occur until the ITP has been issued to the applicant.

**BIO-3:** The project shall submit for approval a Native Vegetation Preservation Plan pursuant to PMC Chapter 14.04 prior to issuance of a grading permit.

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

**No Impact.** As indicated in the biological assessment, the project site does not contain any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by CDFW or the U.S. Fish and Wildlife Service. Therefore, no impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** No waters subject to regulatory oversight such as vernal pools or riparian habitat were noted during the biological assessment of the site. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact with Mitigation Incorporated.** The project site is not part of an established migratory wildlife corridor. Vegetation at the project site could be used by nesting migratory birds and, while none were noted during the habitat assessment, there is habitat at the site that is suitable for occupation by nesting birds. As a result, removing vegetation during the nesting season may cause a significant impact. If project construction activities were to occur during the nesting bird season, which typically ranges from February 15<sup>th</sup> to June 15<sup>th</sup> with some variance based on annual rainfall and temperatures, a nesting bird survey

will be conducted. If present at the site, implementation of **Mitigation Measure BIO-4** would reduce impacts to nesting birds to a less than significant.

**Mitigation Measures:**

**BIO-4:** If project grading/construction activities are scheduled to occur during the nesting season for breeding birds (February 15<sup>th</sup> through June 15<sup>th</sup>) a pre-construction nesting bird survey shall be conducted by qualified biologists. If nesting birds are observed during the survey, the following measures shall be implemented:

1. An Avoidance Plan for nesting birds will be prepared by a qualified biologist that would include measures that are effective, enforceable and feasible to avoid impacts to nesting birds. The Avoidance Plan would be fully developed prior to implementing project-related ground disturbance activities that includes site preparation, equipment staging and mobilization.
2. As part of the Avoidance Plan, within seven days prior to commencement of grading/construction activities, a qualified biologist shall perform a pre-construction survey of all proposed work limits and within 500 feet of the proposed work limits unless those areas are developed or restricted due to a lack of property owner permission for access.
3. If active avian nest(s) of non-special status species are discovered within or 500 feet from the work limits, a buffer shall be delineated around the active nest(s) measuring 300 feet for passerines and 500 feet for raptors. A qualified biologist shall monitor the nest(s) weekly after commencement of grading/construction to ensure that nesting behavior is not adversely affected by such activities.

If the qualified biologist determines that nesting behavior of non-special-status species is adversely affected by grading/construction activities, then a noise mitigation program may be required to be prepared in advance of work at the site (i.e., within 10 calendar days prior to the start of construction activities including removal of vegetation).

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

**Less than Significant Impact with Mitigation Incorporated.** The project area was noted as disturbed habitat with scattered Joshua trees (RCA Associates, Inc. 2021b). There were no sensitive plant species, other than Joshua trees, detected during site surveys. A total of 86 Joshua trees were evaluated as part of the Desert Vegetation Preservation Plan (plan) preparation (RCA & Associates, Inc. 2021a). The plan provides information for those Joshua trees determined to be suitable for

transplanting/relocation and those that can be discarded. The project will require the removal of 80 Joshua trees that are scattered through the project area, which requires compliance with CESA and PMC Chapter 14.04. Six of the Joshua trees are suitable for transplanting/relocation (RCA & Associates, 2021a).

With the implementation of **Mitigation Measures BIO-2, BIO-3, BIO-5 and BIO-6** impacts would be reduced to a less than significant level.

**Mitigation Measure:**

**BIO 5:** The applicant shall submit to the City of Palmdale a native desert vegetation preservation plan prepared by RCA & Associates, Inc. The plan shall, at minimum, include the following:

1. A written report and a site plan which depicts the location of each Joshua tree and California juniper, discusses their age and health, identifies and locates all trees and shrubs which can be saved in place or relocated.
2. A site landscaping plan showing the proposed location of those Joshua trees, California junipers, and any other native desert vegetation that will remain on-site.
3. A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is approved by the City.

**BIO-6:** Two years following Joshua tree transplanting, a written report shall be submitted to the City. This report shall indicate the number of Joshua trees transplanted, the date(s) of transplanting, the method of transplanting, dates Joshua trees are watered, and the number of Joshua trees surviving

With implementation of **Mitigation Measures BIO-2, BIO-3, BIO-5 and BIO-6**, impacts to Joshua trees and native plants would be less than significant.

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

**No Impact.** The project area is not located within or near lands that are governed by a habitat conservation plan, a natural community conservation plan or other approved, local, regional or state habitat conservation plan. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>V CULTURAL RESOURCES.</b> Would the Project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in§15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in Public Resources Code Section 21083.2 and 21084.1, and CEQA Guidelines Section 15064.5, respectively?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any Native American tribal cultural resources or human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C.A. Singer & Associates, Inc.

2004 Phase I Cultural Resources Study, Pacific Sage II (TTM 60148) [Appendix C-1]

Paleo Solutions, Inc.

2021 Cultural Resources Impact Analysis for the Pacific Mesquite Development (TTM 60148) Project, City of Palmdale, Los Angeles County, California [Appendix C-2]

Project Impacts and Mitigation Measures

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

**No Impact.** A cultural resources records search and pedestrian survey of the project area was conducted in April of 2004 (C.A. Singer & Associates, Inc. 2004). An updated analysis that included a records search and pedestrian survey of the project area was conducted in 2021 (Paleo Solutions, Inc. 2021). No historical resources were observed or recorded within the project area in the 2004 survey and confirmed in the updated 2021 survey, there would be no impacts to historical resources.

**Mitigation Measures:** No mitigation measures are necessary.

- b) *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Public Resources Code Section 21083.2 and 21084.1, and CEQA Guidelines Section 15064.5, respectively?*

**Less than Significant with Mitigation Incorporated.** There is a possibility that during grubbing and grading at the site, buried cultural resources may be discovered. If this occurs, the project proponent will be required to comply with City of Palmdale regulations and California Public Resources Code Section 21083.2. In the event that cultural resources are encountered during the course of construction activities, all work must cease until a qualified archaeologist determines the proper disposition of the resource. With implementation of the **Mitigation Measures CUL-1** through **CUL-3**, impacts would be less than significant.

**Mitigation Measure:**

**CUL-1:** In the event that cultural resources are discovered during earth moving activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) and the Fernandño Tataviam Band of Mission Indians (FTBMI) shall be contacted, as detailed within Mitigation Measures TCR-1 and TCR-2 (refer to Section XVIII – Tribal Cultural Resources), regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

**CUL-2:** If significant pre-contact and/or post-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 SMBMI and FTBMI for review and comment, as detailed within **Mitigation Measures TCR-1 and TCR-2**. The archaeologist shall monitor the remainder of the earth moving activities and implement the Plan accordingly.

**CUL-3:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of earth moving activities.

- c) *Would the project disturb any Native American tribal cultural resources or human remains, including those interred outside of dedicated cemeteries?*

**Less than Significant with Mitigation Incorporated.** No human remains, including those interred outside of a formal cemetery were observed during the



2004 or 2021 cultural resources surveys of the site. In the event that previously unknown human remains are discovered during construction of the project, with implementation of **Mitigation Measures TCR-1 and TRC 2**, (refer to Section XVIII – Tribal Cultural Resources) impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VI ENERGY.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Project Impacts and Mitigation Measures**

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

**Less than Significant Impact.** Energy consumption during construction would have a nominal effect on the local and regional energy supplies. 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. Construction would be temporary and in compliance with AVAQMD regulations, and equipment would be maintained to optimal performance to reduce use of fuels. Residences will be constructed to comply with Title 24, part 11 of the California Green Building Standards Code (CALGreen) and Title 24, Part 6, Building Efficiency Standards to include net zero energy requirements. Rooftop solar panels for each residence would meet the Energy Design Ratings required by the latest California Energy Code Standards. Water conservation strategies including low flow fixtures and toilets, water efficient irrigation systems, and drought tolerant/native landscaping would be incorporated into the residential development. Homeowners would be required to comply with City of Palmdale’s requirements for the residential recycling program to reduce household trash. The necessary infrastructure to support electric vehicle charging such as dedicated electrical circuits and outlets for in-garage charging as required by CALGreen would also be included as part of project construction. Therefore, a less than significant impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** The project would be constructed in compliance with CALGreen and

Title 24, Part 6 standards that is consistent with the Palmdale Energy Action Plan (PEAP). Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VII GREENHOUSE GAS EMISSIONS.</b> Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RK Engineering

2021a TTM 60148 Single Family Residential Project Air Quality and Greenhouse Impact Study City of Palmdale, California [Appendix A]

Project Impacts and Mitigation Measures

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

**Less than Significant Impact.**

**Greenhouse Gas Emissions-Construction**

Greenhouse gas emissions were estimated for on-site and off-site construction activity using CalEEMod (Appendix A). Table 8 shows the annual construction greenhouse gas emissions in metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e/year) and compares the results to the AVAQMD annual threshold of significance.

Table 8 Annual Construction Greenhouse Gas Emissions

Year	Annual GHG Emissions (MTCO <sub>2</sub> e/year) <sup>1</sup>
2021	285.36
2022	756.34
2023	534.09
<b>Maximum Annual Emissions</b>	<b>756.34</b>
AVAQMD Annual Threshold	100,000
Exceeds Threshold?	No

<sup>1</sup>MTCO<sub>2</sub>e/year=metric tons of carbon dioxide equivalents per year

Table 9 shows the daily construction greenhouse gas emissions in pounds per day of carbon dioxide equivalent (lbs.CO<sub>2</sub>e/day) and compares the results to the AVAQMD daily threshold of significance.

Table 9 Daily Construction Greenhouse Gas Emissions

Year	Daily GHG Emissions (lbs.CO <sub>2</sub> e/day) <sup>1</sup>
2021	6,648.20
2022	6,510.74
2023	6,378.71
<b>Maximum Daily Emissions<sup>2</sup></b>	<b>6,648.20</b>
AVAQMD Daily Threshold	548,000
Exceeds Threshold?	No

<sup>1</sup>lbs.CO<sub>2</sub>e/day=pounds of carbon dioxide equivalents per day

<sup>2</sup>Maximum emissions during summer and winter months.

**Greenhouse Gas Emissions-Operation**

Greenhouse gas emissions are estimated for on-site and off-site operational activity using CalEEMod (Appendix A). Greenhouse gas emissions from mobile sources, area sources and energy sources are shown in Table10.

Table 10 Annual Operational Greenhouse Gas Emissions

Emission Source	GHG Emissions (MTCO <sub>2</sub> e/year) <sup>1</sup>
Area	103.01
Energy	283.74
Mobile	1,214.46
Waste	75.47
Water	64.75
<b>Total Annual Emissions</b>	<b>1,741.43</b>
AVAQMD Annual Threshold	100,000
Exceeds Threshold?	No

<sup>1</sup>MTCO<sub>2</sub>e/year=metric tons of carbon dioxide equivalents per year

Table 11 shows the daily operational greenhouse gas emissions in pounds per day of carbon dioxide equivalent (lbs.CO<sub>2</sub>e/day) and compares the results to the AVAQMD daily threshold of significance. As shown in Tables 10 and 11, the project's annual and daily operational greenhouse gas emissions will be below the applicable AVAQMD thresholds of significance.

Table 11 Daily Operational Greenhouse Gas Emissions

Emission Sources	GHG Emissions(lbs.CO <sub>2</sub> e/day) <sup>1</sup>
Area	2,746.17
Energy	1,140.26
Mobile	7,832.18
Waste	413.53
Water	354.79
<b>Total Daily Emissions</b>	<b>12,486.94</b>
AVAQMD Daily Threshold	548,000
Exceeds Threshold?	No

<sup>1</sup>lbs.CO<sub>2</sub>e/day=pounds of carbon dioxide equivalents per day

**Mitigation Measures:** No mitigation measures are necessary.

- b) *Would the project conflict with an applicable plan, policy, or regulation adoption for the purpose of reducing the emission of greenhouse gases?*

**No Impact.** The proposed project would not result in an increase of either population or emissions sources beyond what has been planned for in the City of Palmdale’s General Plan. Residences will be constructed with roof top solar panels, consistent with the City of Palmdale’s PEAP, and the California Building Code promote the use of alternative energy sources for energy needs. The PEAP is consistent with the State of California GHG reduction goals prescribed under Executive Order S-3-05 and Assembly Bill 32 (City of Palmdale 2011). Since the proposed project would be consistent with the City of Palmdale’s PEAP and State GHG reduction goals, it would have less than significant impact. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

GeoTek, Inc.

2021 Updated Geotechnical Evaluation and Infiltration Study for the Proposed Single-Family Development Tentative Tract Map No. 60148-Pacific Sage II Project Northwest Corner of Avenue R-8 and 45<sup>th</sup> Street East Palmdale, Los Angeles County, California [Appendix D]

**Project Impacts and Mitigation Measures**

a)i) *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of injury, damage or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Map issued by the State Geologist for the area or based upon on other substantial evidence of a known fault?*

**No Impact.** The San Andreas fault is located approximately 1.8 miles southwest



of the project area. Rupture of the San Andreas would cause impacts to some degree to the region including the City of Palmdale planning area. A Geotechnical Evaluation and Infiltration Study was prepared for the proposed project (Geotek, Inc. 2021) and is provided in Appendix C. According to the study, while the project area is in a seismically active area, the project site is not located within a Fault-Rupture Hazard Zone. Therefore, no rupture impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** The project area is located in a region that is subject to seismic events. The nearest fault is a portion of the San Andreas Fault located approximately 1.8 miles southwest of the project site. A rupture of the San Andreas fault in the City of Palmdale planning area would expose people that would be living in the planned residential development to seismic rupture hazards. As a result of the potential seismic hazards associated with the region, specifications for earthwork and grading are identified in the geotechnical evaluation. Incorporation of these recommendations and compliance with the California Building Code would reduce seismic hazards to the residential development. Therefore, a less than significant impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact** The highest potential for liquefaction occurs in saturated, loosely consolidated sands and silts below the water table when the water table is within approximately 50 feet of the surface. According to the geotechnical evaluation conducted for the proposed project, factors known to influence liquefaction potential include soil type and grain size, relative density, groundwater level, confining pressures and both intensity and duration of ground shaking. The geotechnical study completed for the project identified that groundwater is estimated to be more than 100 feet below ground surface and the project site has not been identified by the State of California nor the County of Los Angeles as having the potential for liquefaction. The geotechnical evaluation completed for the project determined that the potential for liquefaction at the site during a seismic event was nil. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** The topographic relief at the site is relatively flat with previously placed stockpiles of soils. There are no slopes that may fail in a seismic event and cause adverse effects from a landslide. The potential for an earthquake-induced landslide at the project area is very low. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** Site preparation would require grubbing and clearing of all vegetation present at the site. This would expose soils to erosion from wind and rain events. As more than one acre will be graded, the project would be required to comply with the State of California National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Associated with Construction Activity. A site-specific Storm Water Pollution Prevention Plan (SWPPP) will be developed and implemented. The SWPPP will identify Best Management Practices (BMPs) that will control on-site and off-site erosion from storm events and wind. The SWPPP will also identify BMPs for accidental spills of hazardous materials. Oversight by the City of Palmdale will ensure compliance with any permit-related measures to control erosion generated by the project. Therefore, a less than significant impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** Lateral spreading occurs when large blocks of intact, non-liquefied soil move down slope on a liquefied soil layer. Lateral spreading is often a regional event. For lateral spreading to occur, the liquefiable soil zone must be unconstrained laterally and free to move along sloping ground. As stated above, the project site does not have the potential for liquefaction resulting in a low potential for lateral spreading at the project area. Based on the depth to groundwater the potential for subsidence, liquefaction and collapse are also unlikely. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

- d) *Would the project be located on expansive soil, as defined in Table 18-1-B of the*

*Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

**No Impact.** Soils at the site were noted in the geotechnical evaluation to vary from sands, gravely sands to silty sands which are non-expansive soils. Therefore, construction of the residential development project will not create a substantial direct or indirect risk to life or property from expansive soils. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** During construction, portable toilet/wash station facilities will be used by on-site workers. Constructed residences would be connected to the local sewer system. No septic system would be included as part of project construction. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant with Mitigation Incorporated.** Based on a review of Exhibit ER-8 from the City of Palmdale General Plan, there is a low potential for encountering paleontological resources at the site. However, in the event of encountering unknown paleontological resources, **Mitigation Measure GEO-1** is included to ensure impacts are reduced to a less than significant level.

**Mitigation Measure:**

**GEO-1:** In the event that paleontological resources are encountered all work shall stop at the discovery site. At that time, a qualified paleontological monitor shall be consulted to evaluate the find. Construction activities shall be temporarily redirected to another location on-site (minimum of 100 feet from the location of the find) so that the monitor can recover any specimens encountered during excavation. All fossils/specimens collected during this work shall be deposited in a City of Palmdale-approved museum repository for curation and storage.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IX HAZARDS AND HAZARDOUS MATERIALS.</b> Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, emission or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or a public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Project Impacts and Mitigation Measures**

a-b) *Would the project create a significant hazard to the public or the environment through the routine transport, use, emission or disposal of hazardous materials and 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.** During construction, equipment would require small amounts of potentially hazardous materials such as fuels and lubricants on a regular basis. Some of these materials would be transported to the site by permitted vendors who would be required to obtain permits and are subject to inspection to ensure compliance with all relevant state and federal regulations governing the transportation of hazardous materials. Standard BMPs for storage

and minor spills or leaks will be used to ensure any accidental hazardous material releases will be cleaned up and disposed of as appropriate. When not in use, equipment will be parked in identified parking areas to prevent accidental leaks. Therefore, impacts would be less than significant. No mitigations are required.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant with Mitigations Incorporated.** The project area is within a quarter mile of an existing school and construction of the proposed project would be a source of toxic air emissions. Mesquite Elementary School is adjacent to the west of the project area. Use of hazardous materials during construction and by residential landowners once the project is constructed would be minimal since the proposed project includes a single-family residential development. With incorporation of **Mitigation Measure AQ-1**, potential significant impacts to sensitive receptors in the vicinity of the project would be reduced to less than significant. The project will also generate diesel particulate matter (DPM) during construction from off-road diesel equipment and trucks. Incorporation of **Mitigation Measures AQ-2 through AQ-9** would reduce the potential health risk associated with DPM during construction to the maximum extent feasible. Therefore, with incorporation of Mitigation Measures, impacts would be less than significant.

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

**Less than Significant Impact.** A search of the Envirostor database maintained by the California Department of Toxic Substances Control and the Geotracker database maintained by the Regional Water Quality Control Board (RWQCB) for the vicinity of the project site was completed. The project site is not listed on either databases. The closest Envirostor site to the project area is a voluntary cleanup site located at 47th Street East and Fort Tejon Road approximately 1 mile to the southeast. The cleanup status for this site has been recorded as no further action as of 4/23/2009. The closest Geotracker site to the project area is identified as a Leaking Underground Storage Tank (LUST) site at 520 West Rancho Vista Boulevard, more than five miles northwest of the project site. This Geotracker site has been recorded as case closed. Plant 42, approximately three miles to the north of the project site is identified in the Geotracker site as on-going remediation. Due to the distance from the project site, no impacts from remedial activities to the project site would be likely. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** The proposed project is located three miles south of the Palmdale Regional Airport/US Air Force Plant 42. The project is not included within an airport land use plan area. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** During construction, the proposed project would generate additional traffic associated with workers mobilizing daily at the project site. Equipment would be transported to the project site. All project-related vehicles and equipment will be contained/parked within the site at all times. As the project is over 30 acre; and grading and construction will be in continuous phases, equipment and vehicles can be parked on site and no off-site parking would be required. Construction of the project-related portions adjacent to East Avenue R-8, 42nd Street East, 43rd Street East and 45th Street East will require some traffic control, but the streets will remain open. Traffic generated during construction is not expected to block the roadways. In addition, improvements to 42nd Street East, 43rd Street East, 45th Street East, Avenue R-8 and Pegasus Way would be completed for additional traffic generated by the proposed development. Roads within the project would be constructed to allow emergency vehicle access to the residences. The proposed development would not interfere with any adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** Based on a review of Exhibit S-16 of the Safety Element associated with the Palmdale General Plan (1993), the project area is not associated with a wildfire hazard zone area. Therefore, impacts would be less than significant

**Mitigation Measures:** No mitigation measures are necessary.

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

Adams Streeter Civil Engineers  
 2022a Preliminary Hydrology Study, Pacific Sage II, Tract No. 060148, Palmdale, CA [Appendix E]

Project Impacts and Mitigation Measures

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

**Less than Significant Impact.** Hydrologic analysis was completed for the proposed project (Adams Streeter, 2022a). Existing drainage patterns at the site convey stormwater runoff to the northwest onto 42nd Street East which discharges onto Avenue R. Runoff would eventually discharge into existing

regional detention basins. During construction, BMPs identified in a project specific SWPPP would be used to control any stormwater flow generated on site.

After construction, stormwater generated within the project on the western side would flow along interior street curbs and gutters and collect at low points near lots 1 and 94. Catch basins on both sides of the crowned street would capture and convey runoff into an interim storm water detention pond located at lots 128 through 130. The eastern portion identified in the hydrology report as subarea A consists of easterly surface drainage patterns that discharge directly onto 45th Street East and flows towards Pegasus Way where a proposed catch basin located on the south end of the intersection will intercept the 0.76 cubic feet per second generated by lots 18 through 33 and redirect the runoff to the proposed detention basin. The detention basin pond located on the western side of the site has been sized to include runoff volume from the western side to provide a full capture condition for a combined onsite and offsite 25-year storm event. The project would be constructed to manage stormwater flows generated on site and prevent violations of water quality standards and prevent degradation of surface or groundwater. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** Water would be used during site grubbing and grading for dust suppression. The water purveyor for the project site is the Palmdale Water District. The Palmdale Water District utilizes groundwater and surface water. Surface water is derived from either the state aqueduct or the Littlerock Reservoir (Palmdale Water District 2020). The project proponent would comply with City of Palmdale ordinances and regulations related to construction water use. Water to the residential development would be supplied by the Palmdale Water District and a Will-Serve letter will be required prior to recordation of the Tentative Map. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

- ci-iv) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course or a stream or river or through the addition of impervious surfaces, in a manner that would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 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 impede or redirect flood flows?*

**Less than Significant Impact.** The project area is within FEMA mapped Zone X and outside the 0.2% annual chance floodplain and the proposed project would not be in an area at risk of flooding. As indicated above, existing drainage patterns at the site convey stormwater runoff to the northwest onto 42nd Street East which discharges onto Avenue R. Runoff would eventually discharge into existing regional detention basins. During construction, BMPs identified in a project specific SWPPP would be used to control any stormwater flow generated on site to prevent erosion or siltation of soils and to manage on-site stormwater flow from leaving the site. After the site is developed, stormwater generated within the project on the western side would flow along interior street curbs and gutters and collect at low points near lots 1 and 94. Catch basins on both sides of the crowned street will capture and convey runoff into an interim storm water retention pond located at lots 128 through 130. The detention pond would have a capacity to contain 110,430 cubic feet/2.53 acre-feet which is a greater volume than the volume generated from the difference between a pre- and post-development condition (Adams Streeter, 2022a). The eastern portion of the site identified as subarea A consists of easterly surface drainage patterns that discharge directly onto 45th Street East and flows towards Pegasus Way where a proposed catch basin located on the south end of the intersection will intercept the 0.76 cubic feet per second generated by lots 18 through 33 and redirect the runoff to the proposed on-site detention basin

The detention pond located on the western side of the site has been sized to include runoff volume from the western side to provide a full capture condition of a 25-year storm event and prevent on-site and off-site flooding. Implementation of BMPs during construction and management of post development stormflows would remove pollutants from runoff generated by the project. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** As indicated in c i-iv, the project area is within FEMA mapped Zone X and outside the 0.2% annual chance floodplain and therefore, the proposed project would not be in an area at risk of flooding. The site is not within a coastal zone area so hazards from tsunamis and/or seiche would not occur. Based on a review of the City of Palmdale General Plan Exhibit S-6, the project site is not located within an inundation area. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant Impact.** Water would be used as a dust suppressant during site grubbing and grading. Once the project is built, water would be supplied by the Palmdale Water District. Water conservation strategies including low flow fixtures and toilets, water efficient irrigation systems, and drought tolerant/native landscaping would be incorporated into the residential development. As a result, the proposed project would not obstruct implementation of a water quality control plan or a sustainable groundwater management plan. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XI LAND USE AND PLANNING.</b> Would the Project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Project Impacts and Mitigation Measures

- a) *Would the project physically divide an established community?*

**No Impact.** There is no established community as the site and surrounding area is either vacant or developed with residential or public uses. The City of Palmdale General Plan (1993) land use designation for the site is SFR-3 (Single Family Residential, 3.1-6 dwellings per acre). Zoning for the site is R-1-7000 (Single Family Residential, minimum lot size 7,000 square feet). No change to land use designation or zoning will be required for project development. The proposed project is the construction of residential development that would be consistent with adjacent land uses. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

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

**No Impact.** The current zoning of the site is R-1-7000 (Single Family Residential, on a minimum lot size of 7,000 square feet). No changes to zoning would be required for development of the project. As no change to zoning is required, the project would not conflict with the current City of Palmdale General Plan (1993). No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XII MINERAL RESOURCES.</b> Would the Project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Project Impacts and Mitigation Measures**

- a-b) *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 and 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 proposed project area does not contain any mineral resources nor are there any mining activities occurring at the site or in the general vicinity of the site. Review of the Generalized Mineral Land Classification Map of Los Angeles County for the City of Palmdale shows that the proposed project area is not within an area containing mineral resources of value to the region or within the Quarry and Reclamation Zone as identified by the City of Palmdale. The proposed project would not result in a loss of availability of locally important mineral resources. Therefore, no impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIII NOISE.</b> Would the Project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

RK Engineering

2021b TTM 60148 Single Family Residential Project Noise Impact Study City of Palmdale, California [Appendix G]

Project Impacts and Mitigation Measures

- a-b) **Less than Significant Impact with Mitigation Incorporated.** *Would the project generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Would the project cause generation of excessive groundborne vibration or groundborne noise levels?*

A Noise Impact Study for the proposed project was completed and is provided in Appendix G (RK Engineering Group, Inc. 2021b).

Construction

The project will require temporary construction activities, which will generate noise. The degree of construction noise will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties. PMC Chapter 8.28 (Building Construction Hours of Operation and Noise Control) specifies the following related to construction noise (Section 8.28.030): “Except as otherwise provided in this chapter, no person shall perform any construction or repair work on any 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.”

In addition, PMC Chapter 9.18 sets the regulations for Disturbing, Excessive, Loud or Offensive Noise that characterizes what is noise, acts that constitute disturbing, excessive, loud and offensive noise, the definition of a loud party and enforcement and penalties for all provisions of the regulation. In addition to adhering to the PMC, incorporation of **Mitigation Measures NO-1 through NO-4** would reduce the potential construction-related noise impacts to a less than significant level.

Operation

The City of Palmdale General Plan Noise Element has adopted the California Office of Planning and Research land use compatibility chart that establishes planning criteria for determining noise/land use compatibility of a development based upon the community noise equivalent level (CNEL). Table 12 summarizes the City’s Noise/Land Use Compatibility guidelines for land uses applicable to this project. Table 13 summarizes the City of Palmdale noise standards for residential uses.

Table 12 Noise/Land Use Compatibility Guidelines

Land Use	Noise Limit (dBA CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential-Single Family	50-60	55-70	70-75	75-85

Table 13 City of Palmdale Residential Noise Standards<sup>1</sup>

Land Use	Location	Noise Standard
Residential	Exterior	65 dBA CNEL
	Interior	45 dBA CNEL

<sup>1</sup>Source: City of Palmdale General Plan Noise Element, Table N-3.

dBA: A-weighted unit for measuring the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure which is 20 micro-pascals.

CNEL: Community Noise Equivalent

A noise analysis determined that once developed, the project would contribute additional traffic to the area, which may affect roadway noise levels. Typical on-site noise would include motor vehicle traffic circulating on-site, HVAC equipment,

barking dogs and general social activities. These types of on-site noise sources are regulated under PMC Chapter 9.18 and all persons occupying the project would be required to comply with the City's noise regulations. Traffic noise along Avenue R-8 would be the main source of noise impacting the project site, particularly during the noise sensitive nighttime hours. The first row of residential lots would be set back approximately 46 feet from the centerline of Avenue R-8 (measured from the property line of the new lot). The project is proposing to build a six-foot high concrete masonry unit block wall along the rear property line of homes adjacent to Avenue R-8. Future interior noise levels for the first row of homes adjacent to adjacent roadways were also analyzed. All other interior lots within the tract, not adjacent to roadways, are expected to meet interior noise standards with standard building construction. California standard building shell and residential windows are expected to provide adequate attenuation to meet interior noise standards with a window open and windows closed condition. Based on the City of Palmdale General Plan Noise/Land Use Compatibility Guidelines, the project site falls within the normally acceptable to conditionally acceptable range for Residential-Single Family development. With the proposed building design and insulation, interior noise levels can be reduced to meet the State/City requirement of 45dBA CNEL.

**Mitigation Measures:**

**NO-1:** All construction activities shall be limited to the hours of Monday through Saturday, 6:30 AM to 8 PM. No construction shall occur on Sundays or holidays.

**NO-2:** The project shall coordinate major construction activities during times when the adjacent Mesquite Elementary school is not in session (i.e., summer months), to the extent feasible.

**NO-3:** The project shall implement a construction management plan that includes construction BMPs to reduce noise levels. BMPs should include the following:

- All construction equipment shall be equipped with mufflers and other suitable noise attenuation devices (e.g., engine shields).
- Grading and construction contractors shall use quieter equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.
- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load).
- Electric air compressors and similar power tools rather than diesel equipment shall be used, where feasible.

- The staging area, generators and stationary construction equipment shall be located as far from the adjacent school and residences, as feasible.

**NO-4:** Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.

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

**No Impact.** The proposed project is located three miles south of the Palmdale Regional Airport/US Air Force Plant 42. The project is not included within an airport land use plan area. Therefore, no impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.



	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIV POPULATION AND HOUSING.</b> 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Project Impacts and Mitigation Measures**

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

**Less than Significant Impact.** The City of Palmdale General Plan (1993) Land Use designation for the site is SFR-3 (Single Family Residential, 3.1-6 dwellings per acre). Zoning for the site is R-1-7000 (Single Family Residential, minimum lot size 7,000 square feet). No change to land use designation or zoning will be required for project development. Use of the site for the construction of residences is consistent with adjacent land uses. As the site is currently undeveloped, no existing residences would be displaced by implementation of the project. There would be a temporary influx of workers during the construction of the project that may use hotels for temporary housing. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XV PUBLIC SERVICES.</b> Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Project Impacts and Mitigation Measures**

- a) *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public service; fire protection?*

**Less than Significant Impact.** The City of Palmdale is supported by the Los Angeles County Fire Department for fire, rescue, and emergency medical (paramedic) services, as well as fire prevention function. Los Angeles County Fire Station No. 93, located at 5624 East Avenue R and is less than two miles from the project site, would serve as the first responder in the event of an emergency. The applicant will pay fees to the City of Palmdale that will mitigate any impacts to public services that result from the development of the site. Impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary

- b-e) *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public service; police protection, schools, parks, other public facilities?*

**Less Than Significant Impact.** The proposed residential project is more than 5

miles from the Palmdale Sheriff's station located at 175 East Avenue Q. The closest park to the site is Dominic Massari Park, approximately one mile to the northeast. The closest school to the site is Mesquite Elementary School located on the southwestern side of the site. The additional residences that would result from implementation of the project would require additional public services including police protection, parks and schools.

The applicant will pay applicable impact fees for project-related impacts to public services summarized as follows.

- The City of Palmdale has adopted a Fire Facilities Impact Fee Ordinance and compliance by the Project applicant will mitigate project-related impacts to fire protection services.
- The Project applicant will be required to pay development impact fees to the City for police protection services.
- The applicant will be required to pay all applicable school facility development fees in accordance with California Government Code Section 65995. Pursuant to Government Code Section 65995, payment of development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation."
- The applicant would be required to pay parkland development fees to prevent overuse and deterioration of existing parks and recreational facilities
- The Project applicant will also be required to pay a General Public Facility Development Impact fee to mitigate impacts for public facilities.

With payment of applicable development fees, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVI RECREATION</b>				
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Project Impacts and Mitigation Measures**

- a,b) *Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Does the project include recreational facilities or require the construction of recreational facilities which might have an adverse physical effect on the environment?*

**Less than Significant Impact.** The proposed project is a residential development that with the total number of planned homes, would incrementally increase the use of existing neighborhood or regional parks or other recreational facilities. The following parks are found within a two-mile radius of the project location.

- Domenic Massari Park
- Palmdale Dog Park
- Palmdale Oasis Park Recreation Center
- William J. McAdam Park
- Joshua Hills Park

The closest park to the site is Dominic Massari Park, approximately one mile to the northeast. Local parks such as the Dominic Massari Park may see an increase in use as a result of the development of the site. To mitigate for the potential increased use of local parks by residents of the development, the applicant will pay impact fees to the City. No recreational features are part of the planned development of the site. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVII TRANSPORTATION. Would the Project:</b>				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curve or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Translutions, Inc.

2021 Memorandum from Sandipan Bhattacharjee, PE, TE, AICP, ENV-SP to Ruben Hovanesian, Senior Civil Engineer to, Subject: TTM60148 Residential-VMT Analysis [Appendix H]

**Project Impacts and Mitigation Measures**

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

**Less than Significant Impact.** During construction of the project, there would be a temporary increase in traffic from workers traveling to the site plus equipment and materials being delivered to the site. As part of construction of the project, adjacent roads to the project area will be built to their planned capacity consistent with the Circulation Element of the General Plan. The temporary increase in traffic from construction equipment would not cause a substantial impact to the local circulation patterns. As part of the development of the site, five roads for residences to access homes would be constructed. In addition, improvements to 43rd Street East, 45th Street East, Avenue R-8 and Pegasus Way would be completed for additional traffic generated by the proposed development. No changes to 42nd Street East would occur as part of this project. These improvements would be completed in compliance with the PMC to accommodate the increase in traffic generated by the project. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary

- b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?*

**Less than Significant Impact.**

Senate Bill 743 (SB-743), codified in Public Resources Code section 21099 and signed by the Governor in 2013, directed the Governor’s Office of Planning and Research (OPR) to identify alternative metrics for evaluating transportation impacts under CEQA. Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” Recently adopted changes to the CEQA Guidelines in response to Section 21099 include a new section (15064.3) that specifies that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by OPR provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects.

VMT is a metric that accounts for the number of project generated vehicle trips and the distance of those trips. For development projects, the analysis of VMT is to assess whether a proposed project or plan adequately reduces total VMT. The City of Palmdale has not adopted guidelines specific to the City but has decided to use the *Los Angeles County Public Works Transportation Impact Analysis Guidelines* (July 23, 2020) to evaluate impacts under CEQA. A detailed VMT analysis was conducted for the project and is included as Appendix F (Translutions, Inc. 2021).

The significance threshold for residential developments is based on VMT per capita. For residential projects, the project’s VMT per capita would need to be 16.8 percent below the existing residential VMT per capita for the Baseline Area in which the project is located in order to not cause an impact. Table 14 shows the baseline VMT for North Los Angeles County. As shown in Table 14, the residential VMT per Capita for North Los Angeles County is 22.3 miles.

Table 14 Baseline VMT for North and South County of Los Angeles

Baseline Area	Residential VMT per Capita	Employment VMT Per Employee	Total VMT per Service Population
North County	22.3	19.0	43.1

Source: Los Angeles County Public Works-Transportation Impact Analysis Guidelines dated: July 23, 2020

Table 15 shows the VMT impact criteria of 16.8 percent below the area base line for the North Los Angeles County. As shown in Table15, the residential VMT per Capita for North Los Angeles County is 18.6 miles

Table 15 VMT Impact Criteria (16.8 Percent Below Area Baseline)

Baseline Area	Residential VMT per Capita	Employment VMT Per Employee	Total VMT per Service Population
North County	18.6	15.8	35.9

Source: Los Angeles County Public Works-Transportation Impact Analysis Guidelines dated: July 23, 2020

Therefore, the project would have a significant VMT impact if the project's VMT per capita would be greater than 18.6 miles.

The Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) Travel Demand Model (TDM) was used for the evaluation (Translutions, Inc. 2021). Consistent with the County guidelines, the 2016 SCAGRTP model with 2020 Socio-Economic Data (SED) was used for the evaluation of project and background VMT. The Project is located within Traffic Analysis Zone (TAZ) 20381200, which is part of Tier 1 TAZ 20381000. The project generated VMT was extracted from the model using the production-attraction (P/A) trip matrix to isolate the VMT related to home-based-trips to isolate the residential VMT. The without and with project VMT results are shown in Table 16. As shown in Table 16, the without project VMT per capita from the model run for North County is 18.7 miles, which is slightly higher than the County VMT/capita of 18.6 miles. The baseline plus project VMT per capita is approximately 15.6 miles. Based on the County threshold, the project would have a significant VMT impact if the project's VMT is greater than 18.6 miles. The project VMT per capita of 15.6 miles is less than the county VMT per capita of 18.6 miles. Therefore, the project would have a less than significant VMT impact. Therefore, impacts would be less than significant.

Table 16 Project Generated Vehicle Miles Traveled

2020	Project	LA County North Planning Area (Los Angeles County Guidelines)	LA County North Planning Area (Translutions Inc. Analysis)
Total Households	128		244,749
Total Population	436		740,404
Total Homebased VMT	6,808		16,662,748
VMT per capita	<b>15.6</b>	<b>22.3</b>	<b>22.5</b>
Threshold (16.8 percent below baseline)		<b>18.6</b>	<b>18.7</b>

Source: Los Angeles County Public Works-Transportation Impact Analysis Guidelines dated: July23, 2020

**Mitigation Measures:** No mitigation measures are necessary

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

**No Impact.** The project will include construction of roads to access residences. The roads will be constructed in compliance with City of Palmdale-issued permits and no hazards due to geometric design features would occur. Access to the residential development would not require construction of roads with hazardous geometric design that can cause traffic safety hazards, Standard vehicles would use the project roads so there would be no incompatible use such as occurs in agricultural settings where farm equipment may need to use the roads. Traffic calming features within the project in the form of narrowing of the roadway by extending the curb at intersections have been included as part of the project. These features would aid in pedestrian safety and traffic speed reduction. Therefore, no impacts would occur.

**Mitigation Measures:** No mitigation measures are necessary.

- d) *Would the project result in inadequate emergency access?*

**Less than Significant Impact.** The proposed project would not result in inadequate emergency access. Roads to access the residences are included as part of the project design and have been designed to be used by first responders in case of an emergency. These access roads have been designed to accommodate first responders and fire trucks and roads are rated for the weight



of a fire truck. The cul-de-sac have been designed in conformance with the City's Engineering Design standards. Project designs will comply with City standards and engineering designs for fire department equipment and emergency access. Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVIII TRIBAL CULTURAL RESOURCES.</b> Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) to Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Project Impacts and Mitigation Measures**

- a,b) *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or 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) to Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

**Less than Significant with Mitigation Incorporated.** The City of Palmdale is in consultation with two Native American tribes the San Manuel Band of Mission Indians and the Fernandeño Tataviam Band of Mission Indians. **Mitigation Measures TCR-1 through TCR-3** will be implemented to reduce impacts to potential pre-historic resources located within the project area to a less than significant impact.

**Mitigation Measures:**

**TCR-1:** The applicant shall retain a professional Native American monitor procured

by the Fernandeano Tataviam Band of Mission Indians to observe all clearing, grubbing, and grading operations within the proposed impact areas. If cultural resources are encountered, the Native American monitor will have the authority to request that ground-disturbing activities cease within 60 feet of discovery to assess and document potential finds in real time. One monitor will be required on-site for all ground-disturbing activities in areas designated through additional consultation. One monitor will be required on-site for all ground-disturbing activities in areas designated through additional consultation.

**TRC-2:** The SMBMI and Fernandeano Tataviam Band of Mission Indians shall be contacted, as detailed in **Mitigation Measure CUL-1** of any pre-contact and/or historic-era 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 SMBMI and Fernandeano Tataviam Band of Mission Indians, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.

**TCR-3:** The Lead Agency and/or applicant shall, in good faith, consult with the Fernandeano Tataviam Band of Mission Indians and the SMBMI on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.

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

Adams Streeter Civil Engineers

2022b Preliminary Sewer Area Study, Pacific Sage II, Tract No. 060148, Palmdale, CA [Appendix F]

Los Angeles County Sanitation Districts

2021 Will Serve Letter for Tentative Tract Map No. 60148 [Appendix]

**Project Impacts and Mitigation Measures**

a,b) *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects and 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 proposed project would require utilities such as water, wastewater treatment, electrical and natural gas.

Wastewater generated by the proposed residential development would be treated at the Palmdale Water Reclamation Plant. The Palmdale Water Reclamation Plant

has a capacity of 12 million gallons of wastewater per day (mgd) and is currently processing 9.3 mgd (Los Angeles County Sanitation District 2021). The expected average wastewater flow from the project is 33,020 gallons per day (Los Angeles County Sanitation District 2021). A sewer study prepared for the project determined that the existing sewer system located in an easement north along the western boundary of the site beneath 42nd Street East will serve 113 of the 130 lots associated the project (Adams Streeter Civil Engineers 2022b). The remaining 17 lots located on the east edge of the site will sewer directly to the 12-inch county line located on 45th Street. This increase in demand for wastewater treatment would not be significant given the large capacity of the Palmdale treatment plant.

Utilities are provided to existing developments adjacent to the project site by the following providers.

- Electricity: Southern California Edison
- Telephone: AT&T
- Telecommunications: Spectrum
- Natural Gas: SoCal Gas Company

No impediment is anticipated for these services to be extended to the residential developments

The project is within the Palmdale Water District who would supply potable water to the residential development. Water would be provided to the project in accordance with the Palmdale Water District's rules and regulations. Impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

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

**Less than Significant.** As indicated in above, project wastewater would be treated by Palmdale Water Reclamation Plant that is managed by the County of Los Angeles Sanitation Districts. Correspondence received from the County of Los Angeles Sanitation District confirmed that the existing sewer system can accommodated wastewater originating from the project (Appendix I). The Los Angeles County Sanitation District further confirmed that the Palmdale Water Reclamation Plant would treat the anticipated 33,020 gallons per day generated by the 127 single family homes associated with the project. Impacts would be less than significant.

**Mitigation Measures:** No mitigation measures are necessary.

- d, e) *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 and comply with federal, state and local management and reduction statutes and regulations related to solid waste?*

**Less than Significant Impact:** During site grubbing and clearance, green waste would be generated and disposed of in the local Class III landfill. Trash and debris generated during construction of the project that would also be disposed of at a Class III landfill. Antelope Valley Landfill located at 1200 City Ranch Road, Palmdale, California, is the closest landfill to the project site. Fees for disposing of green waste and non-hazardous waste would be paid by the project proponent. Once the project has been constructed, household trash would also be disposed of at the Antelope Valley Landfill. The General Plan land use designation for the proposed project site to be developed as single-family residences and anticipated waste generated is not expected exceed the capacity of the local trash conveyors or the local landfill. Therefore, impacts would be less than significant

**Mitigation Measures:** No mitigation measures are necessary.

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

**Project Impacts and Mitigation Measures**

- a) *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** Based on a review of Exhibit S-16 of the Safety Element associated with the Palmdale General Plan (1993), the project area is not associated with a wildfire hazard zone area. As a result, the project would not impair any City adopted emergency response plan or emergency evacuation plan design for developments in high fire hazard areas. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

- b) *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?*

**Less than Significant Impact.** The proposed project is not located in lands classified as a wildfire hazard area and has a relatively flat topography with previously stockpiled soils. The proposed project would be required to comply with Federal, State and City of Palmdale regulations for minimizing fire hazards. Construction and operation of the proposed project would not exacerbate wildfire

risks. Therefore, impacts would be less than significant

**Mitigation Measures:** No mitigation measures are necessary.

- c) *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 infrastructure such as access roads that are associated with the proposed project would be constructed to City standards and will not impede traffic or first responders in emergency situations. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.

- d) *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 proposed project area is relatively flat with previously stockpiled soils and the risk for flooding is very low. While the site is not located in a major drainage course or FEMA flood zone, mitigation facilities such as a detention pond that will be constructed as part of the project will reduce localized flooding. Once developed, there will be no risk for landslides at the project site. The project site is not located in a wildfire hazard area. No impact would occur.

**Mitigation Measures:** No mitigation measures are necessary.



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

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

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

**Less than Significant Impact with Mitigation Incorporated.** As described in Section III, Biological Resources, Section IV, Cultural Resources and Section VIII, Geology (for paleontological resources), once mitigation measures are implemented, the proposed project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, reduce the number, or restrict the range of a rare or endangered plant or animal. Incorporation of **Mitigation Measures BIO-1** through **BIO-6** would reduce possible project-related impacts to natural resources to a less than significant level. While historic and prehistoric resources observed at the project site were determined to not be significant, incorporation of **Mitigation Measures CUL-1** through **CUL-3** would reduce possible impacts to cultural resources

discovered during construction. Incorporation of **Mitigation Measure GEO-1** would ensure that any discovered paleontological resources would be properly handled, and impacts would be reduced to a less than significant level.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

**Less than Significant Impact with Mitigation Incorporated.** The proposed project has the potential to have cumulative impacts to air quality and from emission of greenhouse gases. However, as discussed in Section III (Air Quality) and Section VII (Greenhouse Gas Emissions), construction impacts would be temporary and would be reduced by incorporation of **Mitigation Measures AQ-1 through AQ-9**. Operational impacts would not be significant.

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

**Less Than Significant Impact.** 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. Construction would be temporary and in compliance with AVAQMD regulations, and equipment would be maintained to optimal performance to reduce use of fuels. Residences will be constructed to comply with Title 24, part 11 of the California Green Building Standards Code (CALGreen) and Title 24, Part 6, Building Efficiency Standards to include net zero energy requirements. Rooftop solar panels for each residence would meet the Energy Design Ratings required by the latest California Energy Code Standards. Water conservation strategies including low flow fixtures and toilets, water efficient irrigation systems, and drought tolerant/native landscaping would be incorporated into the residential development. Homeowners would be required to comply with City of Palmdale’s requirements for the residential recycling program to reduce household trash. The necessary infrastructure to support electric vehicle charging such as dedicated electrical circuits and outlets for in-garage charging as required by CALGreen would also be included as part of project construction. No impacts would occur.

## 5. REFERENCES

C.A. Singer & Associates, Inc.

2004 Phase I Cultural Resources Study, Pacific Sage II (TTM 60148)

Adams Streeter Civil Engineers

2022a Preliminary Hydrology Study, Pacific Sage II, Tract No. 060148, Palmdale, CA

2022b Preliminary Sewer Area Study, Pacific Sage II, Tract No. 060148, Palmdale, CA

City of Palmdale

1993a General Plan. Adopted by City Council Resolution 92-10, January 25, 1993

1993b General Land Use Map. Adopted by City Council January 25, 1993

GeoTek, Inc.

2021 Updated Geotechnical Evaluation and Infiltration Study for the Proposed Single-Family Development Tentative Tract Map No. 60148-Pacific Sage II Project Northwest Corner of Avenue R-8 and 45<sup>th</sup> Street East Palmdale, Los Angeles County, California

Los Angeles County Sanitation Districts

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Miller, R. V.

1994 Generalized Mineral Land Classification Map of Los Angeles County-North Half. Aggregate Resources Only. Division of Mines and Geology.

Paleo Solutions, Inc.

2021 Cultural Resources Impact Analysis for the Pacific Mesquite Development (TTM 60148) Project, City of Palmdale, Los Angeles County, California

Palmdale Water District

2016 Palmdale Regional Groundwater Recharge and Recover Project. Draft Planning Report. Water Recycling Agreement No. D15-05003, Water Recycling Funding Program WRF No, 3616-010, State of California Division of Financial Assistance.

RCA Associates, Inc

2021a Desert Vegetation Preservation Plan, City of Palmdale, California, Tentative Tract Map No. 60148

2021b General Biological Resources Assessment. Palmdale, Los Angeles County, California, Tentative Tract Map 60148

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RK Engineering

2021a TTM 60148 Single Family Residential Project Air Quality and Greenhouse  
Impact Study City of Palmdale, California

2021b TTM 60148 Single Family Residential Project Noise Impact Study City of  
Palmdale, California

RMC

2009 City of Palmdale Sewer Master Plan Final Report

Translutions, Inc.

2021 Memorandum from Sandipan Bhattacharjee, PE, TE, AICP, ENV-SP to  
Ruben Hovanesian, Senior Civil Engineer to, Subject: TTM 60148  
Residential-VMT Analysis