INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

CHAMBERLAINE WY. & RACCOON AVE. 26.7 ACRE RESIDENTIAL SUBDIVISION ADELANTO, CALIFORNIA

ZONE CHANGE (ZC) 21-02
LAND DEVELOPMENT PLAN (LDP) 21-29
TENTATIVE PARCEL MAP (TPM) 20507

LEAD AGENCY:

CITY OF ADELANTO
COMMUNITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION
11600 AIR EXPRESSWAY BOULEVARD
ADELANTO, CALIFORNIA 92301

REPORT PREPARED BY:

BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING
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HACIENDA HEIGHTS, CALIFORNIA 91745

FEBRUARY 3, 2022

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MITIGATED NEGATIVE DECLARATION

PROJECT NAME: Chamberlaine Way Development. (ZC 21-02, LDP 21-29, and TTM 20507)

PROJECT APPLICANT: The Applicant for the proposed project is Nan Huang, Chamberlaine Development LLC, 5118 Arctic Place, Rancho Cucamonga, California 91739.

PROJECT LOCATION: The project site is located in the north-central portion of the City of Adelanto. The project site is located on the north side of Chamberlaine Way and south of Vintage Road. The future Raccoon Avenue right-of way extends along the project site's west side. No Address has been assigned to the property at this time. The corresponding Assessor Parcel Numbers (APN) include 0459-432-36, 0459-432-37, 0459-432-38, and 0459-432-39.The project site is located in the Adelanto quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 19 of Township 6 North, Range 5 West.

CITY AND COUNTY: City of Adelanto, San Bernardino County.

PROJECT: The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. An above ground infiltration basin and a small park would be located in the northern portion of the project site near the main entrance at the future Vintage Road right-of-way. Sanitary sewer and water service would be provided to each lot in the subdivision. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.

FINDINGS: The environmental analysis provided in the attached Initial Study indicates that the proposed project will not result in any significant adverse unmitigable impacts. For this reason, the City of Adelanto determined that a *Mitigated Negative Declaration* is the appropriate CEQA document for the proposed project. The following findings may be made based on the analysis contained in the attached Initial Study:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.

- The proposed project *will not* have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The environmental analysis is provided in the attached Initial Study prepared for the proposed project. The project is also described in greater detail in the attached Initial Study.

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SECTION 1 INTRODUCTION

1.1 PURPOSE OF THIS INITIAL STUDY

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. An above ground infiltration basin and a small park would be located in the northern portion of the project site near the main entrance at the future Vintage Road right-of-way. Sanitary sewer and water service would be provided to each lot in the subdivision. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[1]

The City of Adelanto is the designated *Lead Agency* and as such, the City will be responsible for the project's environmental review. Section 21067 of California Environmental Quality Act (CEQA) defines a Lead Agency as the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment.[2] As part of the proposed project's environmental review, the City of Adelanto has authorized the preparation of this Initial Study. The primary purpose of CEQA is to ensure that decision-makers and the public understand the environmental implications of a specific action or project. An additional purpose of this Initial Study is to ascertain whether the proposed project will have the potential for significant adverse impacts on the environment once it is implemented. Pursuant to the CEQA Guidelines, additional purposes of this Initial Study include the following:

- To provide the City of Adelanto with information to use as the basis for deciding whether to prepare an environmental impact report (EIR), mitigated negative declaration, or negative declaration for a project;

- To facilitate the project's environmental assessment early in the design and development of the proposed project;

- To eliminate unnecessary EIRs; and,

- To determine the nature and extent of any impacts associated the proposed project.

Although this Initial Study was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgment and position of the City of Adelanto, in its capacity as the Lead Agency. The City determined, as part of this Initial Study's preparation, that a Mitigated Negative Declaration is the appropriate environmental document for the proposed project's CEQA review. Certain projects or actions may also require oversight approvals or permits from other public agencies. These other agencies are referred to as Responsible Agencies and Trustee Agencies, pursuant to Sections 15381 and 15386 of the State CEQA Guidelines.[3] This Initial Study and the Notice of Intent to Adopt (NOIA) a Mitigated Negative Declaration will be forwarded to responsible agencies, trustee agencies,

[1] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[2] California, State of. *California Public Resources Code. Division 13, Chapter 2.5. Definitions.* as Amended 2018. §21067. 2019

[3] California, State of. *California Public Resources Code. Division 13, Guidelines for the Implementation of the California Environmental Quality Act.* §15050. 2019.

and the public for review and comment. This Initial Study and Mitigated Negative Declaration will be forwarded to the State of California Office of Planning Research (the State Clearinghouse). A 30-day public review period will be provided to allow these entities and other interested parties to comment on the proposed project and the findings of this Initial Study.[4] Questions and/or comments should be submitted to the following contact person:

James Hirsch, Planning Consultant
City of Adelanto, Planning Division
11600 Air Expressway Boulevard
Adelanto, California 92301

1.2 INITIAL STUDY'S ORGANIZATION

The following annotated outline summarizes the contents of this Initial Study:

- *Section 1 Introduction* provides the procedural context surrounding this Initial Study's preparation and insight into its composition.

- *Section 2 Project Description* provides an overview of the existing environment as it relates to the project area and describes the proposed project's physical and operational characteristics.

- *Section 3 Environmental Analysis* includes an analysis of potential impacts associated with the construction and the subsequent operation of the proposed project.

- *Section 4 Conclusions* summarizes the findings of the analysis.

- *Section 5 References* identifies the sources used in the preparation of this Initial Study.

[4] California, State of. *California Public Resources Code. Division 13, Guidelines for the Implementation of the California Environmental Quality Act. Article 8 Time Limits.* § 15105 Public Review Period for a Draft EIR, or a Proposed Negative Declaration or Mitigated Negative Declaration. 2019.

SECTION 2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. An above ground infiltration basin and a small park would be located in the northern portion of the project site near the main entrance at the future Vintage Road right-of-way. Sanitary sewer and water service will be provided to each lot in the subdivision. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[5]

2.2 PROJECT LOCATION

The City of Adelanto is located approximately 60 miles northeast of Downtown Los Angeles and 30 miles north of the City of San Bernardino. Adelanto is bounded on the north by unincorporated San Bernardino County; on the east by Victorville and unincorporated San Bernardino County; on the south by Hesperia and unincorporated San Bernardino County; and on the west by unincorporated San Bernardino County.[6] Regional access to the City of Adelanto is provided by three area highways: the Mojave Freeway (Interstate 15), which extends in a southwest to northeast orientation approximately three miles east of the City; U.S. Highway 395, which traverses the eastern portion of the City in a northwest to southeast orientation; and Palmdale Road (State Route 18), which traverse the southern portion of the City in an east to west orientation.[7] The location of Adelanto, in a regional context, is shown in Exhibit 2-1.

The project site is located in the north-central portion of the City of Adelanto. The project site is located on the north side of Chamberlaine Way and south of Vintage Road. The future Raccoon Avenue right-of way extends along the project site's west side. No Address has been assigned to the property at this time. The corresponding Assessor Parcel Numbers (APN) include 0459-432-36, 0459-432-37, 0459-432-38, and 0459-432-39.The project site is located in the Adelanto quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 19 of Township 6 North, Range 5 West. A citywide map is provided in Exhibit 2-2. A vicinity map is provided in Exhibit 2-3.

2.3 ENVIRONMENTAL SETTING

The project site is undeveloped though there are various land uses and development found in the immediate area. Land uses and development located in the vicinity of the proposed project are outlined below:

- *North of the project site:* The parcels located to the north of the site is vacant and undeveloped. This area is zoned as Single Family Residential (R-S1) with Single Family Residential (R-S5) zone land usage being located further north.[8]

[5] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

[6] Blodgett Baylosis Environmental Planning. December 1, 2021.

[7] Google Maps. Website accessed September 30, 2021.
[8] Google Maps and City of Adelanto Zoning Map. Website accessed on September 30, 2021.

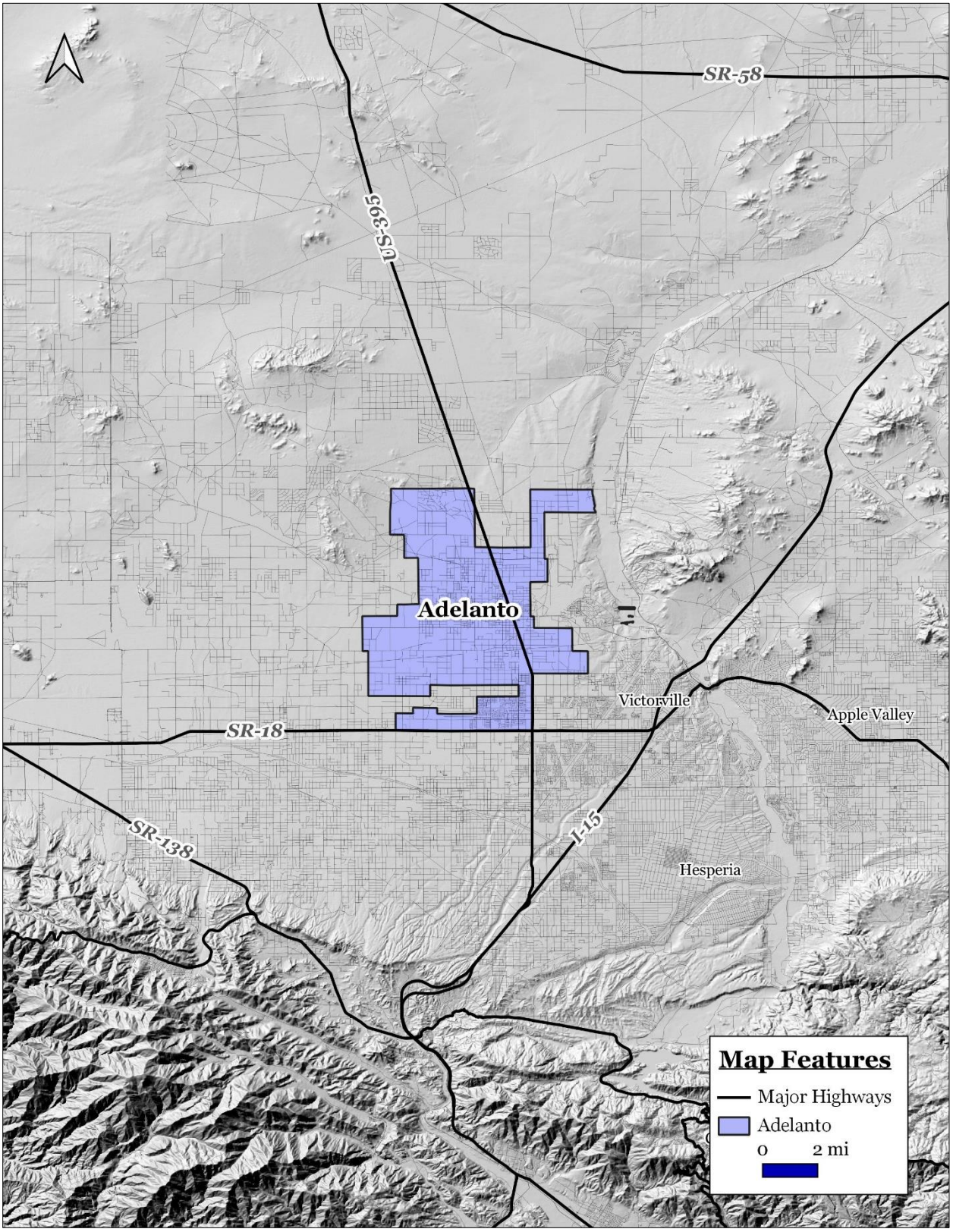

EXHIBIT 2-1
REGIONAL MAP
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

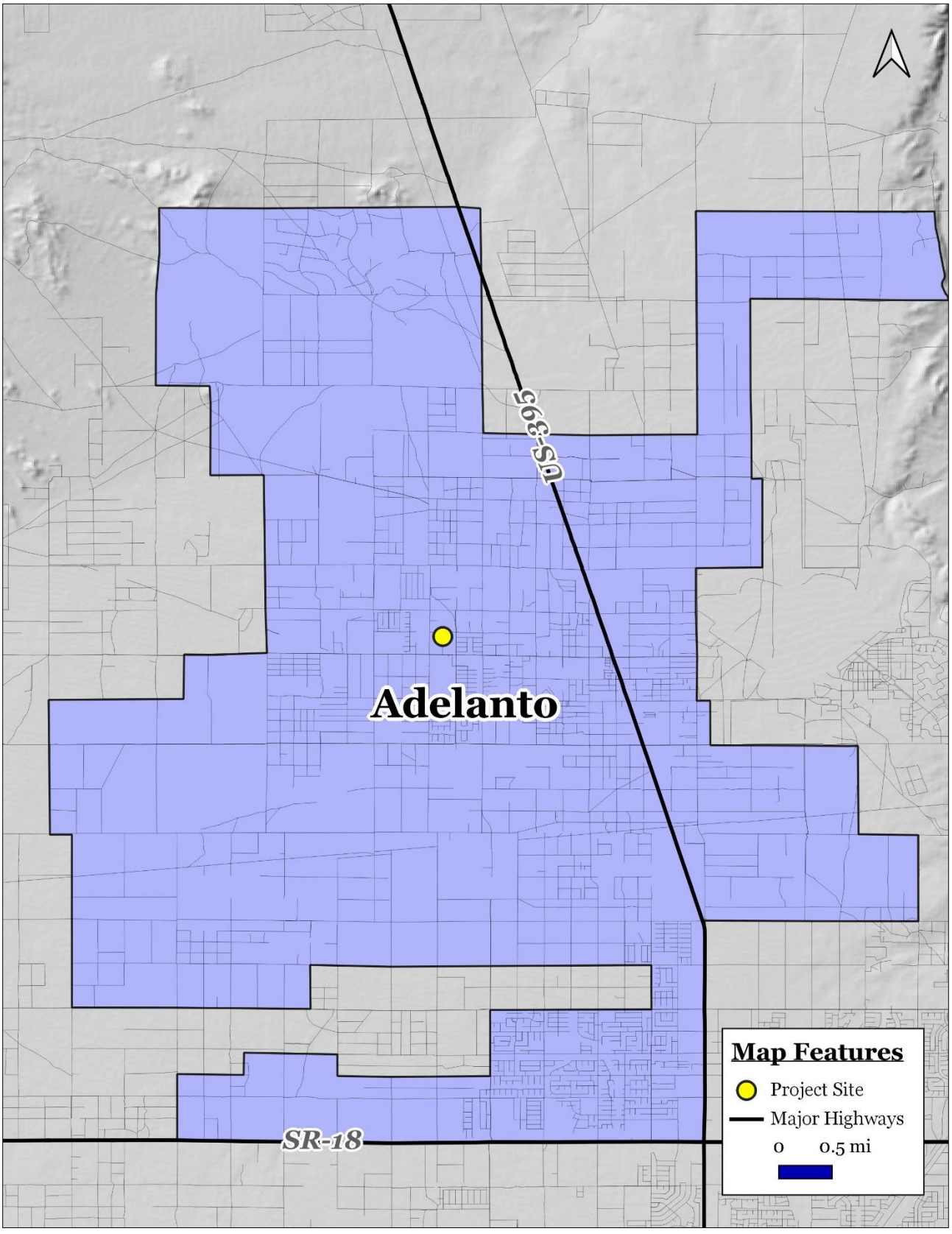

EXHIBIT 2-2
CITYWIDE MAP
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

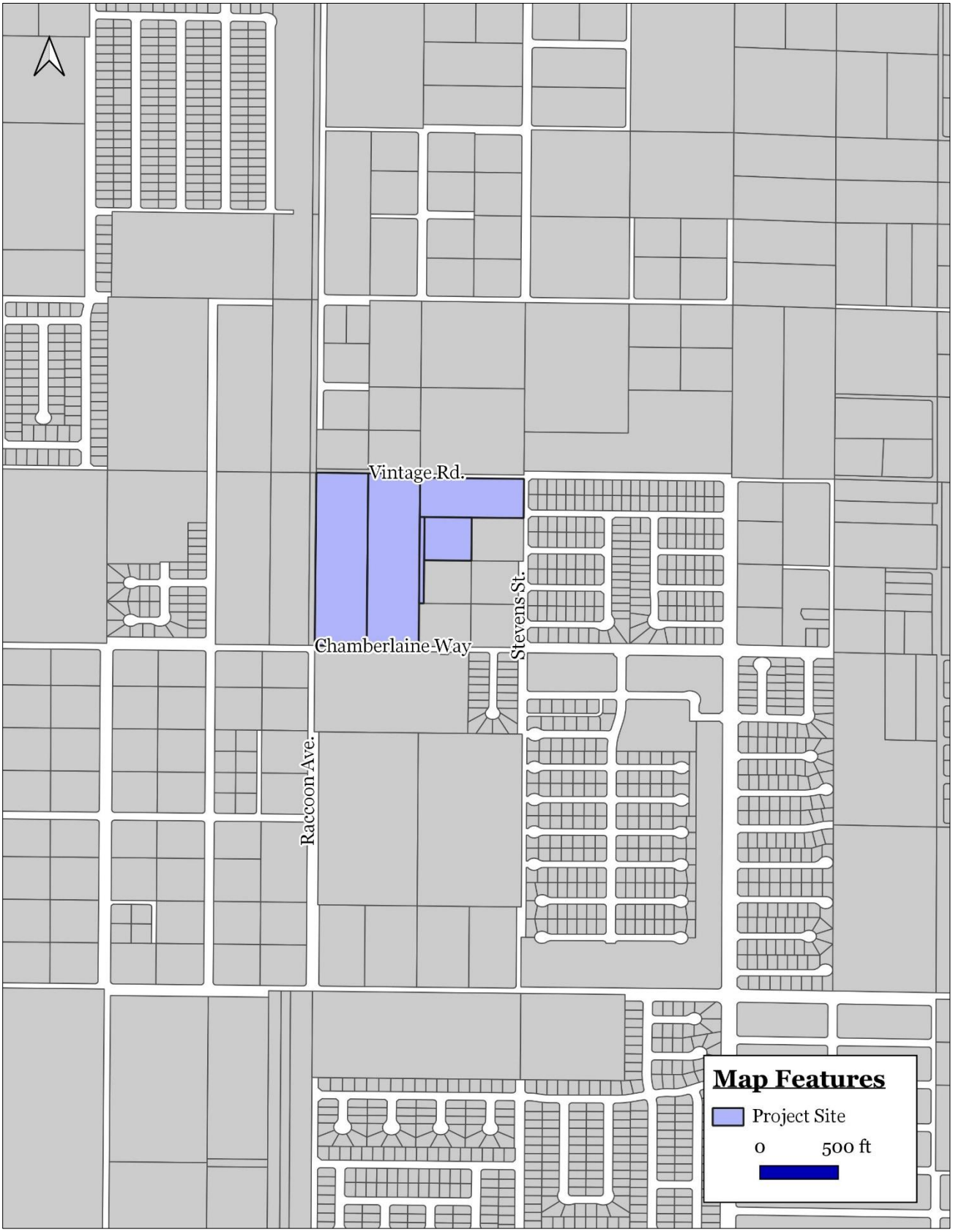

EXHIBIT 2-3
LOCAL MAP

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

- *West of the project site:* The future Raccoon Avenue right-of-way (currently an unimproved roadway) extends along the project site's westerly side. Further west, the properties are also undeveloped. These properties are zoned Desert living (DL-2.5).[9]

- *South of the project site:* Chamberlaine Way extends along the project site's southerly side. Undeveloped land is located further south, south of this roadway. These properties are zoned Desert living (DL-2.5).[10]

- *East of the project site:* The site's boundaries are irregular along the east side. Undeveloped land is found in some areas while in the northeast portion the Stevens Street right-of-way serves as the project boundary. A residential subdivision occupies the properties located to the east of Stevens Street. The properties located to the west of Stevens Street are zoned Desert living (DL-2.5) while the properties located to the west of Stevens Street are zoned Single-Family Residential (R-S1).[11]

The site is located within an area zoned for residential development. The site is currently zoned as *Single Family Residential (R-S1)* though it will require a zone change to be *Single Family Residential (R-S5)*. An aerial photograph of the project site and the surrounding area is provided in Exhibit 2-4.

2.4 PROJECT DESCRIPTION

PHYSICAL CHARACTERISTICS

Key elements of the proposed project, shown in Exhibit 2-5, are summarized below and on the following page.

- *Proposed Site Plan*. The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. Once complete, the project would have an average density of 5.2 dwelling units per acre (du/ac).[12]

- *Single-family Units*. As indicated previously, a total of 136 single-family units would be provided. Each single-family unit would be situated on an individual lot. The lot sizes will range from approximately 5,000 square feet to approximately 10,435 square feet. The average lot size will be approximately 9,208 square feet.[13]

- *Proposed Floor Plan*. Each unit would consist of a single level and will contain either three or four bedrooms, depending on the floor plan (the fourth bedroom may be used as a family room or study). Each unit would also include two full baths and a private yard area.[14]

[9] Google Maps and City of Adelanto Zoning Map. Website accessed on December 4, 2021.

[10] Ibid.

[11] Ibid.

[12] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[13] Ibid.

[14] Ibid.

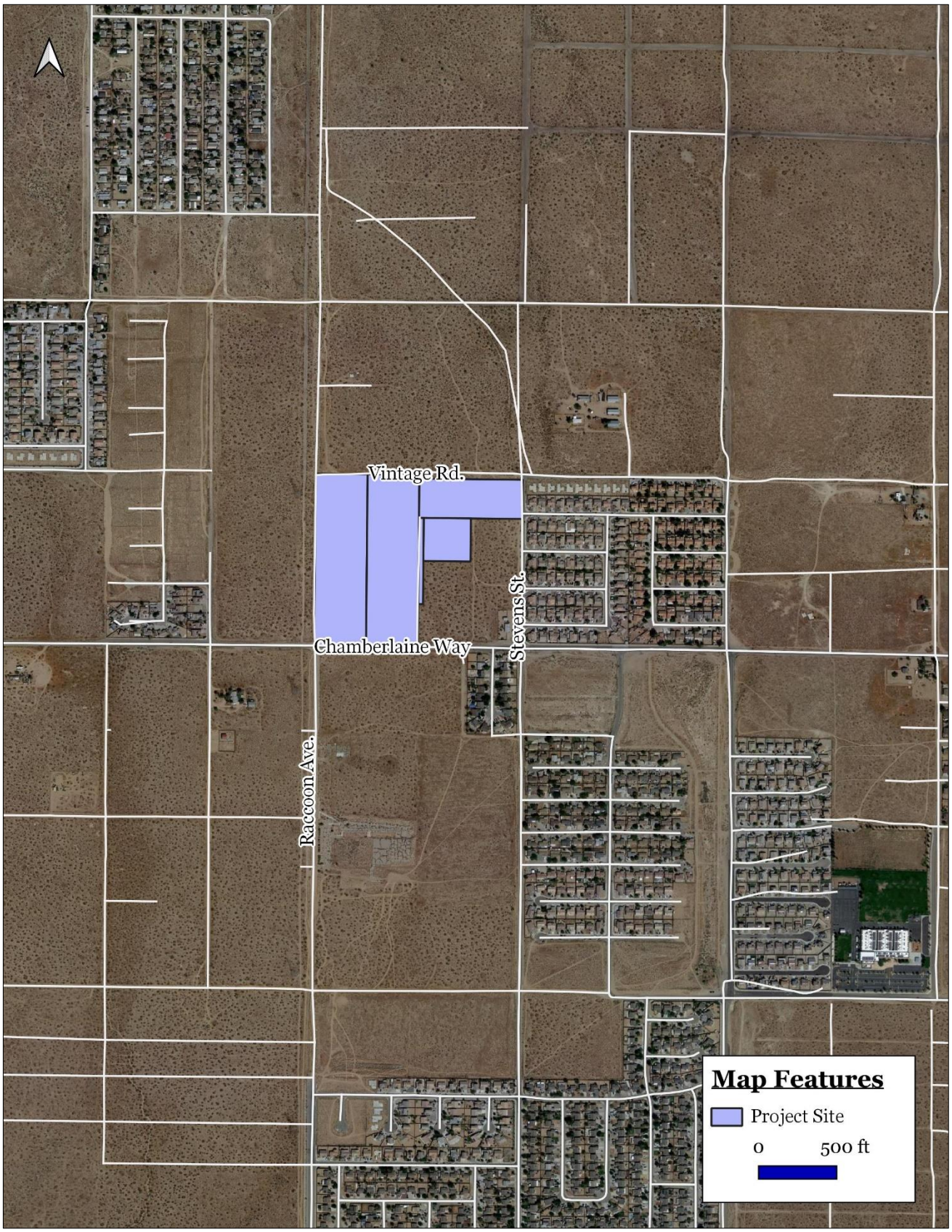

EXHIBIT 2-4
AERIAL IMAGE OF PROJECT SITE
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

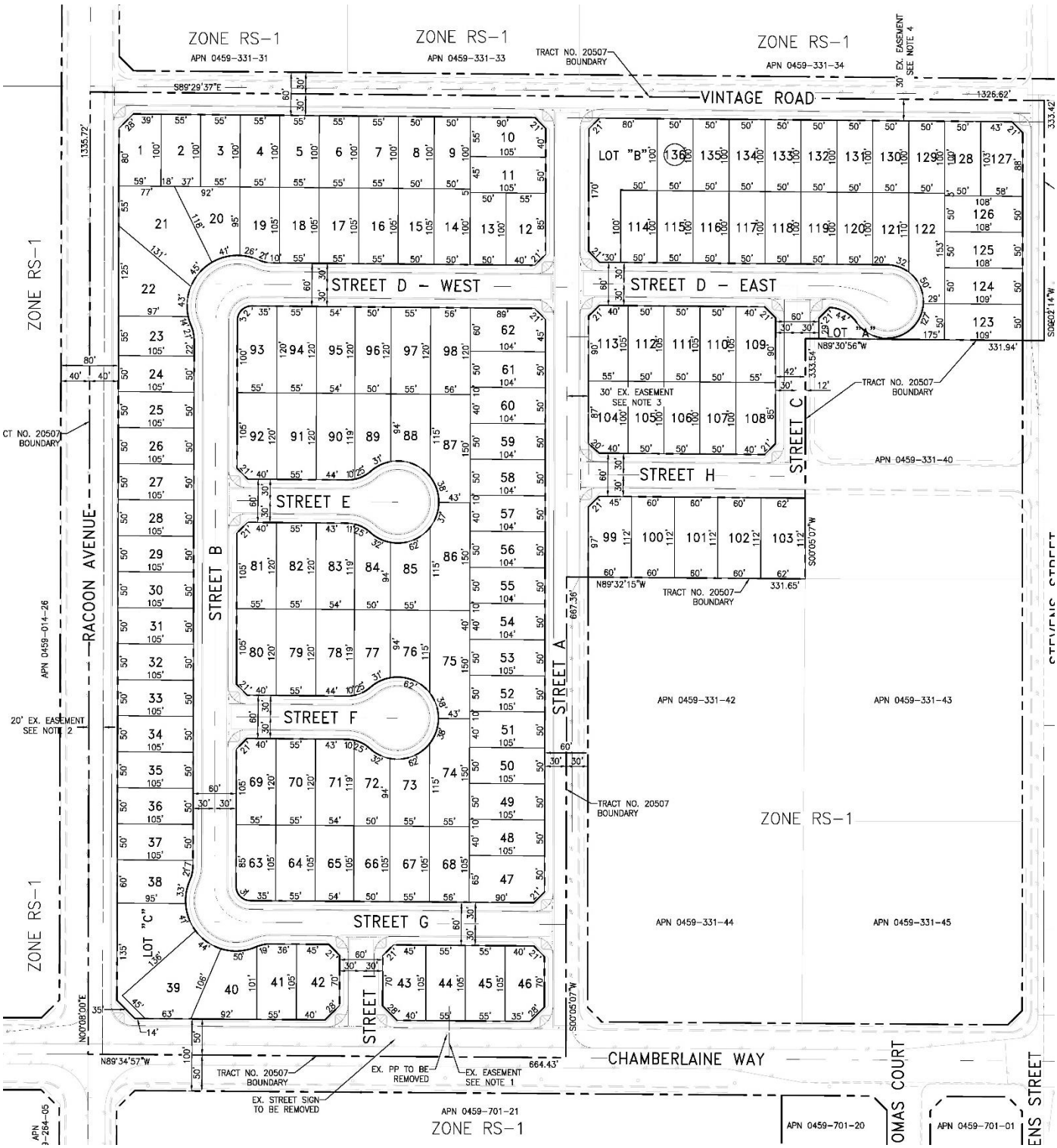

EXHIBIT 2-5
PROJECT SITE PLAN

SOURCE: BLUE ENGINEERING AND CONSULTING, INC.

- *Open Space*. A total of 27,625 square feet of open space would be provided within three lots. A small park would be located near the main entrance with the future Vintage Road right-of-way. This open space lot would be used as a stormwater retention basin and a small pocket park.[15]

- *Access and Internal Circulation*. Access to the proposed development would be provided by a single connection to Chamberlaine Way and two connections to Vintage Road. Access to the individual units would be provided by a number of internal 60-foot-wide internal streets.[16] These new streets will have a right-of-way width of 60 feet with two travel lanes (36 feet) and a parking lane on each side of the street (12-feet).[17]

- *Parking*. Each single-family unit would be provided with a two-car garage. Addition parking would also be available in the driveway apron.[18]

- *Utilities*. Sewer lines (8-inch) and water lines (8-inch) will be installed within the internal roadways. The future units would connect to these utility lines.[19]

The site plan is shown in Exhibit 2-5. A project summary table is shown in Table 2-1.

Table 2-1
Project Summary

Project Element	Description
Total Site Area	26.7 acres (1,163,052 sq. ft.)
Number of Units	136 du
Open Space	27,625 sq. ft.
Development Density	5.1 Units/Acre
Average Lot Size	9,208 sq. ft.
Minimum Lot Size	5,000 sq. ft.
Maximum Lot Size	10,435 sq. ft.

Source: Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[15] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[16] Ibid.

[17] Ibid.

[18] Ibid.

[19] Ibid.

OCCUPANCY CHARACTERISTICS

As indicated previously, the project is a proposal to construct 136 single-family detached residential units. These single-family units would be owner-occupied. In addition, the proposed project is estimated to add 556 new residents assuming an average household size of 4.06 persons per unit. The average household size figure was derived from the most recent Census data.

CONSTRUCTION CHARACTERISTICS

The construction of the proposed project would take approximately nineteen (19) months to complete. The key construction phases are outlined below:

- *Site Preparation*. The project site would be readied for the construction of the proposed project in this phase. This phase would involve the removal of trash and vegetation from the development site. Equipment used on-site during this phase would include backhoes, water trucks, haul trucks, and bulldozers. This phase would take approximately one (1) month to complete.

- *Grading*. This phase would involve the grading and excavation of the site and would include the rough and finished grading of the 26.7-acre site. In addition, the building footings, utility lines, and other underground infrastructure would be installed during this phase. Equipment used on-site during this phase would include backhoes, water trucks, haul trucks, graders, trenching equipment, and bulldozers. This phase will take approximately three (3) months to complete.

- *Construction*. The erection of the individual homes would occur during this phase. During this phase, the individual units would be framed and constructed and the water lines, sewer lines, and other infrastructure connections would be completed. Equipment used on-site during this phase would include off-road trucks, cranes, fork-lifts, and compressors. This phase would take approximately twelve months (12) to complete.

- *Paving*. The roadways and other hardscape areas would be paved during this phase. Equipment used on-site during this phase would include cement and motor mixers, pavers, rollers, and other paving equipment. This phase would take approximately one (1) month to complete.

- *Landscaping and Finishing*. This phase would involve the planting of landscaping, painting of the units, and the completion of the on-site improvements. Equipment used on-site during this phase would include off-road trucks, backhoes, fork-lifts, and compressors. This phase would take approximately two (2) months to complete.

2.5 DISCRETIONARY ACTIONS

A *discretionary action* is an action taken by a government agency (for this project, the government agency is the City of Adelanto) that calls for an exercise of judgment in deciding whether to approve a project. The following discretionary approvals are required:

- The approval of a Zone Change (ZC) 21-02;
- The approval of a Land Development Plan (LDP) 21-29;
- The approval of a Tentative Tract Map (TTM) 20507;

- The approval of the Mitigated Negative Declaration (MND); and,
- The adoption of the Mitigation Monitoring and Reporting Program.

2.6 CUMULATIVE (RELATED) PROJECTS

Cumulative impacts refer to the combined effect of project impacts with the impacts of other past, present, and reasonably foreseeable future projects. As set forth in the *CEQA Guidelines* Section 15355,

> "Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may include changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. This proposed project would require a tentative tract map (TTM 20504) and a land development plan (LDP 21-28). The project site is located within the single-family residential zoning district though the project site is currently undeveloped though it has been disturbed by off-road vehicles. The proposed project would consist of 75 single-family lots. In addition, there would be two lots that would be reserved for open space for use as storm water run-off retention and recreation. Primary vehicular access would be provided by roadway connections with Chamberlaine Way and Rhode Island Street. The applicable zoning designation is Single Family Residential (R-S1). This related project is located approximately 2,300 feet to the east of the proposed project site.

The potential for projects to have a cumulative impact depends on both geographic location as well as the timing of development. The geographic area affected by cumulative projects will vary depending on the environmental topic. For example, construction noise impacts would be limited to areas directly affected by construction noise, whereas the area affected by a project's air emissions generally includes the local air basin. The potential cumulative impacts are discussed for each issue area.

SECTION 3 ENVIRONMENTAL ANALYSIS

This section of the Initial Study analyzes the potential environmental impacts that may result from the proposed project's implementation. The issue areas evaluated in this Initial Study include the following:

Aesthetics (Section 3.1);
Agricultural &Forestry Resources (Section 3.2);
Air Quality (Section 3.3);
Biological Resources (Section 3.4);
Cultural Resources (Section 3.5);
Energy (Section 3.6)
Geology & Soils (Section 3.7);
Greenhouse Gas Emissions; (Section 3.8);
Hazards & Hazardous Materials (Section 3.9);
Hydrology & Water Quality (Section 3.10);
Land Use & Planning (Section 3.11);
Minéral Resources (Section 3.12);
Noise (Section 3.13);
Population & Housing (Section 3.14).
Public Services (Section 3.15);
Recreation (Section 3.16);
Transportation (Section 3.17);
Tribal Cultural Resources (Section 3.18);
Utilities (Section 3.19);
Wildfire (Section 3.20); and,
Mandatory Findings of Significance (Section 3.21).

The environmental analysis included in this section reflects the Initial Study Checklist format used by the City of Adelanto in its environmental review process (refer to Section 1.3 herein). Under each issue area, an analysis of impacts is provided in the form of questions followed by corresponding detailed responses. For the evaluation of potential impacts, questions are stated, and an answer is provided according to the analysis undertaken as part of this Initial Study's preparation. To each question, there are four possible responses:

- *No Impact*. The proposed project *will not* have any measurable environmental impact on the environment.

- *Less Than Significant Impact*. The proposed project *may have* the potential for affecting the environment, although these impacts will be below levels or thresholds that the City of Adelanto or other responsible agencies consider to be significant.

- *Less Than Significant Impact with Mitigation*. The proposed project *may have* the potential to generate impacts that will have a significant impact on the environment. However, the level of impact may be reduced to levels that are less than significant with the implementation of mitigation measures.

- *Potentially Significant Impact*. The proposed project may result in environmental impacts that are significant.

This Initial Study will assist the City of Adelanto in making a determination as to whether there is a potential for significant adverse impacts on the environment associated with the implementation of the proposed project.

3.1 AESTHETICS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project have a substantial adverse effect on a scenic vista?				✕
B. Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				✕
C. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from a publicly accessible vantage point)? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				✕
D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✕	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project have a substantial adverse effect on a scenic vista? ● No Impact*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. An above ground infiltration basin and a small park would be located in the northern portion of the project site near the main entrance at the future Vintage Road right-of-way. Sanitary sewer and water service would be provided to each lot in the subdivision. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[20]

The dominant scenic views from the project site include the views of the San Bernardino and San Gabriel Mountains, located 20 miles south and southeast of the site. Per the Adelanto North 2035 Comprehensive Sustainable Plan, the City of Adelanto has prominent viewsheds of the San Gabriel Mountains to the south, the Mojave River to the northeast, and the surrounding undeveloped land of the Mojave Desert. The proposed single level residential units will not impact these views. All of the buildings will consist of a single level and will be no more than 40 feet in height. As a result, no impacts will occur.

B. *Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ● No Impact.*

According to the California Department of Transportation, Chamberlain Way and Vintage Road are not designated as scenic highways and there are no state or county designated scenic highways in the vicinity

[20] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

of the project site.[21] There are no officially designated highways located near the city. The nearest highways that are eligible for designation as a scenic highway include SR-2 (from SR-210 to SR-138), located 11 miles southwest of the City; SR-58 (from SR-14 to I-15), located 20 miles north of the City; SR-138 (from SR-2 to SR-18), located 13 miles south of the City; SR-173 (from SR-138 to SR-18), located 15 miles southeast of the City; and, SR-247 (from SR-62 to I-15), located 23 miles east of the City. The City of Adelanto 2035 Sustainable Plan identifies prominent view sheds within the City. These view sheds are comprised primarily of undeveloped desert land, the Mojave River, and distant views of the mountains.[22] Lastly, the project site does not contain any buildings listed in the State or National registrar. As a result, no impacts will occur.

C. *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from a 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? ● No Impact*

There are no protected views in the vicinity of the project site and the city does not contain any scenic vistas. In addition, the City does not have any zoning regulations or other regulations governing scenic quality other that the development standards for which the new building will be required to conform to. As a result, no impacts will occur.

D. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ● Less than Significant Impact*

Project-related sources of nighttime light would include parking area exterior lights, security lighting, and vehicular headlights. The proposed project will not expose any sensitive receptors to daytime or nighttime light trespass since the project will be in conformance with Section 17.15.050(E)(5) - Lighting of the City of Adelanto Municipal Code. The project site is zoned for single family land uses. The nearest sensitive receptors to the project site are residential land uses located to the east of Stevens Street as shown in Exhibit 3-1. The Applicant will be required to submit a photometric study to the City for review and approval. Adherence with this City requirement will reduce the potential impacts to levels that are less than significant.

CUMULATIVE IMPACTS

The potential for cumulative aesthetic impacts is typically site specific. The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. This related project is located approximately 2,300 feet to the east of the proposed project site. As a result, no cumulative aesthetic impacts would result.

MITIGATION MEASURES

The analysis of aesthetics indicated that no impact on these resources would occur as part of the proposed project's implementation. As a result, no mitigation is required.

[21] California Department of Transportation. *Official Designated Scenic Highways*.

[22] MIG Hogle-Ireland. *Adelanto North 2035 Comprehensive Sustainable Plan*. August 27, 2014.

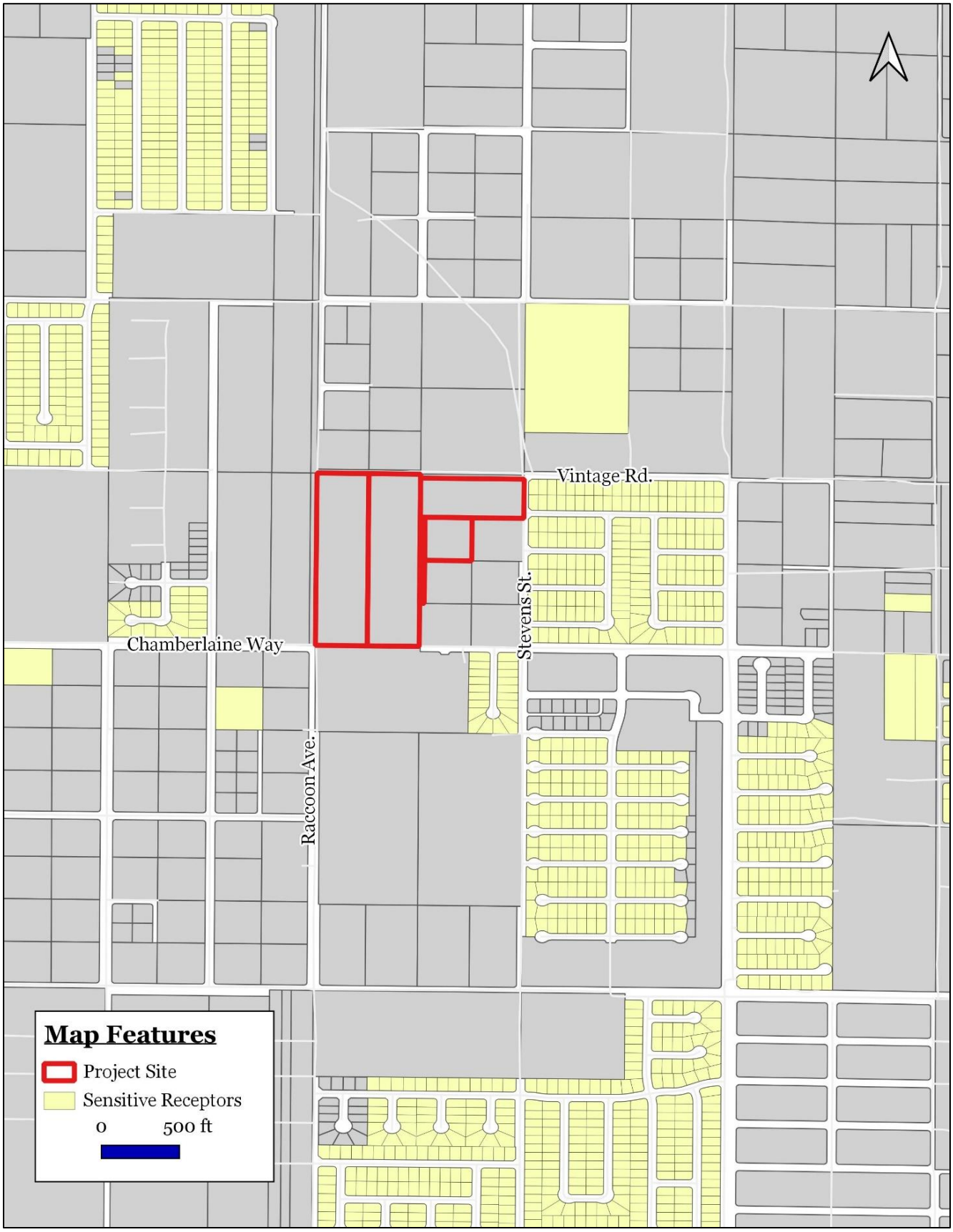

EXHIBIT 3-1
LIGHT SENSITIVE RECEPTORS MAP
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

3.2 AGRICULTURE & FORESTRY RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses?				✖
B. Would the project conflict with existing zoning for agricultural uses, or a Williamson Act Contract?				✖
C. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✖
D. Would the project result in the loss of forest land or conversion of forest land to a non-forest use?				✖
E. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to a non-forest use?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses? ● No Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. An above ground infiltration basin and a small park would be located in the northern portion of the project site near the main entrance at the future Vintage Road right-of-way. Sanitary sewer and water service would be provided to each lot in the subdivision. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[23]

According to the California Department of Conservation, the project site does not contain any areas of Farmland of Statewide Importance, and no agricultural uses are located onsite or adjacent to the property. The implementation of the proposed project would not involve the conversion of any prime farmland, unique farmland, or farmland of statewide importance to urban uses. As a result, no impacts will occur.

[23] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application For Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

B. *Would the project conflict with existing zoning for agricultural uses, or a Williamson Act Contract? ● No Impact.*

The project site is currently zoned as Single Family Residential (R-S1), and there are no agricultural uses located within the site that would be affected by the project's implementation. According to the California Department of Conservation Division of Land Resource Protection, the project site is not subject to a Williamson Act Contract.[24] As a result, no impacts on existing Williamson Act Contracts will result from the proposed project's implementation.

C. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ● No Impact.*

There are no forest lands or timber lands located within or adjacent to the site. Furthermore, the site's existing zoning designation of Single Family Residential (R-S1) does not contemplate forest land or timber land uses. As a result, no impacts will occur.

D. *Would the project result in the loss of forest land or conversion of forest land to a non-forest use? ● No Impact.*

No forest lands are located within the project site. The proposed use will be restricted to the site and will not affect any land under the jurisdiction of the Bureau of Land Management (BLM). As a result, no loss or conversion of forest lands to urban uses will result from the proposed project's implementation.

E. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to a non-forest use? ● No Impact.*

The project would not involve the disruption or damage of the existing environment that would result in a loss of farmland to non-agricultural use or conversion of forest land to non-forest use because there are no agricultural uses or protected forest lands within the proposed project site. As a result, no farmland or forest area conversion impacts will result from the proposed project's implementation.

CUMULATIVE IMPACTS

According to the California Department of Conservation, the city does not contain any areas that contain soils of Farmland of Statewide Importance. As a result, no cumulative impacts on agricultural or forestry resources are anticipated.

MITIGATION MEASURES

The analysis of agricultural and forestry resources indicated that no impact on these resources would occur as part of the proposed project's implementation. As a result, no mitigation is required.

[24] California Department of Conservation. *State of California Williamson Act Contract Land.* ftp://ftp.consrv.ca.gov/pub/dlrp/WA/2012%20Statewide%20Map/WA_2012_8x11.pdf.

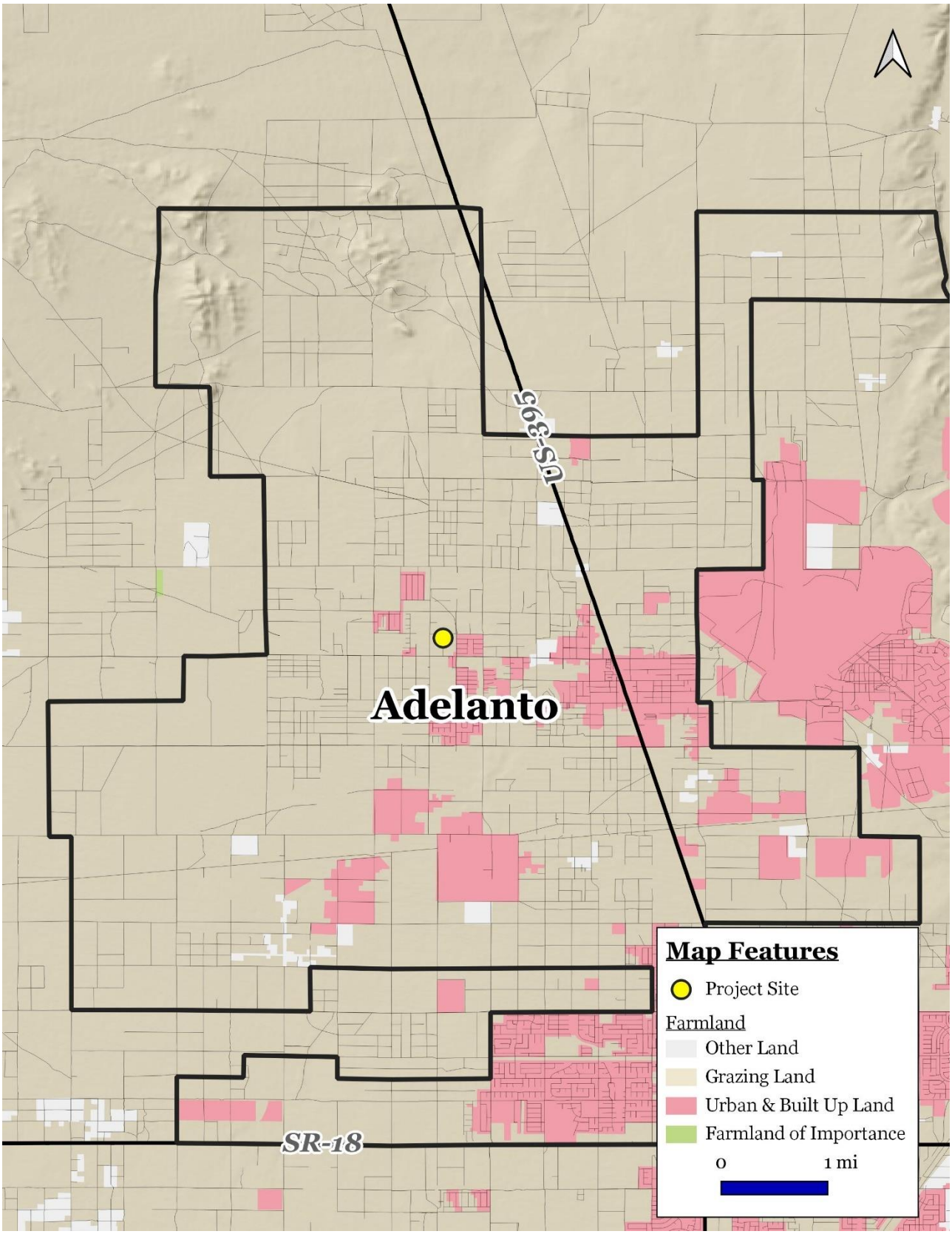

EXHIBIT 3-2
AGRICULTURE MAP
SOURCE: CALIFORNIA DEPARTMENT OF CONCSERVATION

3.3 AIR QUALITY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project conflict with or obstruct implementation of the applicable air quality plan?				✖
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?			✖	
C. Would the project expose sensitive receptors to substantial pollutant concentrations?				✖
D. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project conflict with or obstruct implementation of the applicable air quality plan? ● No Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[25] The City is located within the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD covers the majority of the MDAB. The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. The MDAB is separated from the Southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet).

The Mojave Desert Air Quality Management District (MDAQMD) has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the criteria pollutants listed below. Projects in the Mojave Desert Air Basin (MDAB) generating construction and operational-related emissions that exceed any of the following emissions thresholds are considered to be significant under CEQA.

- *Ozone (O_3)* is a nearly colorless gas that irritates the lungs, damages materials, and vegetation. Ozone is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight).

[25] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application For Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

- *Carbon Monoxide (CO)* is a colorless, odorless toxic gas that interferes with the transfer of oxygen to the brain and is produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust. The threshold is 548 pounds per day of carbon monoxide (CO).

- *Nitrogen Oxide (NO_x)* is a yellowish-brown gas, which at high levels can cause breathing difficulties. NO_x is formed when nitric oxide (a pollutant from burning processes) combines with oxygen. The daily threshold is 137 pounds per day of nitrogen oxide (NO_x).

- *Sulfur Dioxide* (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms. The daily threshold is 137 pounds per day of sulfur oxides (SO_x).

- *PM_{10} and $PM_{2.5}$* refers to particulate matter less than ten microns and two and one-half microns in diameter, respectively. The daily threshold is 82 pounds per day of PM_{10} and 65 pounds per day of $PM_{2.5}$.

- *Reactive Organic Gasses (ROG)* refers to organic chemicals that, with the interaction of sunlight photochemical reactions may lead to the creation of "smog." The daily threshold is 137 pounds per day of ROG.

According to the Growth Forecast Appendix prepared by SCAG for the 2016-2040 RTP/SCS, the City of Adelanto is projected to add a total of 38,900 new residents through the year 2040.[26] The proposed project will potentially result in an additional 556 residents. Therefore, the proposed project is not in conflict with the growth projections established for the City by SCAG. The project's construction emissions would be below the thresholds of significance established by the MDAQMD (the project's daily construction emissions are summarized in Table 3-1 included in the next section). In addition, the proposed project's long-term (operational) airborne emissions will be below levels that the MDAQMD considers to be a significant impact (refer to Table 3-2 included in the next section). As a result, no conformity impacts will occur.

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? ● Less than Significant Impact.*

According to the MDAQMD, any project is significant if it triggers or exceeds the daily emissions threshold identified previously and noted at the bottom of Tables 3-1 and 3-2. In general, a project will have the potential for a significant air quality impact if any of the following are met:

- Generates total emissions (direct and indirect) that exceeds the MDAQMD thresholds (the proposed project emissions are less than the thresholds as indicated in Tables 3-1 and 3-2);
- Results in a violation of any ambient air quality standard when added to the local background (the proposed project will not result, in any violation of these standards);
- Does not conform with the applicable attainment or maintenance plan(s) (the proposed project is in conformance with the City's Zoning and General Plan); and,

[26] Southern California Association of Governments. *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040. Demographics & Growth Forecast.* April 2016.

- Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1 (the proposed project will not expose sensitive receptors to substantial pollutant concentrations nor is the site located near any sensitive receptors).

The proposed project's construction and operation will not lead to a violation of the above-mentioned criteria. The analysis of daily construction and operational emissions was prepared utilizing the California Emissions Estimator Model (CalEEMod V.2020.4.0). For air quality modeling purposes, a 13-month construction period was assumed. As shown in Table 3-1, daily construction emissions will not exceed the MDAQMD significance thresholds. The short-term construction emissions will be limited to those emissions generated during project construction.

Table 3-1
Estimated Daily Construction Emissions

Construction Phase	ROG	NOx	CO	SOx	PM10	PM2.5
Site Preparation (on-site)	3.17	33.08	19.70	0.04	20.63	11.52
Site Preparation (off-site)	0.07	0.04	0.58	--	0.15	0.04
Total Site Preparation	**3.24**	**33.12**	**20.28**	**0.04**	**20.78**	**11.56**
Grading (on-site)	3.62	38.84	29.04	0.06	7.97	4.85
Grading (off-site)	0.08	0.04	0.65	--	0.16	0.04
Total Grading	**3.70**	**38.88**	**29.69**	**0.06**	**8.13**	**4.89**
Building Construction (on-site)	1.71	15.62	16.36	0.03	0.81	0.76
Building Construction (off-site)	0.22	0.76	1.86	--	0.52	0.15
Total Building Construction	**1.93**	**16.38**	**18.22**	**0.03**	**1.33**	**0.91**
Paving (on-site)	0.99	9.52	14.62	0.02	0.47	0.43
Paving (off-site)	0.05	0.03	0.41	--	0.12	0.03
Total Paving	**1.04**	**9.55**	**15.03**	**0.02**	**0.59**	**0.46**
Architectural Coating (on-site)	424.19	1.22	1.81	--	0.06	0.06
Architectural Coating (off-site)	0.03	0.02	0.27	--	0.08	0.02
Total Architectural Coating	**424.22**	**1.24**	**2.08**	**--**	**0.14**	**0.08**
Maximum Daily Emissions	**424.22**	**38.88**	**29.69**	**0.06**	**20.78**	**11.56**
Daily Thresholds	**137**	**137**	**548**	**137**	**82**	**65**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod V.2020.4.0.

Long-term emissions refer to those air quality impacts that will occur once the proposed project has been constructed and is operational. These impacts will continue over the operational life of the project. The two main sources of operational emissions include mobile emissions and area-wide emissions. The operational emissions assumed that all of the buildings were occupied and in operation. The analysis of long-term operational impacts summarized in Table 3-2 also used the CalEEMod V.2020.4.0 computer model. The analysis summarized in Table 3-2 indicates that the operational (long-term) emissions will be below the MDAQMD daily emissions thresholds.

Table 3-2
Estimated Operational Emissions in lbs/day

Emission Source	ROG	NOx	CO	SO2	PM10	PM2.5
Area-wide (lbs./day)	72.18	4.19	268.14	0.46	36.08	36.08
Energy (lbs./day)	0.11	0.97	0.41	--	0.08	0.08
Mobile (lbs./day)	4.88	6.05	41.17	0.08	7.86	2.14
Total (lbs./day)	**77.17**	**11.21**	**309.73**	**0.55**	**44.02**	**38.31**
Daily Thresholds	**137**	**137**	**548**	**137**	**82**	**65**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

1. Note Calculation is based on actual total floor area of 244,800 sq. ft. instead of 785,540 sq. ft.
Source: CalEEMod.2020.4.0

As indicated in Tables 3-1 and 3-2, the impacts are considered to be less than significant. In addition, the MDAQMD Rule Book contains numerous regulations governing various activities undertaken within the district. In addition, the MDAQMD has rules and regulations for controlling fugitive dust during construction. Future construction truck drivers must also adhere to Title 13 - §2485 of the California Code of Regulations, which limits the idling of diesel-powered vehicles to less than five minutes.[3] Adherence to the aforementioned standard condition will minimize odor impacts from diesel trucks. Adherence to these rules and regulations will reduce potential impacts to levels that are less than significant.

C. *Would the project expose sensitive receptors to substantial pollutant concentrations? ● No Impact.*

According to the MDAQMD, residences, schools, daycare centers, playgrounds, and medical facilities are considered sensitive receptor land uses.[27] Sensitive receptors located in the vicinity of the project site are shown in Exhibit 3-1. The nearest sensitive receptor includes the homes located to the east of Stevens Street. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated:

- Any industrial project within 1,000 feet;
- A distribution center (40 or more trucks per day) within 1,000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1,000 feet;
- A dry cleaner using perchloroethylene within 500 feet; and,
- A gasoline dispensing facility within 300 feet.

The project is a proposal to construct 136 single-family units within the 36.7-acre site. The project as proposed does not meet the aforementioned criteria listed above. As a result, less than significant impacts will occur.

D. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? ● Less than Significant Impact.*

The MDAQMD Rule Book contains numerous regulations governing various activities undertaken within the MDAB. Among these regulations is Rule 403.2 – Fugitive Dust Control for the Mojave Desert Planning Area, which was adopted in 1996 for the purpose of controlling fugitive dust. Adherence to Rule 403.2

[27] Southern California Association of Governments. *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040. Demographics & Growth Forecast.* April 2016.

regulations is required for all projects undertaken within the MDAB. These regulations are outlined below:

(2) The owner or operator of any Construction/Demolition source shall:

(a) Use periodic watering for short-term stabilization of Disturbed Surface Area to minimize visible fugitive dust emissions. For purposes of this Rule, use of a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance;

(b) Take actions sufficient to prevent project-related Track out onto paved surfaces;

(c) Cover loaded haul vehicles while operating on Publicly Maintained paved surfaces;

(d) Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate Visible Fugitive Dust emissions;

(e) Cleanup project-related Track out or spills on Publicly Maintained paved surfaces within twenty-four hours; and,

(f) Reduce non-essential Earth-Moving Activity under High Wind conditions. For purposes of this Rule, a reduction in Earth-Moving Activity when visible dusting occurs from moist and dry surfaces due to wind erosion shall be considered sufficient to maintain compliance.

Adherence to the aforementioned regulations will reduce potential impacts to levels that are less than significant.

CUMULATIVE IMPACTS

The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. The proposed project would consist of 75 single-family lots. In addition, there would be two lots that would be reserved for open space for use as storm water run-off retention and recreation. This related project is located approximately 2,300 feet to the east of the proposed project site. The analysis of long-term operational cumulative impacts also used the CalEEMod V.2016.3.2 computer model. The analysis indicated that the operational emissions of the related project would be 54% of those of the proposed project. The combined emissions of the proposed project and the related project would still be under thresholds of significance. As a result, no significant cumulative sir quality impacts are anticipated.

MITIGATION MEASURES

The analysis of air quality impacts indicated that the projected emissions would be below the MDAQMD's thresholds of significance. As a result, no mitigation is required.

3.4 BIOLOGICAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		✖		
B. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				✖
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?				✖
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 life corridors, or impede the use of native wildlife nursery sites?				✖
E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✖
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?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

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

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[28]

The proposed project site is located in an area that supports a mix of developed and undeveloped land in the middle of the City of Adelanto. The land surrounding the site is composed of a mosaic of undeveloped, vacant land and residential developments. The site is bounded immediately by undeveloped, vacant land to the north and west, Chamberlaine Way and undeveloped and developed land to the south, and a residential

[28] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application For Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

development to the east. The site itself is almost entirely undeveloped but has been heavily impacted by historic land uses, including weed abatement activities that were required by the City. Topography and Soils Onsite elevation ranges from approximately 2,853 to 2,860 feet above mean sea level and generally slopes from south to north, with no areas of significant topographic relief. Based on the NRCS USDA Web Soil Survey, the project site is historically underlain by Helendale-Bryman loamy sands (0 to 5 percent slopes). Soils onsite have been compacted and disturbed by anthropogenic disturbances.[29]

Due to historic and existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the project site. The project site consists primarily of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances, including weed abatement activities that were required by the City. These disturbances have eliminated and/or greatly disturbed the natural plant communities that historically occurred within the immediate vicinity of the project site. No native plant communities will be impacted from implementation of the proposed project. No natural plant communities occur within the boundaries of the project site. The site supports one (1) land cover types that would be classified as disturbed. The disturbed portions of the site vary in vegetative density from unvegetated to densely vegetated with early successional and non-native plant species.

Common plant species observed onsite include rubber rabbitbrush (Ericameria nauseosa), burrobush (Ambrosia dumosa), Mediterranean grass (Schismus barbatus), and Mediterranean mustard (Hirschfeldia incana), western ragweed (Ambrosia psilostachya). Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the project site. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The project site provides limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development. No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent. The survey area provides suitable foraging and cover habitat for local reptile species adapted to conditions within the Mojave Desert. The only reptilian species observed was western side-blotched lizard (Uta stansburiana elegans). Common reptilian species that could be expected to occur include Great Basin fence lizard (Sceloporus occidentalis longipes), Great basin gopher snake (Pituophis catenifer deserticola), red racer (Coluber flagellum piceus), and southwestern speckled rattlesnake (Crotalus mitchellii pyrrhus). The project site provides suitable foraging and nesting habitat for bird species adapted to conditions within the Mojave Desert. Bird species detected during the field investigation include house finch (Haemorhous mexicanus), common raven (Corvus corax), red-tailed hawk (Buteo jamaicensis), mourning dove (Zenaida macroura), and white-crowned sparrow (Zonotrichia leucophrys).

The survey area provides suitable foraging and cover habitat for mammalian species adapted to conditions within the Mojave Desert. Mammalian species detected during the field investigation include California ground squirrel (Otospermophilus beecheyi), and desert cottontail (Sylvilagus audubonii), and feral

[29] ELMT Consulting, Inc. *Chamberlaine Development LLC – 27 Acre Site Biological Resources Assessment*. November 30, 2021.

domestic cat (Felis catus). Common mammalian species that could be expected to occur include blacktailed jackrabbit (Lepus californicus), coyote (Canis latrans). Nesting Birds No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted outside of breeding season. The project site has the potential to provide minimal nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. No raptors are expected to nest on-site due to lack of suitable nesting opportunities. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction.[30]

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special status natural plant communities in the Adelanto USGS 7.5-minute quadrangle. Only one quadrangle was queried due to the proximity of the site to quadrangle boundaries, regional topography, and conditions in the vicinity of the site. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.[31]

The literature search identified six (6) special-status plant species and twelve (12) special-status wildlife species as having potential to occur within the Adelanto USGS 7.5-minute quadrangle. No special-status plant communities were identified as having potential to occur within this quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions.

According to the CNDDB and CNPS, six (6) special-status plant species have been recorded in the Adelanto quadrangle. No special-status plant species were observed on-site during the field investigation. The project site consists vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred on-site which has removed ability of the habitat on the project site to provide suitable habitat for special-status plant species known to occur in the general vicinity. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and all are presumed to be absent. No focused surveys are recommended.[32]

According to the CNDDB, twelve (12) special-status wildlife species have been reported in the Adelanto quadrangle (refer to Attachment D). No special-status wildlife species were observed onsite during the field investigation. The project site has been subject to anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred onsite which has reduced potential foraging and nesting/denning opportunities for wildlife species. Based on habitat requirements for specific species and the availability and quality of onsite habitats, it was determined that the proposed project site has a moderate potential to provide suitable habitat for loggerhead shrike (Lanius ludovicianus); and a low potential to support prairie falcon (Falco mexicanus). None of the aforementioned special-status wildlife

[30] ELMT Consulting, Inc. *Chamberlaine Development LLC – 27 Acre Site Biological Resources Assessment*. November 30, 2021.

[31] Ibid.

[32] Ibid.

species are state or federally listed as threatened or endangered. In order to ensure impacts to these avian species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of the pre-construction nesting bird clearance survey, impacts to special status avian species will be less than significant and no mitigation will be required. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). As a result, the foll9wing mitigation measure will be required:

- In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season. If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.[33]

The above mitigation measure will reduce thee impacts to levels that are less than significant.

B. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? ● No Impact.*

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.[34] Hydrologic feature in the City are shown in Exhibit 3-2.

[33] ELMT Consulting, Inc. *Chamberlaine Development LLC – 27 Acre Site Biological Resources Assessment*. November 30, 2021.

[34] Ibid.

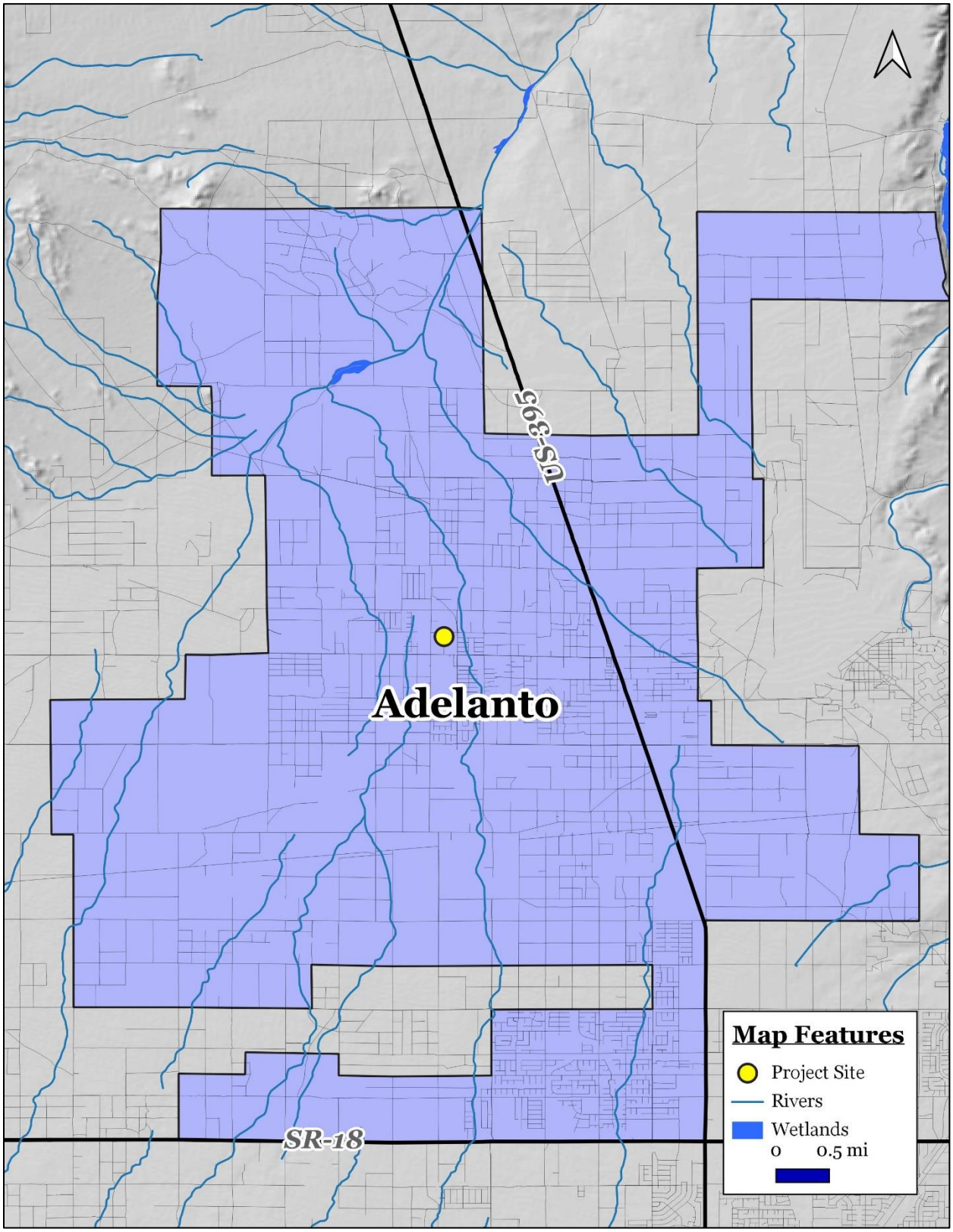

EXHIBIT 3-3
WATER RESOURCES MAP
SOURCE: CALIFORNIA DEPARTMENT OF WATER RESOURCES

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The USFWS NWI and the USGS National Hydrography Dataset were reviewed to determine if any blueline streams or riverine resources have been documented on the project site. Based on this review, no blueline streams or riverine resources have been identified on the project site. The project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. query of the NWI database found on potential blueline streams, riverine, or other aquatic resources within or adjacent to the project site. Therefore, project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.[35] As a result, the project will have no impact on riparian habitats.

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 wetland areas or riparian habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations. A review of the USFWS National Wetlands Inventory, Wetlands Mapper confirmed that there are no wetlands or riparian habitat present within in the site. The nearest wetland lies on the properly adjacently north of the site, where an intermittent stream, that is dry majority of the year, transects the northwest border and continues south west. Therefore, the proposed project will have no impact on federally protected wetlands as defined by Section 404 of the CWA. The site's utility as a wetland or riparian habitat is constrained by the presence of adjacent roadways and existing developments in the surrounding areas.[36] As a result, no impacts are anticipated.

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 life corridors, or impede the use of native wildlife nursery sites? ● No Impact.*

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both anthropogenic disturbance and natural fluctuations in resources. According to the San Bernardino County General Plan, the project site has not been identified as occurring within a Wildlife Corridor or Linkage. As designated by the San Bernardino County General Plan Open Space Element, major open space areas documented in the vicinity of the project site include the Mojave River

[35] ELMT Consulting, Inc. *Chamberlaine Development LLC – 27 Acre Site Biological Resources Assessment*. November 30, 2021.

[36] Ibid.

located approximately 5.5 miles east of the site. The site is separated from this identified regional wildlife corridors and linkages by existing development and roadways, and undeveloped land; however, there are no riparian corridors or creeks connecting the project site to these areas. The undeveloped land in the immediate vicinity of the project site provides local wildlife movement opportunities for wildlife species moving through the immediate area; however, the project site does not function as a major wildlife movement corridor or linkage. As such, implementation of the proposed project is not expected to have a significant impact to wildlife movement opportunities or prevent local wildlife movement through the area since there is ample habitat adjacent to the project site to support wildlife movement opportunities.[37] As a result, no off-site migratory fish corridors or wildlife nurseries will be affected by the proposed development since all new development will be confined to the project site and no impacts are anticipated.

E. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ● No Impact.*

Joshua Trees are protected under Chapter 17.57 – Biotic Resources of the City of Adelanto's Municipal Code. In addition, the City of Adelanto enforces Title 8, Division 9 of San Bernardino County Code, which requires that every Joshua Tree proposed for removal be inspected by the City to assure the Joshua tree is not a "specimen" class tree requiring preservation and transplantation. Joshua trees occur throughout the Mojave Desert in Southern California and are typically found at an elevation of 1,200 to 5,400 feet. The California Department of Fish and Wildlife consider Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. Joshua trees are also considered a significant resource under the California Environmental Quality Act (CEQA) and are included in the Desert Plant Protection Act, Food, and Agricultural Code (80001 – 80006). Based on the site surveys, there are no Joshua Trees present on the site.[38] As a result, no impacts will occur with respect to this issue.

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.*

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat.

The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a Clean Water Act Permit from the United States Army Corps of Engineers). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS. The project site is not located within federally designated Critical Habitat. Further, the nearest Critical Habitat designations is located approximately 5.5 miles east of the

[37] ELMT Consulting, Inc. *Chamberlaine Development LLC – 27 Acre Site Biological Resources Assessment*. November 30, 2021.

[38] Ibid.

project site for southwestern willow flycatcher (Empidonax traillii extimus). Therefore, no impacts to federally designated Critical Habitat will occur from implementation of the proposed project.

CUMULATIVE IMPACTS

The site's future development will lead to an incremental and permanent loss of habitat. As indicated in the analysis, the site's development activities are not expected to have an impact on any special status species based on the results of the on-site surveys. Furthermore, loss of approximately 27-acres of creosote bush habitat is not expected to be a significant cumulative impact given the presence of this community throughout the Mojave Desert. In addition, loss of this habitat is not expected to have a significant impact on wildlife which may inhabit the site or on those species which may infrequently traverse the site. As a result, no cumulative impacts on biological resources are anticipated.

MITIGATION MEASURES

The analysis of biological impacts determined that the following mitigation measures would be required to reduce the project's impacts to levels that would be less than significant.

BIO-1 In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season. If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

3.5 CULTURAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines?		✖		
B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines?		✖		
C. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines? ● Less than Significant Impact with Mitigation.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units will consist of single-level units and include an enclosed two-car garage. The project will also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[39]

Historic structures and sites are defined by local, State, and Federal criteria. A site or structure may be historically significant if it is locally protected through a General Plan or historic preservation ordinance. In addition, a site or structure may be historically significant according to State or Federal criteria even if the locality does not recognize such significance. To be considered eligible for the National Register, a property's significance may be determined if the property is associated with events, activities, or developments that were important in the past, with the lives of people who were important in the past, or represents significant architectural, landscape, or engineering elements. Specific criteria include the following:

- Districts, sites, buildings, structures, and objects that are associated with the lives of significant persons in or past;

- Districts, sites, buildings, structures, and objects that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or,

[39] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application For Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

- Districts, sites, buildings, structures, and objects that have yielded or may be likely to yield, information important in history or prehistory.

Ordinarily, properties that have achieved significance within the past 50 years are not considered eligible for the National Register. However, such properties *will qualify* if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A religious property deriving primary significance from architectural or artistic distinction or historical importance;

- Districts, sites, buildings, structures, and objects that are associated with events that have made a significant contribution to the broad patterns of our history;

- A building or structure removed from its original location that is significant for architectural value, or which is the surviving structure is associated with a historic person or event;

- A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life;

- A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events;

- A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;

- A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or,

- A property achieving significance within the past 50 years if it is of exceptional importance.[40]

The State has established *California Historical Landmarks* that include sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. *California Points of Historical Interest* has a similar definition, except they are deemed of local significance. A search of the National Register of Historic Places and the list of California Historical Resources was conducted, and it was determined that no historic resources were listed within the City of Adelanto.[41] The proposed project will not affect any structures or historical resources listed on the National or State Register or those identified as being eligible for listing on the National or State Register. Furthermore, the project site is not present on the list of historic resources identified by the State Office of Historic Preservation (SHPO).[42] The proposed project will be limited to the project site and will not affect any structures or historical resources listed on

[40] U. S. Department of the Interior, National Park Service. National Register of Historic Places. http://nrhp.focus.nps.gov. 2010.

[41] U. S. Department of the Interior, National Park Service. *National Register of Historic Places*. http://focus.nps.gov/nrhp. Secondary Source: California State Parks, Office of Historic Preservation. *Listed California Historical Resources*. Website accessed December 4, 2021.

[42] California Department of Parks and Recreation. *California Historical Resources*. Website http:// ohp.parks.ca.gov/ ListedResources. Website accessed on December 4, 2021.

the National or State Register or those identified as being eligible for listing on the National or State Register. Furthermore, the project site is not present on the list of historic resources identified by the State Office of Historic Preservation (SHPO). No signs of human habitation nor any cemeteries are apparent within or near the project, and no signs of development on the parcel appear on any historic aerial map reviewed, nor on later USGS maps. Since it is possible that previously unrecognized resources could exist at the site, the proposed project would be required to adhere to Mitigation Measures CR-1, CR-2, CR-3 and CR-4. As a result, less than significant impacts will occur with mitigation.

B. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines? ● Less than Significant Impact with Mitigation.*

The Uto-Aztecan "Serrano" people occupied the western Mojave Desert periphery. Artificial disturbances have resulted from modern refuse dumping, off-road vehicle use, and mechanical grading and stockpiling. The overall topography of the area exhibits a one-to-two-degree slope with a northeasterly slope. Vegetation includes creosote scrub, Russian thistle, and some seasonal grasses. Soils include silty sand with 10 to 15% gravels measuring less than five centimeters in diameter. No historic-period or prehistoric cultural resources of any kind were discovered during the field survey. Therefore, no significant impacts related to archaeological or historical resources is anticipated and no further investigations are recommended for the proposed project.

On September 1, 2021, DUKE CRM submitted a request for a records search by the South Central Coastal Information Center (SCCIC) (See Attachment 2). The SCCIC located at the California State University, Fullerton is part of the California Historical Resources Information System (CHRIS). The records search included a review of all recorded cultural resources within a ½-mile radius of the Project, as well as a review of known cultural resource survey and excavation reports. Record search results were received on November 18, 2021. The records search identified one cultural resource within ½ mile of the Project. Resource P-36- 007090 is located approximately 680 feet south of the Project. The resource is a small scatter of historic trash, including discarded and miscellaneous metal. Additionally, the SCCIC identified three cultural reports within the Project, however only one was available to the SCCIC staff due to COVID-19 closures. Table 1 summarizes the reports within the Project.[43]

Additionally, an inquiry to the Native American Heritage Commission (NAHC) was submitted to ascertain the presence of known sacred sites, Native American cultural resources, and/or human remains within the boundaries of the proposed Project. On October 5, 2021, the NAHC indicated that there have been no Native American cultural resources identified within the Sacred Lands File for the Project location.[44]

DUKE C R M conducted a review of online historical aerial photographs and historic USGS quad maps utilizing UCSB FrameFinder, historicaerials.com, and USGS Historical Topographic Map Explorer. The *San Bernadino* 1:125,000 scale map from 1952 does not show any trails, roads, buildings or structures within Section 29. The *San Bernadino* 1:125,000 scale map from 1994 shows multiple paths running through the Project site which continue to run in various directions through the site (historicaerials.com).[45]

[43] DUKE Cultural Resources Management. *Cultural/Paleontological Resources Assessment for 27.5 Acre Project, San Bernardino County, California (Project Number C-0376)*. November 14, 2021.

[44] Ibid.

[45] Ibid.

A review of this map indicates the proposed Project is located on unconsolidated alluvial sediments from valley fill, mostly silt and sand of Holocene age (*Qa*) with a maximum thickness of 100 feet. DUKE CRM requested that the Natural History Museum of Los Angeles County perform a paleontological records search for known fossil localities within, and in the vicinity of, the Project. On October 7, 2021, the Natural History Museum of Los Angeles County found that there have been no paleontological resources discovered within the Project. The nearest fossil locality is located approximately 3.9 miles east. This fossil locality (LACM VP 7786) occurred within the Shoemaker Gravel Formation (*Qsh*). The Shoemaker Gravel Formation is a Quaternary alluvial gravel composed of detritus from the transverse ranges.[1] Locality LACM VP 7786 unearthed pre-mineralized rodent (*Microtus mexicanus*) remains in surficial older Pleistocene alluvium deposits. Located 8.10 miles southeast of the proposed project is locality LACM VP CIT209, which unearthed pre-mineralized Mammoth (*Mammuthus*) and Horse (*Equus*) remains within the Shoemaker Gravel Formation. Approximately nine miles southeast of the proposed project is LACM VP 3353, which yielded pre- mineralized horse (*Equus*) remains within the Shoemaker Gravel Formation as well. Approximately 8.76 miles East of the proposed project is locality LACM VP 3498 which unearthed pre-mineralized Horse (*Equus*), deer (*Cervidae*), and antelope (*Antilocapridae*) within the Shoemaker Gravel Formation. Lastly, 14.89 miles west of the project are localities LACM VP 5942-5950. They are located along Avenue S from Palmdale to Los Angeles in Holocene aged sediment. Localities LACM VP 5942-5950 yielded various pre-mineralized snakes (*Pituophis*, *Lampropeltis*), lizards (*Gambelia*) rabbit (*Lagomorpha*), rodents (*Thomomys*, *Chaetodippus*, and *Dipodomys*) and birds (Aves).[46]

Morgan Bender, M.A., RPA, Archaeologist, and Adrian Garibay, Paleontologist, conducted an intensive pedestrian survey and several surface scrapes of the Project on September 29, 2021. The survey area included 27.5 acres in the area of the proposed Project. Transects were spaced no more than 15 meters apart. The surface visibility was good, ranging from 90-100 percent. The area has sparsely scattered small bushes and debris with a mean elevation of approximately 3000 feet above sea level. Two minor roads have been graded through the site. See photographs in Attachment B. No cultural resources were observed as a result of the field survey.[47]

DUKE CRM evaluated the proposed project for impacts to cultural resources according to CEQA. As a result of negative findings during the field survey and negative findings within the Project boundary from the SCCIC, our assessment is that the Project has a low potential to impact any cultural resource. Therefore, no mitigation is recommended for cultural resources.

The Project is considered to have a low potential to impact paleontological resources. The Project is located on Holocene age (*Qa*) sediments. The nearest paleontologically significant resource is about 3.9 miles away from the Project site at a depth of 10 to 11 ft in older sediments (*Qsh*), not the sediments within the current Project. The sediment within the Project boundary has the potential to preserve remains, but due to the young age it is unlikely paleontologically significant remains will be uncovered. The Project is anticipated to disturb sediments to a maximum depth of six feet. Given that the sediments are Holocene and the unconsolidated alluvium has maximum depth of 100 feet, it is unlikely any significant paleontological resources will be uncovered. Therefore, no mitigation is recommended for paleontological resources.

[46] DUKE Cultural Resources Management. *Cultural/Paleontological Resources Assessment for 27.5 Acre Project, San Bernardino County, California (Project Number C-0376)*. November 14, 2021.

[47] Ibid.

If previously unidentified cultural and/or paleontological materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist/paleontologist can assess the significance of the find. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Future ground disturbing activities always have the potential to reveal buried deposits not observed on the surface during previous surveys. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- Historic artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;

- Historic structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;

- Prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;

- Groundstone artifacts, including mortars, pestles, and grinding slabs;

- Dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks.

Therefore, the following mitigation measure is required:

- Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed.

Additional mitigation was received as part of the AB-52 process. Under AB-52, the lead agency is required to engage in consultation with various tribes who request AB-52 consultation. Formal requests for consultation were sent out to various local tribes for the mandatory 30-day review period. A representative from the San Manuel Band of Mission Indians provided project specific mitigation measures on April 29, 2019 via email communication. The requested mitigation measures are reiterated below:

- In the event that cultural resources are discovered during project 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) shall be contacted, as detailed within the mitigation provided in Section 3.17, regarding any pre-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.

- If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within the mitigation provided in Section 3.17. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

- 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 the project.

Adherence to the above-mentioned mitigation will reduce potential impacts to levels that are less than significant.

C. *Would the project disturb any human remains, including those interred outside of dedicated cemeteries? ● Less than Significant Impact.*

There are no dedicated cemeteries located in the vicinity of the project site.[48] The proposed project will be restricted to the project site and therefore will not affect any dedicated cemeteries in the vicinity. Notwithstanding, the following mitigation is mandated by the California Code of Regulations (CCR) Section 15064.5(b)(4):

> "A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures."

Additionally, Section 5097.98 of the Public Resources Code states:

> "In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with (b) Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related

provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission."

Adherence to the aforementioned standard condition will ensure potential impacts remain at levels that are less than significant.

CUMULATIVE IMPACTS

The analysis determined that the site's future development will not result in any impacts on cultural resources for the related project site. Such impacts are typical site specific. The cultural resources survey and the analysis indicated that in the event previously undocumented cultural resources are identified during earthmoving activities, a qualified archaeologist should be contacted to assess the nature and significance of the find. The analysis further stated that project-related construction activities shall be diverted from the location of the discovery until the finding's significance is established. As a result, no cumulative impacts on cultural resources are anticipated.

MITIGATION MEASURES

The following mitigation measures will be required to address potential cultural resources impacts:

CR-1 Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Adelanto that a qualified archaeologist/paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.

CR-2 The archaeologist/paleontologist monitor shall conduct full-time monitoring during grading and excavation operations in undisturbed, very old alluvial fan sediments at or below four (4) feet below ground surface and shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The archaeologist/paleontologist monitor shall be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified archaeologist/paleontologist personnel to have a low potential to contain or yield fossil resources.

CR-3 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional,

accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the San Bernardino County Museum in San Bernardino, California, is required for significant discoveries. The archaeologist/paleontologist must have a written repository agreement in hand prior to initiation of mitigation activities.

CR-4 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the City of Adelanto prior to building final.

3.6 ENERGY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			✖	
B. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? ● Less than Significant Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[49]

The proposed project site is served by the Southern California Edison Company which provides electrical service to the project area and the Southern California Gas Company which provides natural gas service. Electrical service in the City of Adelanto is supplied by the Southern California Edison Company (SCE) while natural gas service is provided by the Southwest Gas Company. The City is home to a number of initiatives designed to promote clean solar power generation. The Adelanto Solar Power Project is expected to produce an average of 20,000 megawatt hours annually and is an important element of the Los Angeles Department of Water and Power's (LADWP's) power supply transformation from fossil fuels to more renewable energy sources. The Adelanto Solar Power Project is being built on a 42-acre site at LADWP's Adelanto Switching Station. Clean Focus now owns and operates a 3.75-megawatt solar project (solar generation facility) that sells electricity to the SCE under the California Renewable Energy Small Tariff program. A number of other solar projects, such as the 1,197-acre Baldy Mesa Solar Power Project, are in the planning stages.

Table 3-3 provided on the following page includes an estimate of electrical and natural gas consumption for the proposed project. As indicated in the table, the project is estimated to consume approximately 886,448 kilowatt (kWh) per year of electricity and 43,928 therms of natural gas.

[49] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

Table 3-3
Estimated Annual Energy Consumption

Project	Consumption Rate	Total Project Consumption
Electrical Consumption	6,518 kWh/unit/year	886,448 kWh/year total
Natural Gas Consumption	323 therms/unit/year	43,928 therms/year total

Source: Southern California Edison and Southern California Gas Company.

It is important to note that the new residential units will include energy efficient fixtures. In addition, the energy consumption rates do not reflect the more stringent 2020 California Building and Green Building Code requirements. The proposed project will be constructed in accordance with the City's Building Code and with Part 6 and Part 11 of Title 24 of the California Code of Regulations. As a result, less than significant impacts will occur.

B. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? ● Less Than Significant Impact.*

On January 12, 2010, the State Building Standards Commission adopted updates to the California Green Building Standards Code (Code) which became effective on January 1, 2011. The California Code of Regulations (CCR) Title 24, Part 11: California Green Building Standards (Title 24) became effective to aid efforts to reduce GHG emissions associated with energy consumption. Title 24 now requires that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. The proposed project as well as any future development within the remainder of the project site will be required to conform to all pertinent energy conservation requirements. While the proposed project is a privately owned commercial use, the implementation of similar programs would prove effective in reducing potential energy consumption. The proposed project will be required to comply with all pertinent Title 24 requirements along with other Low Impact Development (LID) requirements. As a result, the potential impacts will be less than significant.

CUMULATIVE IMPACTS

The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. The proposed related project would consist of 75 single-family lots and would potentially consume approximately 448,850 kilowatt (kWh) per year of electricity and 24,225 therms of natural gas. This projected consumption is approximately half of that anticipated for the proposed project. The proposed project will be required to comply with all pertinent Title 24 requirements along with other Low Impact Development (LID) requirements. As a result, the potential impacts will be less than significant.

MITIGATION MEASURES

The analysis determined that the proposed residential development would not lead to any significant adverse environmental impacts. As a result, no mitigation is required.

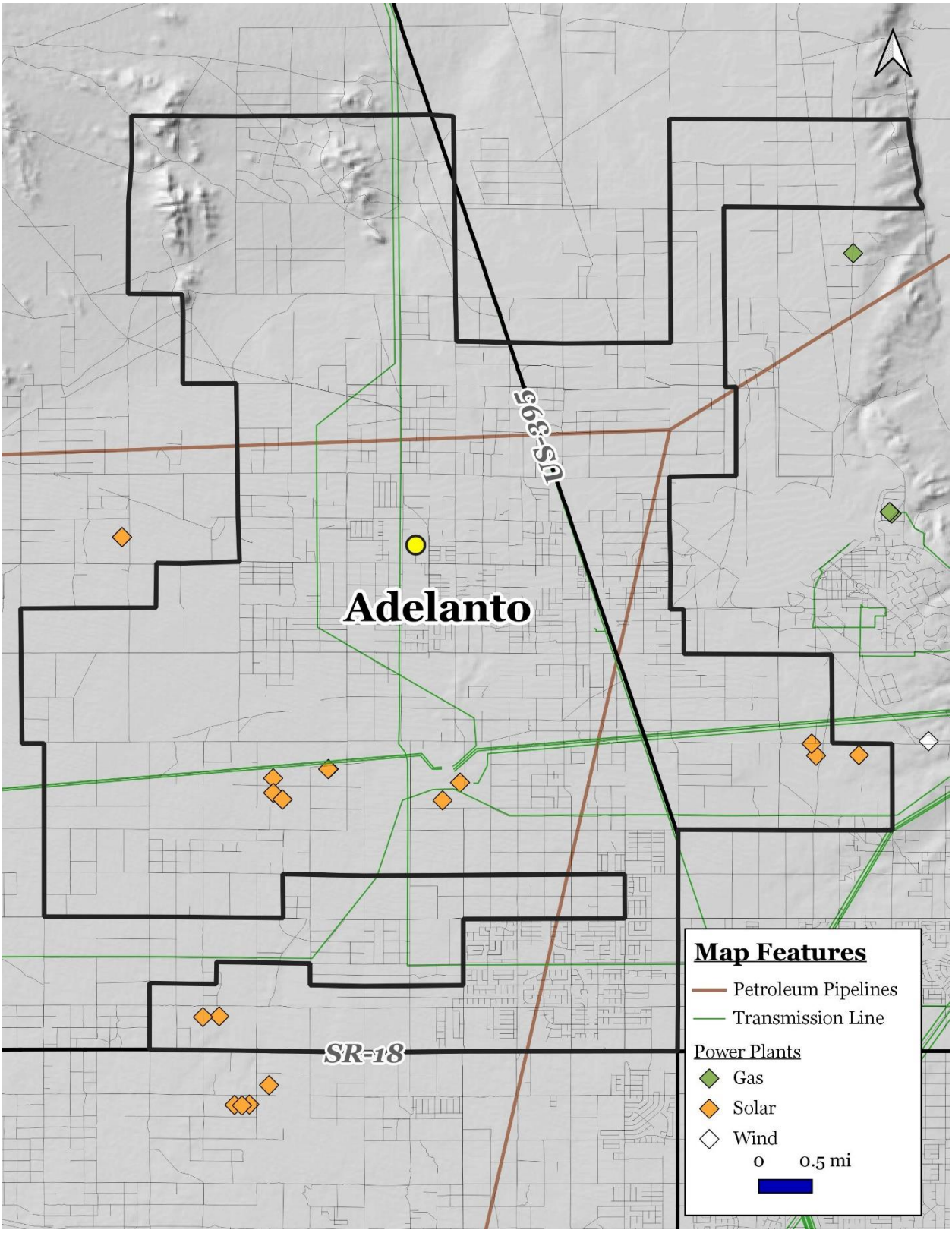

EXHIBIT 3-4
ENERGY MAP
SOURCE: CALIFORNIA ENERGY COMMISSION

3.7 GEOLOGY & SOILS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or, landslides?			✖	
B. Would the project result in substantial soil erosion or the loss of topsoil?			✖	
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?			✖	
D. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012), creating substantial direct or indirect risks to life or property?			✖	
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?				✖
F. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✖		

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides? ● Less than Significant Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[50] The City of Adelanto is located in a seismically active region. Earthquakes from several active and potentially active faults in the Southern California region could affect the proposed project site. In 1972, the Alquist-Priolo Earthquake Zoning Act was passed in response to the

[50] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

damage sustained in the 1971 San Fernando Earthquake. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The closest fault to the project site is the Mirage Valley Fault Zone, which is located approximately 9.5 miles northwest of the City.[51] Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two. The amount of ground shaking depends on the intensity of the earthquake, the duration of shaking, soil conditions, type of building, and distance from epicenter or fault. The potential impacts from fault rupture and ground shaking are considered no greater for the project site than for the surrounding areas given the distance between the site and the fault trace. Other potential seismic issues include ground failure and liquefaction. Ground failure is the loss in stability of the ground and includes landslides, liquefaction, and lateral spreading. The project site is located in a moderate liquefaction zone.[52] The risk for liquefaction is no greater on-site than it is for the region. As a result, the potential impacts in regard to liquefaction and landslides are less than significant.

B. *Would the project result in substantial soil erosion or the loss of topsoil? ● Less than Significant Impact.*

The University of California, Davis SoilWeb database was consulted to determine the nature of the soils that underlie the project site. According to the University of California, Davis SoilWeb database, the project site is underlain by Bryman Loamy Fine Sand (BLFS) soils.[53] Once occupied, the project site would be paved over and landscaped, which would minimize soil erosion. The project's construction will not result in soil erosion. Chapter 17.93 - Erosion and Sediment Control, of the municipal code regulates erosion and sediment control. The project Applicant will be required to adhere to the regulations outlined in Section 17.93.050 – Soil Erosion and Sediment Control Plan. These regulations are as follows:

- No land clearing or grading other than those activities listed as exemptions by this chapter or as determined by the Director of Public Works shall occur unless the said land clearing or grading is in compliance with an approved Soil Erosion and Sediment Control Plan and/or Permit issued in accordance with the provisions of this chapter.

- A Soil Erosion and Sediment Control Plan shall be submitted and approved in accordance with the provisions of this chapter prior to the issuance of building permits, soil erosion and sediment control permits, grading permits or any other permit where, in the opinion of the Director of Public Works, erosion can reasonably be expected to occur.

- Soil Erosion and Sediment Control Plans shall include the measures required by this chapter. Additional measures or modifications of proposed measures may be required by the Director of Public Works prior to the approval of a Soil Erosion and Sediment Control Plan.

- The Director of Public Works shall specify the application requirement for Soil Erosion and Sediment Control Plans and Permits including, but not limited to:

[51] California Department of Conservation. *Fault Activity Map of California. https://maps.conservation.ca.gov/cgs/fam/*

[52] San Bernardino County. *Multi-Jurisdictional Hazard Mitigation Plan* - July 13, 2017.

[53] UC Davis. *Soil Web*. https://casoilresource.lawr.ucdavis.edu/gmap/

- Requirements for the submittal of plans and supporting data as required by the Director of Public Works to accompany applications for Soil Erosion and Sediment Control Plans and/or Permits;

- Licensing and/or certification requirements for those preparing Soil Erosion and Sediment control Plan and/or Permit submittal; and,

- The incorporation and coordination of Soil Erosion Control Plans and/or Permits with other plan requirements.

In addition, stormwater discharges from construction activities that disturb one or more acres, or smaller sites disturbing less than one acre that are part of a common plan of development or sale, are regulated under the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Prior to the start of construction, construction operators must obtain coverage under a NPDES permit, which is administered by the State. In order to obtain an NPDES permit, the project Applicant must prepare a Stormwater Pollution Prevention Plan (SWPPP). The County has identified sample construction Best Management Practices (BMPs) that may be included in the mandatory SWPPP. These construction BMPs are as follows: [54]

- *Stockpiling of Soil.* County Ordinance requires operators to preserve native topsoil on-site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient.

- *Protecting Construction Materials from Run-On and Runoff*. At the end of every workday and during precipitation events, contractors must provide cover for materials that could leach pollutants.

- *Designating Waste Disposal Areas*. Clearly identify separate waste disposal areas on-site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff.

- *Installing Perimeter Controls on Downhill Lot Line*. Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.

- *Maintaining a Stabilized Exit Pad*. Minimize sediment track-out from vehicles exiting your site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track-out occurs, remove deposited sediment by the end of the same work day.

The use of construction Best Management Practices (BMPs) identified in the mandatory SWQPPP will prevent soil erosion and the discharge of sediment into the local storm drains during the project's construction phase. As a result, the impacts will be less than significant.

[54] San Bernardino County. *Erosion Control and Pollution Prevention for General Construction Sites*. http://www.sbcounty.gov/Uploads/lus/BandS/PreConstErosionControl/Erosion_Control_Flyer.pdf

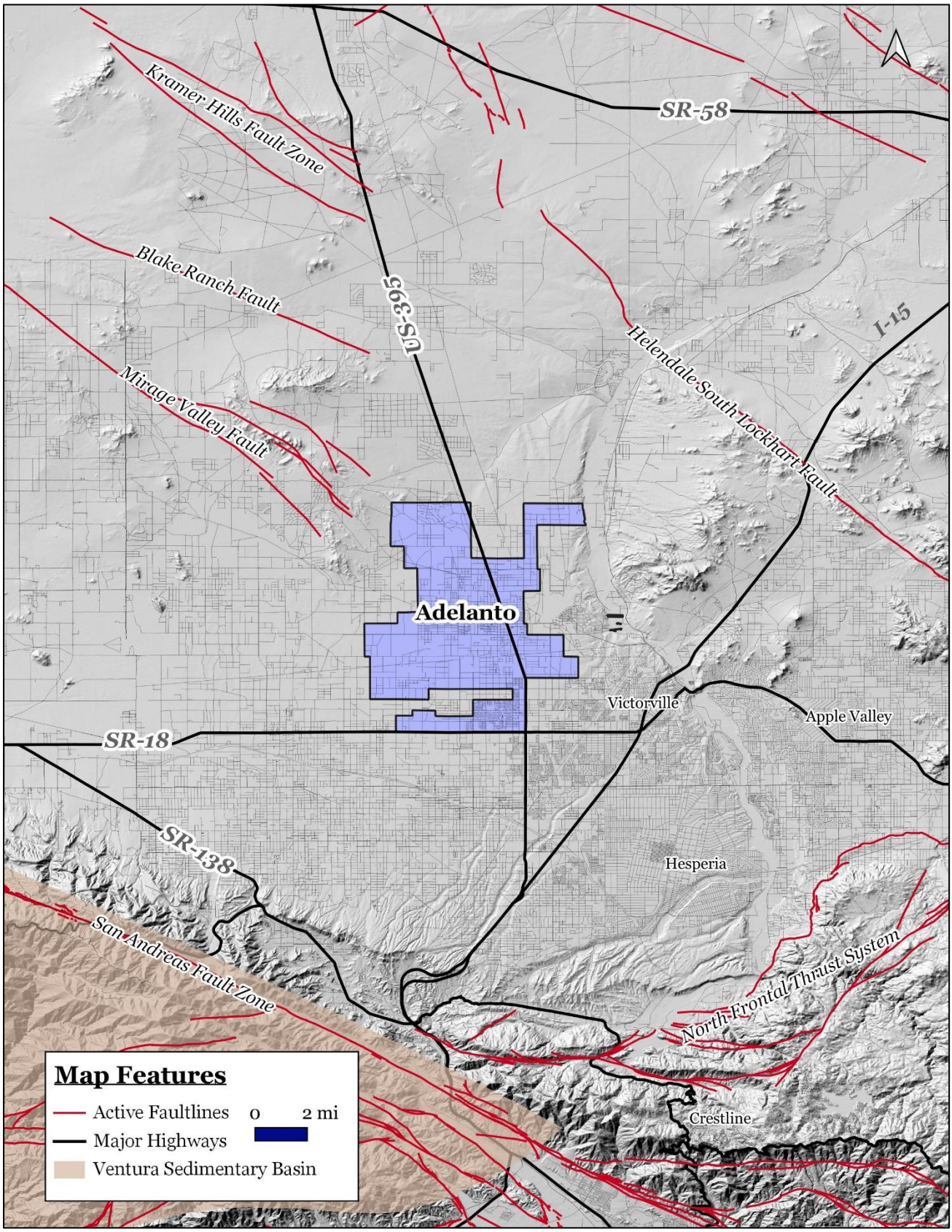

EXHIBIT 3-5
GEOLOGY MAP
SOURCE: U.S. GEOLOGICAL SURVEY

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.*

As indicated previously, the project site is underlain by Bryman Loamy Fine Sand soils.[55] The water erosion risk for Bryman Loamy Fine Sand soils is slight, whereas the Bryman Loamy Fine Sand soil's wind erosion risk is high.[56] Once occupied, the project site would be paved over and landscaped, which would minimize soil erosion.[57] The project's construction will not result in soil erosion since the project's contractors must implement the construction BMPs identified in the mandatory SWPPP. The BMPs will minimize soil erosion and the discharge of sediment off-site. Additionally, the project site is not located within an area that could be subject to landslides or liquefaction.[58]

Lateral spreading is a phenomenon that is characterized by the horizontal, or lateral, movement of the ground. Lateral spreading could be liquefaction induced or can be the result of excess moisture within the underlying soils. Liquefaction induced lateral spreading will not affect the proposed project because the site is not located in an area that is subject to liquefaction. Therefore, lateral spreading caused by liquefaction will not affect the project. The soils that underlie the project site possess a low potential for shrinking and swelling. Soils that exhibit certain shrink swell characteristics become sticky when wet and expand according to the moisture content present at the time. Since the soils have a low shrink-swell potential, lateral spreading resulting from an influx of groundwater is slim. The likelihood of lateral spreading will be further reduced since the project's implementation will not require grading and excavation that would extend to depths required to encounter groundwater.

In addition, the project will not result in the direct extraction of groundwater located below ground surface (BGS) since the project will be connected to the City's water system. The soils that underlie the project site are not prone to subsidence. Subsidence occurs via soil shrinkage and is triggered by a significant reduction in an underlying groundwater table, thus causing the earth on top to sink.[59] No groundwater will be drained to accommodate the construction of the proposed project. Moreover, the project will not result in the direct extraction of groundwater located below ground surface (BGS). As a result, the potential impacts are considered to be less than significant.

D. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012), creating substantial direct or indirect risks to life or property? ● Less than Significant Impact.*

The University of California, Davis SoilWeb database was consulted to determine the nature of the soils that underlie the project site. According to the University of California, Davis SoilWeb database, the project site is underlain by Bryman Loamy Fine Sand soils.[60] According to the U.S. Department of Agriculture, Bryman

[55] UC Davis. *Soil Web*. https://casoilresource.lawr.ucdavis.edu/gmap/

[56] United States Department of Agriculture, Soil Conservation Service. *Soil Survey of San Bernardino California – Mojave River Area*. Report dated 1978.

[57] Ibid.

[58] Ibid.

[59] Subsidence Support. *What Causes House Subsidence?* http://www.subsidencesupport.co.uk/what-causes-subsidence.html

[60] UC Davis. *Soil Web*. https://casoilresource.lawr.ucdavis.edu/gmap/

Loamy Fine Sand soils possess a low shrink swell potential.[61] The shrinking and swelling of soils is influenced by the amount of clay present in the underlying soils.[62] If soils consist of expansive clay, damage to foundations and structures may occur. A minimal amount of clay is present in Bryman Loamy Fine Sand soils. All soils that are unsuitable for development will be removed during the project's grading phase. As a result, the potential impacts are considered to be less than significant.

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.*

The proposed project will connect to the City's sanitary sewer system. As a result, no impacts associated with the use of septic tanks will occur as part of the proposed project's implementation.

F. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ● Less than Significant Impact with Mitigation*

The surface deposits in the proposed project area are composed entirely of younger Quaternary Alluvium. This younger Quaternary Alluvium is unlikely to contain significant vertebrate fossils, at least in the uppermost layers. The closest fossil vertebrate locality is LACM 7786, between Adelanto and the former George Air Force Base (now the Southern California Logistics Airport). This locality produced a fossil specimen of meadow vole, *Microtus*. The next closest vertebrate fossil locality from these deposits is LACM 1224, west of Spring Valley Lake, which produced a specimen of fossil camel, *Camelops*. Additionally, on the western side of the Mojave River below the bluffs, an otherwise unrecorded specimen of mammoth was collected in 1961 from older Quaternary Alluvium deposits. The following mitigation will be applicable during earth-disturbing activities as a means to protect potential paleontological resources:

- Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Adelanto that a qualified archaeologist/paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.

- The archaeologist/paleontologist monitor shall conduct full-time monitoring during grading and excavation operations in undisturbed, very old alluvial fan sediments at or below four (4) feet below ground surface and shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The archaeologist/paleontologist monitor shall be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified archaeologist/paleontologist personnel to have a low potential to contain or yield fossil resources.

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[61] United States Department of Agriculture, Soil Conservation Service. *Soil Survey of San Bernardino California – Mojave River Area*. Report dated 1978.

[62] Natural Resources Conservation Service Arizona. *Soil Properties Shrink/Swell Potential.* http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/az/soils/?cid=nrcs144p2_065083

- Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the San Bernardino County Museum in San Bernardino, California, is required for significant discoveries. The archaeologist/paleontologist must have a written repository agreement in hand prior to initiation of mitigation activities.

- A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the San Bernardino County Museum prior to building final.

CUMULATIVE IMPACTS

The potential cumulative impacts with respect to geology and soils are typically site specific. In addition, the analysis completed for the proposed project determined the analysis determined that the site's development would not lead to any significant adverse cumulative environmental impacts on geology and soils. As a result, no cumulative impacts are anticipated.

MITIGATION MEASURES

The following mitigation measures will be required to address potential paleontological resources impacts:

CR-1 Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Adelanto that a qualified archaeologist/paleontologist has been retained by the Project Applicant to conduct monitoring of excavation activities and has the authority to halt and redirect earthmoving activities in the event that suspected paleontological resources are unearthed.

CR-2 The archaeologist/paleontologist monitor shall conduct full-time monitoring during grading and excavation operations in undisturbed, very old alluvial fan sediments at or below four (4) feet below ground surface and shall be equipped to salvage fossils if they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The archaeologist/paleontologist monitor shall be empowered to temporarily halt or divert equipment to allow of removal of abundant and large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined upon exposure and examination by qualified archaeologist/paleontologist personnel to have a low potential to contain or yield fossil resources.

CR-3 Recovered specimens shall be properly prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if necessary. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage, such as the San Bernardino County Museum in San Bernardino, California, is required for significant discoveries. The archaeologist/paleontologist must have a written repository agreement in hand prior to initiation of mitigation activities.

CR-4 A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered, if any, and necessary maps and graphics to accurately record the original location of the specimens. The report shall be submitted to the San Bernardino County Museum prior to building final.

3.8 GREENHOUSE GAS EMISSIONS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✖	
B. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ● Less than Significant Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[63]

Greenhouse gasses (GHG) are emitted by both natural processes and human activities. Examples of GHG that are produced both by natural processes and human activities include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The accumulation of GHG in the atmosphere regulates the earth's temperature. Without these natural GHG, the Earth's surface would be about 61°F cooler. However, emissions from fossil fuel combustion have elevated the concentrations of GHG in the atmosphere to above natural levels. These man-made GHG will have the effect of warming atmospheric temperatures with the attendant impacts of changes in the global climate, increased sea levels, and changes to the worldwide biome. They major GHG that influence global warming are described below.

- *Water Vapor*. Water vapor is the most abundant GHG present in the atmosphere. While water vapor is not considered a pollutant, while it remains in the atmosphere it maintains a climate necessary for life. Changes in the atmospheric concentration of water vapor is directly related to the warming of the atmosphere rather than a direct result of industrialization. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to "hold" more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. When water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect

[63] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

incoming solar radiation. This will allow less energy to reach the Earth's surface thereby affecting surface temperatures.

- *Carbon Dioxide (CO2).* The natural production and absorption of CO2 is achieved through the terrestrial biosphere and the ocean. Manmade sources of CO2 include the burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700's, these activities have increased the atmospheric concentrations of CO2. Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC Fifth Assessment Report, 2014) Emissions of CO2 from fossil fuel combustion and industrial processes contributed about 78% of the total GHG emissions increase from 1970 to 2010, with a similar percentage contribution for the increase during the period 2000 to 2010.

- *Methane (CH4).* CH4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO2. Methane's lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO2, N2O, and Chlorofluorocarbons (CFCs). CH4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other human-related sources of methane production include fossil-fuel combustion and biomass burning.

- *Nitrous Oxide (N2O).* Concentrations of N2O also began to increase at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is also commonly used as an aerosol spray propellant.

- *Chlorofluorocarbons (CFC).* CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C2H6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

- *Hydrofluorocarbons (HFC).* HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF3), HFC-134a (CF3CH2F), and HFC-152a (CH3CHF2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade and used for applications such as automobile air conditioners and refrigerants.

- *Perfluorocarbons (PFC).* PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF4) and hexafluoroethane (C2F6). Concentrations of CF4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

- *Sulfur Hexafluoride (SF6).* SF6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO2. Concentrations in the 1990s where about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

As indicated in Table 3-3, the project's operational CO_2E emissions are estimated to be 1,600.51 $MTCO_2E$, which is below the aforementioned thresholds. The project's construction would result in a generation of 192.66 $MTCO_2E$ per year. When amortized over a 30-year period, these emissions decrease to 6.42 $MTCO_2E$ per year. These amortized construction emissions were added to the project's operational emissions to calculate the project's true GHG emissions. As shown in the table, the project's total operational emissions would be 1,606.93 $MTCO_2E$ per year, which is still below the threshold of 100,000 $MTCO_2E$ per year for residential projects. The GHG emissions estimates reflect what a 136-unit subdivision of the same location and description would generate once fully operational. The type of activities that may be undertaken once the project is operational have been predicted and accounted for in the model for the selected land use type. As a result, the potential impacts are considered to be less than significant.

Table 3-4
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (tons/year)			
	CO_2	CH_4	N_2O	CO_2E
Long-Term – Area Emissions	119.74	0.07	--	123.65
Long-Term - Energy Emissions	357.20	0.01	--	358.79
Long-Term - Mobile Emissions	1,027.85	0.05	--	1,029.24
Long-Term – Waste Emissions	19.30	1.14	--	47.83
Long-Term – Water Emissions	35.34	0.17	--	40.97
Long-Term - Total Emissions	1,559.45	1.46	0.0	1,600.51
Total Construction Emissions	191.40	0.05	0.00	192.66
Construction Emissions Amortized Over 30 Years				6.42 $MTCO_2E$
Total Operational and Amortized Construction Emissions				1,606.93 $MTCO_2E$
Significance Threshold				**100,000 $MTCO_2E$**

Source: CalEEMod.V.2016.3.2

Furthermore, as mentioned in Section 3.17, Transportation, the projected vehicle trips to and from the site will not be significant given the proposed use is a residential development. As a result, the potential impacts are considered to be less than significant.

B. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases? ● Less than Significant Impact.*

The San Bernardino County Transit Authority (SBCTA) authorized the preparation of a county-wide Regional Greenhouse Gas Reduction Plan. This plan was completed and finalized in March of 2014. The plan contains multiple reduction measures that would be effective in reducing GHG emissions throughout the SBCTA region.

- Integrate state, regional, and local sustainable community/smart growth principles into the development and entitlement process;
- Develop a system of trails and corridors that facilitates and encourages bicycling and walking;
- Require new development to provide transit facilities, such as bus shelters, transit bay and turnouts, as necessary;
- Require the future development of community-wide servicing facilities to be sites in transit-ready areas that can be served and made accessible by public transit;
- Provide development-related incentives for projects that promote transit use;
- Designate and maintain a network of City truck routes that provide for the effective transport of goods while minimizing negative impacts on local circulation and noise sensitive land uses;
- Transition City Fleet to low emission/fuel efficient vehicles while minimizing negative impacts on local circulation and noise sensitive land uses;
- Encourage Carpooling; and,
- Work with the regional transit provider to provide shade, weather protection, seating and lighting at all stops;

The project is a proposal to construct 136 single-family units within a 26.5-acre undeveloped lot located in the southern portion of the City of Adelanto. Much of the City is undeveloped and the Victor Valley/Antelope Valley areas do not currently support the level of density located south of the San Gabriel Mountains and San Bernardino Mountains. Although the site is bounded on all sides by development, many of the parcels in the nearby areas are undeveloped. The lack of development in the immediate area may preclude residents from obtaining employment or commercial services within City boundaries, thus compelling residents to travel outside of City boundaries for employment and commercial services. The size of the project (136 units) as well as the project site's location in a semi-rural environment are two factors that may exacerbate Vehicle Miles Travelled (VMT). It is important to note that the California Department of Transportation as well as the Counties of Los Angeles and San Bernardino are engaged in an effort to construct a multi-modal transportation corridor consisting of public transit, a new freeway, and bicycle lanes known as the High Desert Corridor (HDC). The aforementioned regional program will reduce potential GHG emissions related to excessive VMTs to levels that are less than significant.

CUMULATIVE IMPACTS

None of the related projects are located within one mile of the proposed project site. Furthermore, the combined daily GHG emissions for all of the related projects will still be below the MDAQMD's established thresholds of 100,000 MTCO2 per day. As a result, the cumulative GHG impacts will be less than significant.

MITIGATION MEASURES

The analysis of potential impacts related to greenhouse gas emissions indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.9 HAZARDS & HAZARDOUS MATERIALS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✖	
B. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✖	
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?				✖
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?				✖
E. Would the project for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✖
F. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✖
G. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ● Less than Significant Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[64]

The proposed project's construction would require the use of diesel fuel to power the construction equipment. The diesel fuel would be properly sealed in tanks and would be transported to the site by truck. Other hazardous materials that would be used on-site during the project's construction phase include, but

[64] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

are not limited to, gasoline, solvents, architectural coatings (paint), fertilizers, and equipment lubricants. The project site is not located on the California Department of Toxic Substances Control's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List).[65] In addition, the project site is not identified on any Leaking Underground Storage Tank database (LUST).[66] A search through the California Department of Toxic Substances Control's Envirostor database indicated that the project site was not included on any Federal or State clean up or Superfund lists.[67]

The United States Environmental Protection Agency's multi-system search was consulted to determine whether the project site is identified on any Federal Brownfield list; Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List; Federal Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal (TSD) Facilities List; and/or Federal RCRA Generators List. The project site was not identified on any of the aforementioned lists.[68] Since the project site is not listed on any of the aforementioned databases, the likelihood of encountering contamination or other environmental concerns (leaking storage tanks, transformers, etc.) during the project's construction phase is slim. Due to the residential nature of the proposed project (a 107-unit residential development), no hazardous materials beyond what is typically used in a household setting for routine cleaning and maintenance would be used once the project is occupied. As a result, the potential impacts are considered to be less than significant and no mitigation is required.

B. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ● Less than Significant Impact.*

The project's construction would require the use of diesel fuel to power the construction equipment. The diesel fuel would be properly sealed in tanks and would be transported to the site by truck. Other hazardous materials that would be used on-site during the project's construction phase include, but are not limited to, gasoline, solvents, architectural coatings, and equipment lubricants. As stated previously, the project site is not identified on the California Department of Toxic Substances Control's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List); the Leaking Underground Storage Tank database (LUST); the California Department of Toxic Substances Control's Envirostor database; or the United States EPA Envirofacts database. Since the project site is not listed on any of the aforementioned databases, the likelihood of encountering contamination or other environmental concerns (leaking storage tanks, transformers, etc.) during the project's construction phase is slim.

Once the residential units are occupied, the project is not likely to create a hazard involving the accidental release of hazardous materials into the environment due to the nature of the proposed project (a 136-unit development). No hazardous materials beyond what is typically used in a household setting for routine cleaning and maintenance would be used once the project is occupied. As a result, the potential impacts are considered to be less than significant and no mitigation is required.

[65] CalEPA. *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). http://www.dtsc.ca.gov.*

[66] CalEPA. *Envirostor. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=adelanto.*

[67] Ibid.

[68] United States Environmental Protection Agency. *Multisystem Search*. Site accessed December 22, 2020.

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? ● No Impact.*

There are no schools located within one-quarter of a mile from the project site. The nearest school to the project site is Westside Park Elementary School, which is located approximately 4,165 feet southeast of the project site.[69] As a result, the proposed project will not create a hazard to any local school and no impacts are anticipated.

D. *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ● No Impact.*

Government Code Section 65962.5 refers to the Hazardous Waste and Substances Site List, commonly known as the Cortese List. The Cortese List is a planning document used by the State and other local agencies to comply with CEQA requirements that require the provision of information regarding the location of hazardous materials release sites. A search was conducted through the California Department of Toxic Substances Control Envirostor website to identify whether the project site is listed in the database as a Cortese site. The project site is not identified as a Cortese site.[32] Therefore, no impacts will occur.

E. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ● No Impact.*

The project site is not located within an airport land use plan for a public airport or public use airport.[70] The nearest airport to the City is the Southern California Logistics Airport that is located approximately 2.36 miles east of the project site.[71] The project will not introduce a structure that will interfere with the approach and take off of airplanes utilizing any regional airports. As a result, no impacts related to this issue will occur

F. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ● No Impact.*

At no time will either Vintage Road, Chamberlaine Road, or Stevens Street be completely closed to traffic during the proposed project's construction. Vintage Road will undergo significant reconstruction as part of the proposed project's implementation. In addition, all construction staging must occur on-site. As a result, no impacts are associated with the proposed project's implementation.

[69] Google Earth. Website accessed October 1, 2020.

[32] CalEPA. *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*.

[70] Toll-Free Airline. *Los Angeles County Public and Private Airports, California.* http://www.tollfreeairline.com/california/losangeles.htm.

[71] Google Earth. Website accessed October 1, 2020.

G. *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? ● No Impact.*

The project site is not located within a "very high fire hazard severity zone."[33] As a result, no impacts will result.

CUMULATIVE IMPACTS

The analysis determined that the site's future development will not result in any impacts on hazards and hazardous materials. Such impacts are typically site specific. The analysis herein determined that the implementation of the proposed project would not result in any significant adverse impacts related to hazards and/or hazardous materials with the implementation of the required mitigation measures. As a result, no cumulative impacts related to hazards or hazardous materials will result from the proposed project's implementation.

MITIGATION MEASURES

The analysis of potential impacts related to hazards and hazardous materials indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

[33] CalFire. *Very High Fire Hazard Severity Zone Map for SW San Bernardino County*. http://frap.fire.ca.gov/webdata/maps/san_bernardino_sw/

3.10 HYDROLOGY & WATER QUALITY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant - Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			✖	
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?			✖	
C. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; 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?			✖	
D. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?				✖
E. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? ● Less than Significant Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units will consist of single-level units and include an enclosed two-car garage. The project will also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[72] The project Applicant will be required to adhere to Chapter 17.93 - Erosion and Sediment Control, of the municipal code regulates erosion and sediment control. The project Applicant will be required to adhere to the regulations outlined in Section 17.93.050 – Soil Erosion and Sediment Control Plan. These regulations are as follows:

- No land clearing or grading other than those activities listed as exemptions by this chapter or as determined by the Director of Public Works shall occur unless said land clearing or grading is in

[72] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

compliance with an approved Soil Erosion and Sediment Control Plan and/or Permit issued in accordance with the provisions of this chapter.

- A Soil Erosion and Sediment Control Plan shall be submitted and approved in accordance with the provisions of this chapter prior to the issuance of building permits, soil erosion and sediment control permits, grading permits or any other permit where, in the opinion of the Director of Public Works, erosion can reasonably be expected to occur.

- Soil Erosion and Sediment Control Plans shall include the measures required by this chapter. Additional measures or modifications of proposed measures may be required by the Director of Public Works prior to the approval of a Soil Erosion and Sediment Control Plan.

- The Director of Public Works shall specify the application requirement for Soil Erosion and Sediment Control Plans and Permits including, but not limited to: requirements for the submittal of plans and supporting data as required by the Director of Public Works to accompany applications for Soil Erosion and Sediment Control Plans and/or Permits; licensing and/or certification requirements for those preparing Soil Erosion and Sediment control Plan and/or Permit submittal; and, the incorporation and coordination of Soil Erosion Control Plans and/or Permits with other plan requirements.

- If in the Director of Public Works' sole discretion, he/she determines that no land disturbance will take place, the applicant shall not be required to include a Soil Erosion and Sediment control Plan and/or Permit. Such activities may include, but are not limited to: a change of use permits where there would be no expansion of land-disturbing activities and construction within an existing structure.

The project Applicant will also be required to conform to Section 17.93.060 – Runoff Control of the City's Municipal Code. In addition, stormwater discharges from construction activities that disturb one or more acres, or smaller sites disturbing less than one acre that are part of a common plan of development or sale, are regulated under the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program. Prior to the start of construction, construction operators must obtain coverage under a NPDES permit, which is administered by the State. In order to obtain an NPDES permit, the project Applicant must prepare a Stormwater Pollution Prevention Plan (SWPPP). The County has identified sample construction Best Management Practices (BMPs) that may be included in the mandatory SWPPP. These construction BMPs are as follows: [73]

- *Stockpiling of Soil.* County Ordinance requires operators to preserve native topsoil on-site unless infeasible and protect all soil storage piles from run-on and runoff. For smaller stockpiles, covering the entire pile with a tarp may be sufficient.

- *Protecting Construction Materials from Run-On and Runoff*. At the end of every workday and during precipitation events, contractors must provide cover for materials that could leach pollutants.

[73] San Bernardino County. *Erosion Control and Pollution Prevention for General Construction Sites*. http://www.sbcounty.gov/Uploads/lus/BandS/PreConstErosionControl/Erosion_Control_Flyer.pdf

- *Designating Waste Disposal Areas*. Clearly identify separate waste disposal areas on-site for hazardous waste, construction waste, and domestic waste by designating with signage, and protect from run-on and runoff.

- *Installing Perimeter Controls on Downhill Lot Line*. Install perimeter controls such as sediment filter logs or silt fences around the downhill boundaries of your site.

- *Maintaining a Stabilized Exit Pad*. Minimize sediment track-out from vehicles exiting your site by maintaining an exit pad made of crushed rock spread over geotextile fabric. If sediment track-out occurs, remove deposited sediment by the end of the same work day.

The use of construction Best Management Practices (BMPs) identified in the mandatory SWPPP will prevent soil erosion and the discharge of sediment into the local storm drains during the project's construction phase. As a result, the construction impacts will be less than significant. Once constructed, the project will not introduce polluted runoff into the existing storm drain system. In addition, the project will not create excess runoff that will exceed the capacity of the existing storm water drainage system. Currently, the entire project site is covered over in pervious surfaces and the stormwater runoff either percolates into the ground or is discharged off-site. Following the proposed project's construction, the amounts of pervious surfaces will be reduced. In the absence of mitigation, the new impervious surfaces (buildings, internal driveways, parking areas, etc.) that would be constructed may result in debris, leaves, soils, oil/grease, and other pollutants. As a result, the project Applicant will construct a stormwater retention basin in the northern portion of the project site. Runoff generated on-site will be conveyed this retention basin where stormwater runoff will percolate into the ground, resulting the slow and controlled discharge of runoff into the below ground. As a result, the potential impacts are considered to be less than significant.

B. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ● Less than Significant Impact.*

The grading and trenching that would be undertaken to accommodate the building footings, utility lines, and other underground infrastructure would not extend to depths required to encounter groundwater. Therefore, no direct construction related impacts to groundwater supplies, or groundwater recharge activities would occur. The proposed units would be connected to the City's water lines and would not result in a direct decrease in underlying groundwater supplies. Furthermore, the construction and post-construction BMPs will filter out contaminants of concern from excess runoff, thereby preventing the contamination of local groundwater. In addition, the proposed retention basin would facilitate groundwater recharge. As a result, the impacts are anticipated to be less than significant.

C. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; 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's construction will be restricted to the designated project site and the project will not alter the course of any stream or river that would lead to on- or off-site siltation or erosion. The project's construction would be restricted to the site and would not alter the course of any stream or channel or river that would lead to on- or off-site siltation or erosion. As a result, the potential impacts are considered to be less than significant.

D. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? ● No Impact.*

According to the Federal Emergency Management Agency (FEMA) flood insurance maps obtained for the City of Adelanto, the proposed project site is located in Zone X.[34] Thus, properties located in Zone X are not located within a 100-year flood plain. The proposed project site is not located in an area that is subject to inundation by seiche or tsunami. In addition, the project site is located inland approximately 72 miles from the Pacific Ocean and the project site would not be exposed to the effects of a tsunami.[74] As a result, the potential impacts will be less than significant. As a result, no impacts are anticipated.

E. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ● No Impact.*

The proposed project is required to be in compliance with Chapter 17.93 the City of Adelanto Municipal Code. Chapter 17.93 of the City of Adelanto Municipal Code is responsible for implementing the NPDES and MS4 stormwater runoff requirements. In addition, the project's operation will not interfere with any groundwater management or recharge plan because there are no active groundwater management recharge activities on-site or in the vicinity. As a result, no impacts are anticipated.

CUMULATIVE IMPACTS

The potential cumulative impacts on hydrology are site-specific. Furthermore, the analysis determined that the proposed project would not result in any impacts on mineral resources. No mineral resources or extraction activities are located within the project site boundaries nor are any such resources found within the boundaries of the related projects. As a result, no cumulative impacts will occur.

MITIGATION MEASURES

As indicated previously, hydrological characteristics will not substantially change as a result of the proposed project. As a result, no mitigation is required.

[34] Federal Emergency Management Agency. *Flood Insurance Rate Mapping Program*. 2020.

[74] Google Earth. Website accessed October 1, 2020.

3.11 LAND USE & PLANNING

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project physically divide an established community?				✖
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?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project physically divide an established community? ● No Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[75] The land uses and development located in the vicinity of the proposed project are outlined below:

- *North of the project site:* The parcels located to the north of the site is vacant and undeveloped. This area is zoned as Single Family Residential (R-S1) with Single Family Residential (R-S5) zone land usage being located further north.[76]

- *West of the project site:* The future Raccoon Avenue right-of-way (currently and unimproved roadway) extends along the project site's westerly side. Further west, the property is undeveloped. These properties are zoned Desert living (DL-2.5).[77]

- *South of the project site:* Chamberlaine Way extends along the project site's southerly side. Undeveloped land is located further south, south of this roadway. These properties are zoned Desert living (DL-2.5).[78]

- *East of the project site:* The site's boundaries are irregular along the east side. Undeveloped land is found in some areas while in the northeast portion the Stevens Street right-of-way serves as the project boundary. A residential subdivision occupies the properties located to the east of Stevens

[75] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[76] Google Maps and City of Adelanto Zoning Map. Website accessed on September 30, 2021.

[77] Google Maps and City of Adelanto Zoning Map. Website accessed on December 4, 2021.

[78] Ibid.

Street. The properties located to the west of Stevens Street are zoned Desert living (DL-2.5) while the properties located to the west of Stevens Street are zoned Single-Family Residential (R-S1).[79]

The site is located within an area zoned for residential development. The site is currently zoned as *Single Family Residential (R-S1)* though it will require a zone change to be *Single Family Residential (R-S5)*. An aerial photograph of the project site and the surrounding area is provided in Exhibit 2-4.

This issue is specifically concerned with the expansion of an inconsistent land use into an established neighborhood. The proposed project will be confined within the project site's boundaries. The land use and zoning designations applicable to the site and the surrounding area are shown in in Exhibit 3-4. The granting of the requested entitlements and subsequent construction of the proposed project will not result in any expansion of the use beyond the current boundaries. As a result, the project will not lead to any division of an existing established neighborhood and no impacts will occur.

B. *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? ● No Impact.*

The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required. The project site's zoning is shown in Exhibit 3-6. The project's implementation will require the approval of a Tentative Tract Map (TTM No. 20507) to subdivide the lot. No general plan amendment though a zone change will be required. Table 3-4 depicts the proposed project's conformity with the City's R-1 zoning standards.

Table 3-5
The Project Conformity with the City's Zoning Standards

Description	City Requirements	Project Element	Conforms?
Minimum Lot Size	5,000 sq. ft.	5,000 sq. ft.	Yes
Maximum Permitted Density	5 du/acre	5 du/acre	Yes
Minimum Lot Width	50 ft.	50 ft.	Yes
Minimum Lot Depth	100 ft.	100 ft.	Yes
Maximum Height	35 ft. and two stories	One story	Yes
Minimum Useable Open Space	2,000 sq. ft. /unit	At least 2,000 ft.	Yes

Source: City of Adelanto Municipal Code

As shown in the table, the project will conform to the City's development standards established for the R-1 zone. Therefore, no significant adverse impacts will occur upon implementation of the proposed project.

[79] Google Maps and City of Adelanto Zoning Map. Website accessed on December 4, 2021.

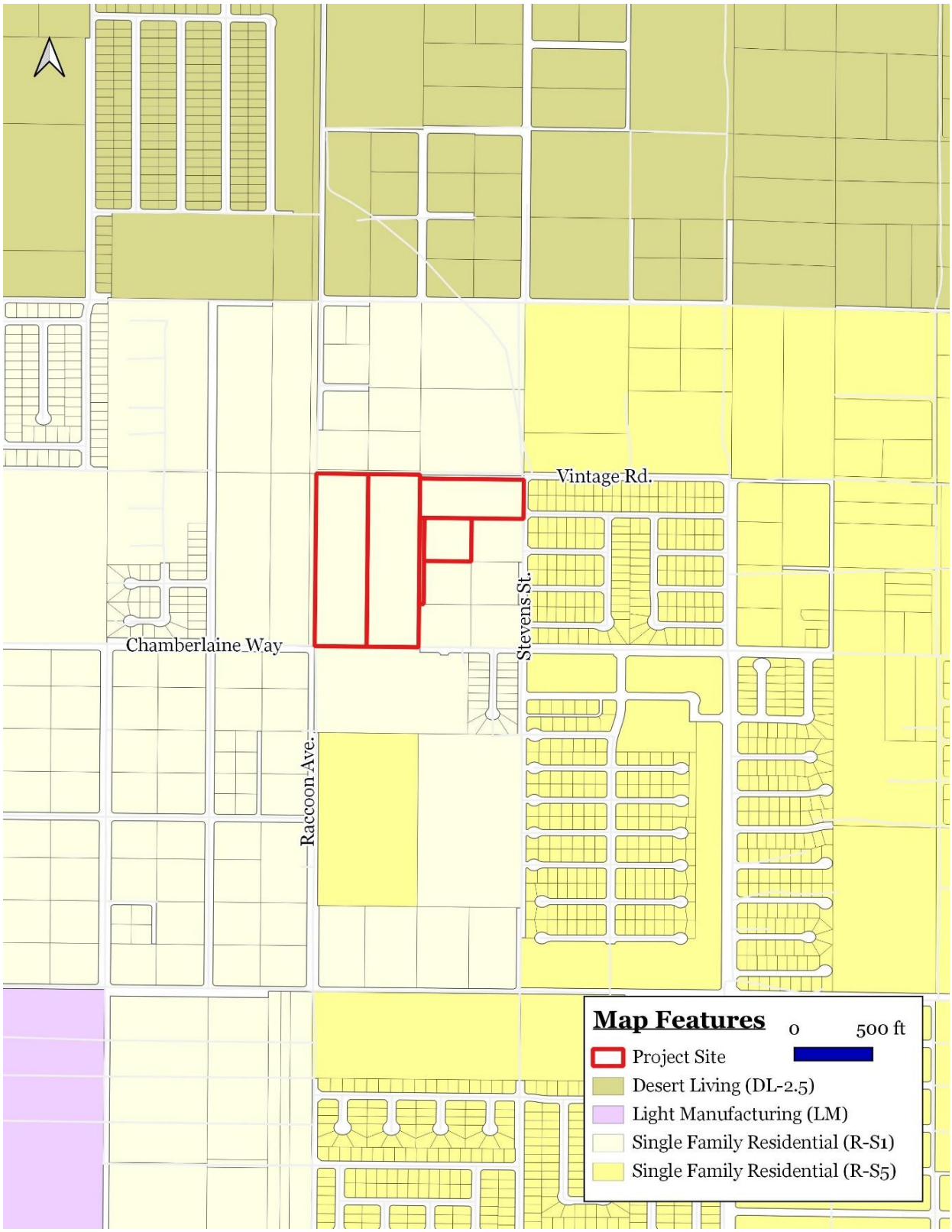

EXHIBIT 3-6
LAND USE AND ZONING MAP
SOURCE: CITY OF ADELANTO

CUMULATIVE IMPACTS

The potential cumulative impacts with respect to land use are site-specific. The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. This proposed project would require a tentative tract map (TTM 20504) and a land development plan (LDP 21-28). The project site is located within the single-family residential zoning district though the project site is currently undeveloped though it has been disturbed by off-road vehicles. The proposed project would consist of 75 single-family lots. In addition, there would be two lots that would be reserved for open space for use as storm water run-off retention and recreation. Primary vehicular access would be provided by roadway connections with Chamberlaine Way and Rhode Island Street. The applicable zoning designation is Single Family Residential (R-S1). This related project is located approximately 2,300 feet to the east of the proposed project site. This related project will not require a zone change or general plan amendment. As a result, no cumulative land use impacts will result from the proposed project's implementation.

MITIGATION MEASURES

The analysis determined that no impacts on land use and planning would result upon the implementation of the proposed project. As a result, no mitigation measures are required.

3.12 MINERAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				✖
B. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ● No Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[80]

A review of California Division of Oil, Gas, and Geothermal Resources well finder indicates that there are no wells located in the vicinity of the project site.[36] The Surface Mining and Reclamation Act of 1975 (SMARA) has developed mineral land classification maps and reports to assist in the protection and development of mineral resources. According to the SMARA, the following four mineral land use classifications are identified:

- *Mineral Resource Zone 1 (MRZ-1):* This land use classification refers to areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

- *Mineral Resource Zone 2 (MRZ-2):* This land use classification refers to areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.

- *Mineral Resource Zone 3 (MRZ-3):* This land use classification refers to areas where the significance of mineral deposits cannot be evaluated from the available data. Hilly or mountainous areas underlain by sedimentary, metamorphic, or igneous rock types and lowland areas underlain by alluvial wash or fan material are often included in this category. Additional information about

[80] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[36] California, State of. Department of Conservation. California *Oil, Gas, and Geothermal Resources Well Finder*.

the quality of material in these areas could either upgrade the classification to MRZ-2 or downgraded it to MRZ-1.

- *Mineral Resource Zone 4 (MRZ-4):* This land use classification refers to areas where available information is inadequate for assignment to any other mineral resource zone.

The project site is not located in a Significant Mineral Aggregate Resource Area (SMARA) nor is it located in an area with active mineral extraction activities. A review of California Division of Oil, Gas, and Geothermal Resources well finder indicates that there are no wells located in the vicinity of the project site.[81] The project site is located within Mineral Resource Zone (MRZ-3A), which means there may be significant mineral resources present.[82] As indicated previously, the site develop and there are no active mineral extraction activities occurring on-site or in the adjacent properties. As a result, no impacts to mineral resources will occur.

B. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ● No Impact.*

As previously mentioned, no mineral, oil, or energy extraction and/or generation activities are located within the project site. Moreover, the proposed project will not interfere with any resource extraction activity. Therefore, no impacts will result from the implementation of the proposed project.

CUMULATIVE IMPACTS

The potential impacts on mineral resources are site-specific. Furthermore, the analysis determined that the proposed project would not result in any impacts on mineral resources. No mineral resources or extraction activities are located within the project site boundaries nor are any such resources found within the boundaries of the related projects. As a result, no cumulative impacts will occur.

MITIGATION MEASURES

The analysis of potential impacts related to mineral resources indicated that no significant adverse impacts would result from the approval of the proposed project and its subsequent implementation. As a result, no mitigation measures are required.

[81] Ibid.

[82] California Department of Conservation. *Mineral Land Classification Map for the Adelanto Quadrangle*. Map accessed April 11, 2019.

3.13 NOISE

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✖	
B. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?			✖	
C. For a project located within the vicinity of a private airstrip or- an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ● Less than Significant Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[83]

The most commonly used unit for measuring the level of sound is the decibel (dB). Zero on the decibel scale represents the lowest limit of sound that can be heard by humans. The eardrum may rupture at 140 dB (refer to Exhibit 3-5). In general, an increase of between 3.0 dB and 5.0 dB in the ambient noise level is considered to represent the threshold for human sensitivity. In other words, increases in ambient noise levels of 3.0 dB or less are not generally perceptible to persons with average hearing abilities.[38] Future sources of noise generated on-site will include noise from vehicles traveling to and from the project and noise emanating from back-up alarms, air conditioning units, and other equipment. All of the cultivation and manufacture of cannabis products will occur indoors.

[83] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

[38] Pagliarulo, et. al. *The Impact of Noise Pollution,* Chapter 127, 1975.

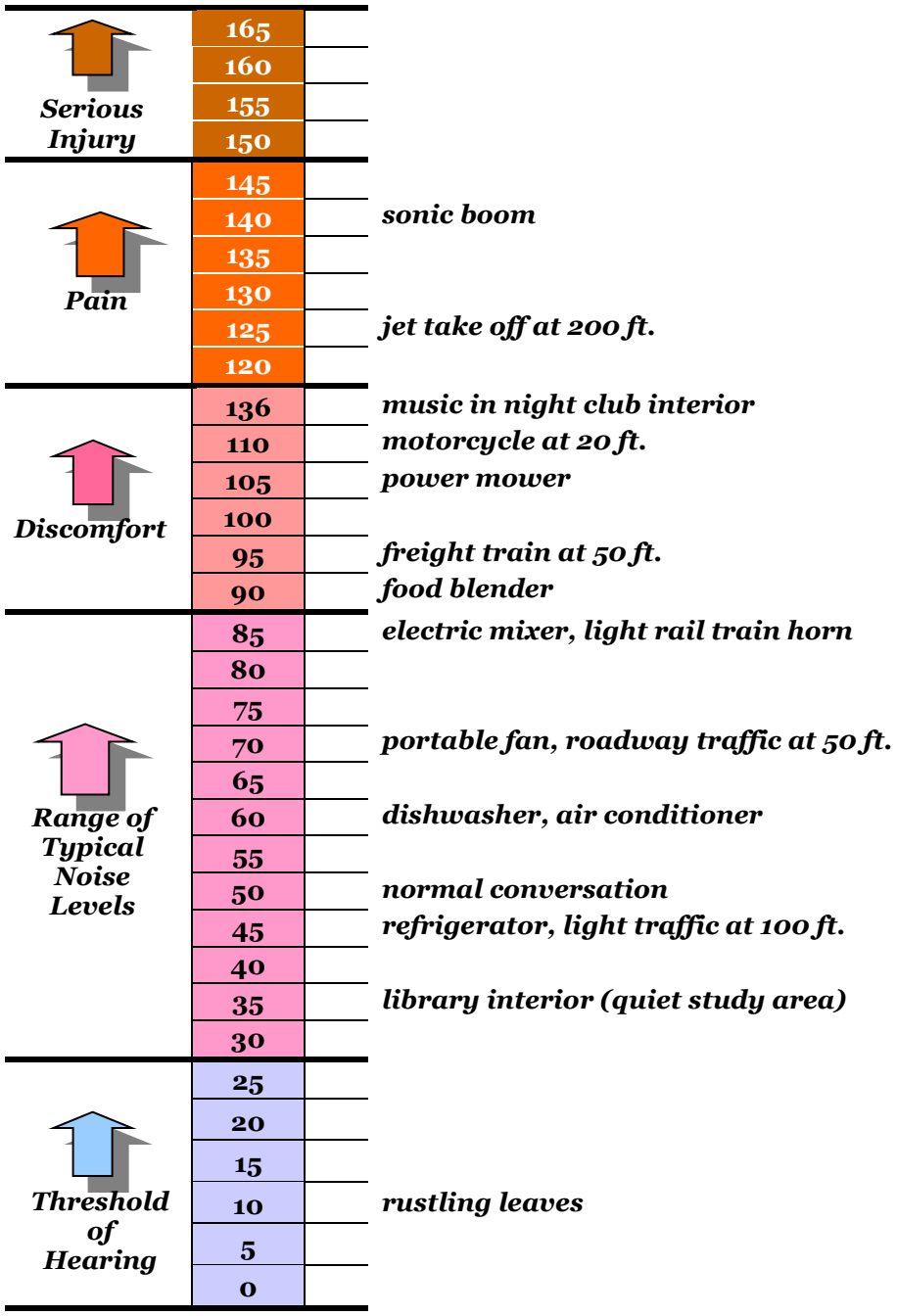

EXHIBIT 3-7
TYPICAL NOISE SOURCES AND LOUDNESS SCALE
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

In addition, the occupancy of the 136 units will not expose surrounding uses to excessive noise since interior noise will be further attenuated by the walls of the housing units. Finally, there are no noise sensitive land uses located in the vicinity of the site. There is a residential subdivision located to the east of Stevens Street. As a result, the proposed project will not expose sensitive receptors to excessive noise levels and the potential impacts are considered to be less than significant. As a result, the impacts will be less than significant.

B. *Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels? ● Less than Significant Impact.*

Once in operation, the proposed project will not significantly raise ground-borne noise levels. Slight increases in ground-borne noise levels could occur during the construction phase. The limited duration of construction activities and the City's construction-related noise control requirements will reduce the potential impacts to levels that are less than significant. Furthermore, there are no sensitive receptors or noise sensitive land uses located near the project site. As a result, the impacts will be less than significant.

C. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ● No Impact.*

The Southern California Logistics Airport is (SCLA) located approximately 2.4 miles northeast of the project site.[84] The project site is not located within the approach or takeoff zones of either of the two runways that are operating at the SCLA.[85] In addition, the project site is not located within the aforementioned airport's designated compatibility review areas.[86] Furthermore, the project site is not located within any 70 Community Noise Equivalent Level (CNEL) contour line boundaries.[87] As a result, the proposed project will not expose people residing or working in the project area to excessive noise levels related to airport uses. As a result, no impacts will occur.

CUMULATIVE IMPACTS

The cumulative noise impacts are site specific. In addition, the analysis determined that the related projects' traffic will not result in a doubling of traffic volumes resulting in a discernable increase in traffic (mobile) noise. All of the related projects' stationary activities will occur indoors and, as a result, the stationary noise impacts will not affect any noise sensitive land uses. As a result, the potential cumulative noise impacts will be less than significant.

MITIGATION MEASURES

The analysis of potential noise impacts indicated that no significant adverse impacts would result from the proposed project's construction and operation. As a result, no mitigation measures are required.

[84] Google Earth. Website accessed September 20, 2020.

[85] Southern California Logistics Airport Near Victorville California. Website accessed on June 15, 2021.

[86] Ibid.

[87] Coffman Associates, Inc. *Comprehensive Land Use Plan – Southern California Logistics Airport – Exhibit 2H*. Report prepared September 2008.

3.14 POPULATION & HOUSING

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✖
B. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? ● No Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project will also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[88]

Growth-inducing impacts are generally associated with the provision of urban services to an undeveloped or rural area. Growth-inducing impacts include the following:

- *New development in an area presently undeveloped and economic factors which may influence development*. The site is currently undeveloped though it has been designated for residential development.
- *Extension of roadways and other transportation facilities*. Future roadway and infrastructure connections will serve the proposed residential development.
- *Extension of infrastructure and other improvements*. The installation of any new utility lines will not lead to subsequent offsite development since these utility connections will serve the site only. At present, there are water or sewer utility lines within the immediate area of the project site. The project's potential utility impacts are analyzed in Section 3.19.
- *Major off-site public projects (treatment plants, etc.)*. The project's increase in demand for utility services can be accommodated without the construction or expansion of landfills, water treatment

[88] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

plants, or wastewater treatment plants. The project's potential utility impacts are further analyzed in Section 3.19.

- *The removal of housing requiring replacement housing elsewhere.* The site does not contain any housing units. As a result, no replacement housing will be required.
- *Additional population growth leading to increased demand for goods and services.* The project will result in a limited increase in employment which can be accommodated by the local labor market. The 136 units will result in a potential population increase of 552 persons.
- *Short-term growth-inducing impacts related to the project's construction.* The project will result in temporary employment during the construction phase.

The proposed project will utilize existing roadways and infrastructure. The existing roads and utility lines will serve the project site only and will not extend into undeveloped areas. The proposed project will not result in any unplanned growth. Therefore, no impacts will result.

B. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? ● No Impact.*

The project site is vacant and unoccupied. The site is located within an area zoned for residential development. The site is currently zoned as *Single Family Residential (R-S1)* though it will require a zone change to be *Single Family Residential (R-S5)*. No housing units will be displaced as a result of the proposed project's implementation. Therefore, no impacts will result.

CUMULATIVE IMPACTS

The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. This proposed project would require a tentative tract map (TTM 20504) and a land development plan (LDP 21-28). The project site is located within the single-family residential zoning district though the project site is currently undeveloped though it has been disturbed by off-road vehicles. The proposed project would consist of 75 single-family lots. The applicable zoning designation is Single Family Residential (R-S1). This related project is located approximately 2,300 feet to the east of the proposed project site. The addition of 75 residential units from the related project together with the 136 units from the proposed project will be beneficial in assisting the City in addressing the local demand for new housing.

MITIGATION MEASURES

The analysis of potential population and housing impacts indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.15 PUBLIC SERVICES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for: fire protection; police protection; schools; parks; or other public facilities?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

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 would cause significant environmental impacts, in* fire protection; police protection; schools; parks; or other public facilities? ● *Less than Significant Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[89]

Fire Department

The City of Adelanto contracts fire protection services with the San Bernardino County Fire Department from two fire stations located within the City limits. The nearest station serving the project site is Station Number 322 located at 10370 Rancho Road. The first response station is Station No. 322.[90] The Fire Department currently reviews all new development plans. The proposed project will be required to conform to all fire protection and prevention requirements, including, but not limited to, building setbacks, emergency access, and fire flow (or the flow rate of water that is available for extinguishing fires). The proposed project would only place an incremental demand on fire services since the project will be constructed with strict adherence to all pertinent building and fire codes. In addition, the proposed project would be required to implement all pertinent Fire Code Standards including the installation of fire hydrants and sprinkler systems inside the buildings. Furthermore, the project will be reviewed by City and County Fire officials to ensure adequate fire service and safety as a result of project implementation. As a result, the potential impacts to fire protection services will be less than significant.

[89] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

[90] San Bernardino Fire Department. Website accessed June 15, 2021.

Law Enforcement

Law enforcement services within the City are provided by the San Bernardino County Sheriff's Department which serves the community from one police station. The Department operates out of a facility located at 11613 Bartlett Avenue.[91] The proposed project will not be open or be accessible to the general public. The proposed residential development will also be required to comply with the County and City security requirements. As a result, the potential impacts to law enforcement services will be less than significant.

Schools

The City of Adelanto is served by two school districts: Adelanto Elementary School District, which provides Elementary and Middle School services throughout the city, and the Victor Valley Union High School District, which owns and operates Adelanto High School. The proposed project would be responsible to contribute development impact fees to the Victor Valley Union High School District (VVUHSD. As a result, the impacts on school-related services will be less than significant. According to the 2010 Census, a total of 36% of the City's population is school aged (5 years of age to 18 years of age). As indicated in the previous section, the development's projected to increase the City's population by 564 residents. Using the Citywide Census data, there is a potential for 200 students. The project Applicant will be required to pay all required development impact fees mandated under Chapter 14.36 – Development Impact Fees of the City of Adelanto Municipal Code. Pursuant to SB-50, payment of fees to the applicable school district is considered full mitigation for project-related impacts. The proposed project's school enrollment impacts will be off-set by the school fees that will be paid by the developer and as a result, the impacts will be less than significant.

Recreational Services

The nearest public park to the project site is the Westside Park which is located approximately one mile to the southeast of the project site. The project Applicant will be required to pay in-lieu park fees required by the City. As a result, less than significant impacts to parks and recreational services will occur

Governmental Services

The proposed project will not create direct local population growth which could potentially create demand for other governmental service. As a result, less than significant impacts will result from the proposed project's implementation.

[91] San Bernardino Sheriff's Department. Website accessed on June 15, 2021.

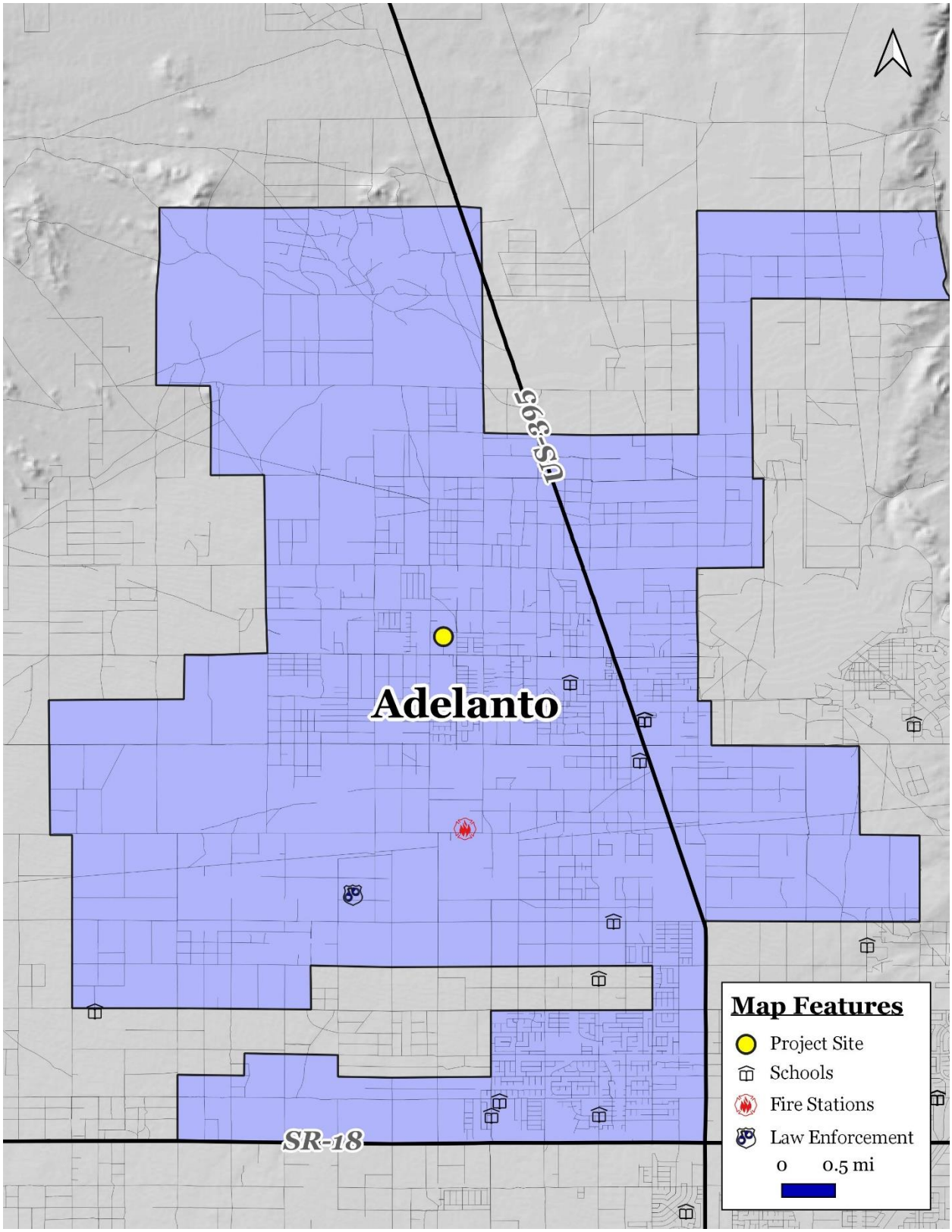

EXHIBIT 3-8
PUBLIC SERVICES MAP
SOURCE: CITY OF ADELANTO

CUMULATIVE IMPACTS

The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. This proposed project would require a tentative tract map (TTM 20504) and a land development plan (LDP 21-28). The project site is located within the single-family residential zoning district though the project site is currently undeveloped though it has been disturbed by off-road vehicles. The proposed project would consist of 75 single-family lots. This related project is located approximately 2,300 feet to the east of the proposed project site. The addition of 75 residential units from the related project together with the 136 units from the proposed project will be beneficial in assisting the City in addressing the local demand for new housing.

MITIGATION MEASURES

The analysis of public service impacts indicated that no significant adverse impacts are anticipated, and no mitigation is required with the implementation of the proposed project.

3.16 RECREATION

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				✖
B. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* ● *No Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[92] As indicated previously the proposed project may result in the addition of 417 new residents. Therefore, the project Applicant will be required to pay Quimby Act Parkland and Open Space acquisition fees mandated under Chapter 14.36 – Development Impact Fees of the City of Adelanto Municipal Code. The payment of all required development fees will ensure that impacts to parks, recreation, and community services remain at levels that are less than significant.

B. *Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* ● *No Impact.*

The nearest public park to the project site is the Westside Park which is located approximately one mile to the southeast of the project site. The project Applicant will be required to pay in-lieu park fees required by the City. No such facilities are located adjacent to the project site and, as a result, no impacts will occur.

CUMULATIVE IMPACTS

The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. This proposed project would require a tentative tract map (TTM 20504) and a land development plan (LDP 21-28). The project site is located within the single-family residential zoning district

[92] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

though the project site is currently undeveloped though it has been disturbed by off-road vehicles. The proposed project would consist of 75 single-family lots. This related project is located approximately 2,300 feet to the east of the proposed project site. The addition of 75 residential units from the related project together with the 136 units from the proposed project will be beneficial in assisting the City in addressing the local demand for new housing.

MITIGATION MEASURES

The analysis of potential impacts related to parks and recreation indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.17 TRANSPORTATION

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			✖	
B. Conflict or be inconsistent with CEQA Guidelines §15064.3 subdivision (b)?				✖
C. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✖	
D. Would the project result in inadequate emergency access?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

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.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project will also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[93]

Access to the proposed development would be provided by connection with Stevens Road and Chamberlaine Way. Access to the individual units would be provided by the internal, 60-foot wide streets.[94] Regional access to the project site is provided by three area highways: Interstate 15 (I-15), which extends in a southwest to northeast orientation approximately three miles east of the City; United States Highway 395 (US-395), which traverses the eastern portion of the City in a northwest to southeast orientation; and State Highway 18 (SH-18), which traverses the southern portion of the City in an east to west orientation.[95]

The trip generation for the proposed project is based on the trip generation rates for Land Use 210 – "Single-Family Detached Housing" included in the Institute of Transportation Engineers' (ITE) *Trip Generation*, 10th Edition. Table 3-7 shows the calculation of the project trip generation for the AM peak hour, PM peak

[93] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[94] Ibid.

[95] Google Earth. Website accessed December 3, 2021.

hour, and weekday. As shown in Table 3-12, the proposed project is forecast to generate 101 total trips in the AM peak hour, 135 total trips in the PM peak hour, and 1,283 daily trips.[96]

Table 3-6
Project Trip Generation

Land Use	Units	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single Family	ITE Code 210	25%	75%	0.74	63%	37%	0.99	9.44
136 units		25	75	101	85	50	135	1,283 trip ends

At the present time, a traditional vehicle mile travelled (VMT) analysis for the Adelanto area would not be readily applicable given the unique development pattens and characteristics common to this portion of the San Bernardino County. Unlike the urbanized coastal areas where housing costs are high, local residents came to this area because of affordable housing. These residents in turn, often commute long distances into the urbanized areas of Riverside, San Bernardino, Orange, and Los Angeles Counties for their places of employment. Table 3-8 include the SCAG population and employment projections for the City of Adelanto and the adjacent cities between 2020 and 2035. As indicated in this table Adelanto's population will increase by 24,000 persons (64.6%) while the number jobs in the City are projected to increase by 2,300 (44.2%).

Table 3-7
Population/Employment Projections for the Adelanto Area 2020 to 2035

Jurisdiction	Population			Employment		
	2020	2035	Δ Change	2020	2035	Δ Change
Adelanto	37,600	61,900	24,300 (64.6%)	5,200	7,500	2,300 (44.2%)
Apple Valley	73,400	95,300	21,900 (29.8%)	15,400	26,500	11,100 (72.1%)
Hesperia	98,500	124,700	26,200 (26.6%)	19,700	27,300	7,600 (38.6%)
Victorville	123,300	171,100	47,800 (38.8%)	37,600	50,900	13,300 (35.4%)
Total	332,800	453,000	120,200 (36.1%)	77,900	112,200	34,300 (44.0%)
San Bern. County	2,197,400	2,637,400	440,000 (20.0%)	789,500	998,000	208,500 (XX%)

Source: Southern California Association of Governments

The jobs-housing balance is the ratio of jobs to housing in a given geographic area. If a jobs-housing balance is too high, adequate housing may be unaffordable or unavailable to workers that live in that geographic area resulting in housing affordability issues and traffic congestion from commuting workers. If the jobs-housing balance is too low, this may indicate inadequate job availability for area residents. According to the Building Industry Association (BIA), experts say that a healthy jobs-housing balance is 1.5 or one full time job and one part time job per housing unit. For purposes of the analysis, the SGAGs growth RTP growth projections for households were substitutes for housing units. As a result, the housing "in-balance" may actually be greater than that shown in Table 3-9.

[96] Google Earth. Website accessed December 3, 2021.

Table 3-8
Jobs/Housing Balance for the Adelanto Area 2020 to 2035

Jurisdiction	Jobs/Housing Balance 2020			Jobs/Housing Balance 2035		
	Employment	Household	J/H Ratio	Employment	Household	J/H Ratio
Adelanto	5,200	10,100	0.51	7,500	16,000	0.47
Apple Valley	15,400	26,500	0.58	26,500	33,000	0.80
Hesperia	19,700	30,400	0.64	27,300	37,600	0.73
Victorville	37,600	37,700	1.00	50,900	51,400	0.99
Total	77,900	104,700	0.74	112,200	138,000	0.81
San Bern. County	789,500	687,100	1.15	998,000	824,600	1.21

Source: Southern California Association of Governments

As is evident in Table 3-9, Adelanto's jobs housing balance is skewed to being housing rich and jobs poor. In other words, to enable the City to maintain an adequate supply of jobs for local residents both to sustain the local economy and to reduce long distance worker commutes and the resulting vehicle miles travelled (VMT), the proposed project will contribute to the area's inventory of affordable housing. The addition of 136 units would have the potential in reducing the VMT by adding new housing opportunities in the Adelanto area. As a result, the impacts would be less than significant.

B. *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)? ● No Impact.*

CEQA Guidelines Section 15064.3 subdivision (b)(2) focuses on impacts that result from certain transportation projects. The proposed project is not a transportation project. As a result, no impacts on this issue will result. CEQA Guidelines Section 15064.3 subdivision (b)(3) and (b)(4) focuses on the evaluation of a project's VMT. As previously mentioned in Subsection A, the proposed project will not create a significant amount of traffic in the surrounding area. As a result, the proposed project will not result in a conflict or be inconsistent with Section 15064.3 subdivision (b) of the CEQA Guidelines and no impacts will occur.

C. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ● Less than Significant Impact.*

Access to the proposed development would be provided by a single connection to Chamberlaine Way and two connections to Vintage Road. Access to the individual units would be provided by a number of internal 60-foot-wide internal streets.[97] These new streets will have a right-of-way width of 60 feet with two travel lanes (36 feet) and a parking lane on each side of the street (12-feet).[98] *Parking*. Each single-family unit would be provided with a two-car garage. Addition parking would also be available in the driveway apron.[99] The project proposes to improve Chamberlaine Way and Vintage Road along its frontages. The ultimate

[97] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507)*. November 3, 2021.

[98] Ibid.

[99] Ibid.

section does not provide a center turn lane but left turning vehicles can use the inside through lane to turn into driveways without impeding through traffic. As a result, less than significant impacts will occur.

D. *Would the project result in inadequate emergency access? ● No Impact.*

The proposed project would not affect emergency access to any adjacent parcels. At no time during construction will the adjacent streets including Koala Road, Joshua Road, and Air Expressway Boulevard be completely closed to traffic. All construction staging must occur on-site. As a result, no impacts are associated with the proposed project's implementation.

CUMULATIVE IMPACTS

The nearest related project is a residential subdivision located south of Chamberlaine Way and west of Rhode Island Street. This proposed project would require a tentative tract map (TTM 20504) and a land development plan (LDP 21-28). The project site is located within the single-family residential zoning district though the project site is currently undeveloped though it has been disturbed by off-road vehicles. The proposed project would consist of 75 single-family lots. This related project is located approximately 2,300 feet to the east of the proposed project site. The 75 units will generate 708 daily trips. Of this total, 524 trips would occur during the AM peak hour and 701 trips would occur during the evening peak hour. The addition of 75 residential units from the related project together with the 136 units from the proposed project will be beneficial in assisting the City in addressing the local demand for new housing.

MITIGATION MEASURES

The analysis of potential impacts related to traffic and circulation indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.18 TRIBAL CULTURAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place?		✖		
B. Would the project cause a substantial adverse change in the significance of an 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) of Public Resource 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 Tribe5020.1(k)?			✖	

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place?, or object with cultural value to a California Native American Tribe, and that is: 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) of Public Resource Code Section 5024.1 In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe? ● Less than Significant Impact with Mitigation.*

The new buildings will be located in the southwestern portion of the City of Adelanto and will consist of 132,077 total site area. The proposed development will be used for cannabis cultivation, manufacturing, and distribution. In addition, 52 standard parking spaces and 6 ADA compliant parking stalls will be provided. The project site is zoned as Manufacturing/Industrial (MI). The proposed project site is located on a 3-acre parcel that is currently vacant and undisturbed. A Tribal Resource is defined in Public Resources Code section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: included or determined to be

eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "non-unique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

Adherence to the standard condition presented in Subsection B under Cultural Resources will minimize potential impacts to levels that are less than significant.

B. *Would the project cause a substantial adverse change in the significance of an 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) of Public Resource 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 Tribe5020.1(k)? ● No Impact.*

The project site is located on recognized Yuhaaviatam/Maarenga'yam (Serrano) ancestral territory. A search of the National Register of Historic Places and the list of California Historical Resources was conducted, and it was determined that no Native historic resources were listed within the City of Adelanto. Since the project's implementation will not impact any Federal, State, or locally designated historic resources, no impacts will occur. Therefore, no significant impacts related to archaeological or historical resources is anticipated, and no further investigations are recommended for the proposed project. As a result, the impacts will be less than significant. Adherence to the standard condition presented in Subsection B under Cultural Resources will minimize potential impacts to levels that are less than significant with adherence to the mitigation measures identified herein (refer to TR-1, TR-2, TR-3, TR-4, TR-5, and TR-6.

CUMULATIVE IMPACTS

The potential environmental impacts related to tribal/cultural resources are site-specific. The analysis determined that the site's future development will not result in any impacts on cultural resources. Such impacts are typical site specific. The cultural resources survey and the analysis indicated that in the event previously undocumented cultural resources are identified during earthmoving activities, a qualified archaeologist should be contacted to assess the nature and significance of the find. The analysis further stated that project-related construction activities shall be diverted from the location of the discovery until

the finding's significance is established. As a result, no cumulative impacts on tribal/cultural resources are anticipated.

MITIGATION MEASURES

The following mitigation measures will be applicable to the proposed project:

TR-1 Prior to the issuance of a grading permit, the Applicant shall provide evidence to the City of Adelanto that a professional archaeologist has been retained to conduct monitoring of all mass grading and trenching activities. The project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during construction. The project Archaeologist, in consultation with the Consulting Native American Tribes, the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) to address the details, timing and responsibility of all archaeological and cultural monitoring activities that will occur on the project site. A Consulting Native American Tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Public Resources Code Section 21080.3.2(b)(I), and includes the Pechanga and Soboba Tribes. Details in the Plan shall include:

Project grading and development scheduling;

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

The protocols and stipulations that the contractor, City, Consulting Native American Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources' evaluation.

TR-2 Prior to the issuance of a grading permit, the Project Applicant shall secure agreements for tribal monitoring. The developer is also required to provide a minimum of 30-days advance notice of all mass grading and trenching activities. The Project Applicant also shall provide the City of Adelanto with copies of any monitoring agreement(s) with the Consulting Native American Tribes. During mass grading and trenching activities, the Native American Tribal Representatives shall have the authority to temporarily halt and redirect all moving activities

in the affected area in the event that suspected archaeological resources are unearthed. If the Native American Tribal Representatives suspect that an archaeological resource may have been unearthed, the Project Archaeologist or the Tribal Representatives shall immediately redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource.

TR-3 If potential tribal cultural resources are uncovered during mass grading and/or excavation activities, the Project Archaeologist shall evaluate the suspected resource in consultation with the Native American Tribal Representatives and the City of Adelanto and shall: make a determination of significance pursuant to Public Resources Code Section 21083.2; and recommend measures to avoid, minimize or mitigate negative effects on the tribal cultural resource. Determinations and recommendations by the Project Archaeologist shall be immediately submitted to the City of Adelanto Planning Division for consideration and implemented as deemed appropriate by the Community Development Director and all Consulting Native American Tribes, as defined in Mitigation Measure TR-I, before any further work commences in the affected area.

3.19 UTILITIES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				✖
B. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			✖	
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?			✖	
D. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✖	
E. Would the project negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals?				✖
F. Would the project comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? ● No Impacts.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units would consist of single-level units and include an enclosed two-car garage. The project would also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[100]

[100] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

There are no existing water or wastewater treatment plants, electric power plants, telecommunications facilities, natural gas facilities, or stormwater drainage infrastructure located on-site or within adjacent parcels. Therefore, the project's implementation will not require the relocation of any of the aforementioned facilities. As a result, no impacts will result.

B. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ● Less than Significant Impact.*

The City of Adelanto Water Department (AWD) provides water service and wastewater service to approximately 27,136 residents of Adelanto. The AWD employs a staff of twelve to manage and maintain the Department and its water resources. The Director of Public Utilities and the five-member Public Utilities Authority are responsible for providing adequate water services to the City. According to the City's 2015 Urban Water Management Plan, the City is projected to have an adequate supply of water to meet the increase in demand. In addition, the City is projected to have enough water to meet demand during a single dry year, and a multiple dry year scenario.[101] The project will provide new water lines below the internal roadways. These water lines will connect to existing water mains located in Chamberlaine Way. Table 3-10, the proposed project is projected to consume approximately 64,872 gallons of water on a daily basis.

Table 3-9
Water Consumption (gals/day)

Use	Unit	Factor	Generation
Single-family Home	136 units	477 gals/dwelling unit	64,872 gals/day
Total	136 units		64,872 gals/day

Source: California Home Building Foundation

The existing water supply facilities and infrastructure will accommodate this additional demand. In addition, the proposed project will be equipped with water efficient fixtures and drought tolerant landscaping will be planted throughout the project site. As a result, the impacts are considered to be less than significant.

C. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ● Less than Significant Impact.*

The City operates a 1.5-million-gallons-per-day activated sludge wastewater treatment facility through an operations and maintenance contract with PERC Water Corporation. In addition to operations, PERC performs routine collection system cleaning, sewage spill response and cleanup, and industrial sewage pretreatment program. The City is currently constructing a 2.5-million-gallons-per-day upgrade that will increase wastewater treatment capabilities to 4.0 million gallons per day and produce treated water that can be used for lawn/public parks irrigation, construction and dust control and other beneficial uses. The project will provide new sewer lines in the internal roadways. These sewer lines will connect to existing

[101] City of Adelanto. *2015 Urban Water Management Plan*. Report dated June 22, 2016.

sewer mains located in Raccoon Road. According to Table 3-11, the proposed project is expected to generate approximately 33,320 gallons of sewage per day. As a result, the impacts are expected to be less than significant.

Table 3-10
Wastewater (Effluent) Generation (gals/day)

Use	Unit	Factor	Generation
Single Family Residential	136 units	245 gallons/unit/day	33,320 gals/day
Total	136 units		33,320 gals/day

Source: Black & Veatch. *Wastewater Collection System Master Plan*. Report dated October 18, 2013

D. *Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ● Less than Significant Impact.*

Residential solid waste collection services are provided by AVCO for disposal into the Salton City Landfill as well as to other Materials Recycling Facilities (MRFs) located throughout San Bernardino County. The proposed project is anticipated to generate approximately 1,632 pounds per day of solid waste (refer to Table 3-12 shown below). As a result, the potential impacts are considered to be less than significant.

Table 3-11
Solid Waste Generation (lbs/day)

Use	Unit	Factor	Generation
Single Family Residential	136 units	12 lbs/unit/day	1,632 lbs/unit/day
Total	136 units		1,632 lbs/unit/day

Source: Blodgett Baylosis Environmental Planning.

E. *Would the project negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals? ● No Impact.*

The proposed project, like all other development in San Bernardino County and the City of Adelanto, will be required to adhere to City and County ordinances with respect to waste reduction and recycling. As a result, no impacts related to State and local statutes governing solid waste are anticipated.

F. *Would the project comply with Federal, State, and local management and reduction statutes and regulations related to solid waste? ● No Impact.*

The proposed project, like all other development in Adelanto and San Bernardino County, will be required to adhere to City and County ordinances with respect to waste reduction and recycling. As a result, no impacts related to State and local statutes governing solid waste are anticipated.

CUMULATIVE IMPACTS

The City of Adelanto Water Department (AWD) provides water service and wastewater service to approximately 27,136 residents of Adelanto. The AWD employs a staff of twelve to manage and maintain the Department and its water resources. The Director of Public Utilities and the five-member Public Utilities Authority are responsible for providing adequate water services to the City. According to the City's 2015 Urban Water Management Plan, the City is projected to have an adequate supply of water to meet the increase in demand. In addition, the City is projected to have enough water to meet demand during a single dry year, and a multiple dry year scenario.[102] The proposed project at total build-out will consume 48,720 gallons of water per day and generate 31,400 gallons of effluent per day. There are existing water and sewer lines located in both Chamberlaine Way and Raccoon Avenue.[103]

MITIGATION MEASURES

The analysis of utilities impacts indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

[102] City of Adelanto. *2015 Urban Water Management Plan*. Report dated June 22, 2016.

[103] City of Adelanto. City of Adelanto Existing Sewer and Water.

3.20 WILDFIRE

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant -Impact with Mitigation	Less Than Significant Impact	No Impact
A. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?				✖
B. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				✖
C. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✖
D. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✖

ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan? ● No Impact.*

The proposed project would involve the development of 136 single-family residential units within a 26.7-acre site. The project site is currently vacant and undeveloped. The residential units will consist of single-level units and include an enclosed two-car garage. The project will also involve the construction of interior streets, curbs and gutters, and storm water catch basins. The project site is currently zoned as Single Family Residential (R-S1) and a zone change to Single Family Residential (R-S5) will be required in addition to the approval of a tentative tract map.[104]

The project site is located in the midst of an urbanized area. Improved surface streets serve the project site and the surrounding area. Furthermore, the proposed project would not involve the closure or alteration of any existing evacuation routes that would be important in the event of a wildfire. At no time during construction will adjacent streets be completely closed to traffic. All construction staging must occur on-

[104] Blue Engineering and Consulting, Inc. (Site Plan Map) and *City of Adelanto Comprehensive Application for Development Review and Land Use Approval (ZC 21-02, LDP 21-29, & TTM 20507).* November 3, 2021.

site. As a result, no impacts will occur.

B. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ● No Impact.*

The project site is located in the midst of an urbanized area. The proposed project may be exposed to particulate emissions generated by wildland fires in the mountains (the site is located approximately 20 miles north and northwest of the San Gabriel and San Bernardino Mountains). However, the potential impacts would not be exclusive to the project site since criteria pollutant emissions from wildland fires may affect the entire City as well as the surrounding cities and unincorporated county areas. As a result, no impacts will occur.

C. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ● No Impact.*

The project site is not located in an area that is classified as a high fire risk severity, and therefore will not require the installation of specialized infrastructure such *as fire roads, fuel breaks, or emergency water sources*. As a result, no impacts will occur.

D. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? ● No Impact.*

There is no risk from wildfire within the project site or the surrounding area given the project site's distance from any area that may be subject to a wildfire event. Therefore, the project will not expose future employees to flooding or landslides facilitated by runoff flowing down barren and charred slopes and no impacts will occur.

CUMULATIVE IMPACTS

The analysis herein determined that the proposed project would not result in any significant adverse impacts with respect to potential wildfire. In addition, none of the related projects are located within an area located in a geographic area where there is a risk from wildfire. All of the related projects occupy properties that surrounded by areas that are not at risk for wildfires. As a result, no cumulative impacts related to wildfire will occur.

MITIGATION MEASURES

The analysis of wildfires impacts indicated that less than significant impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

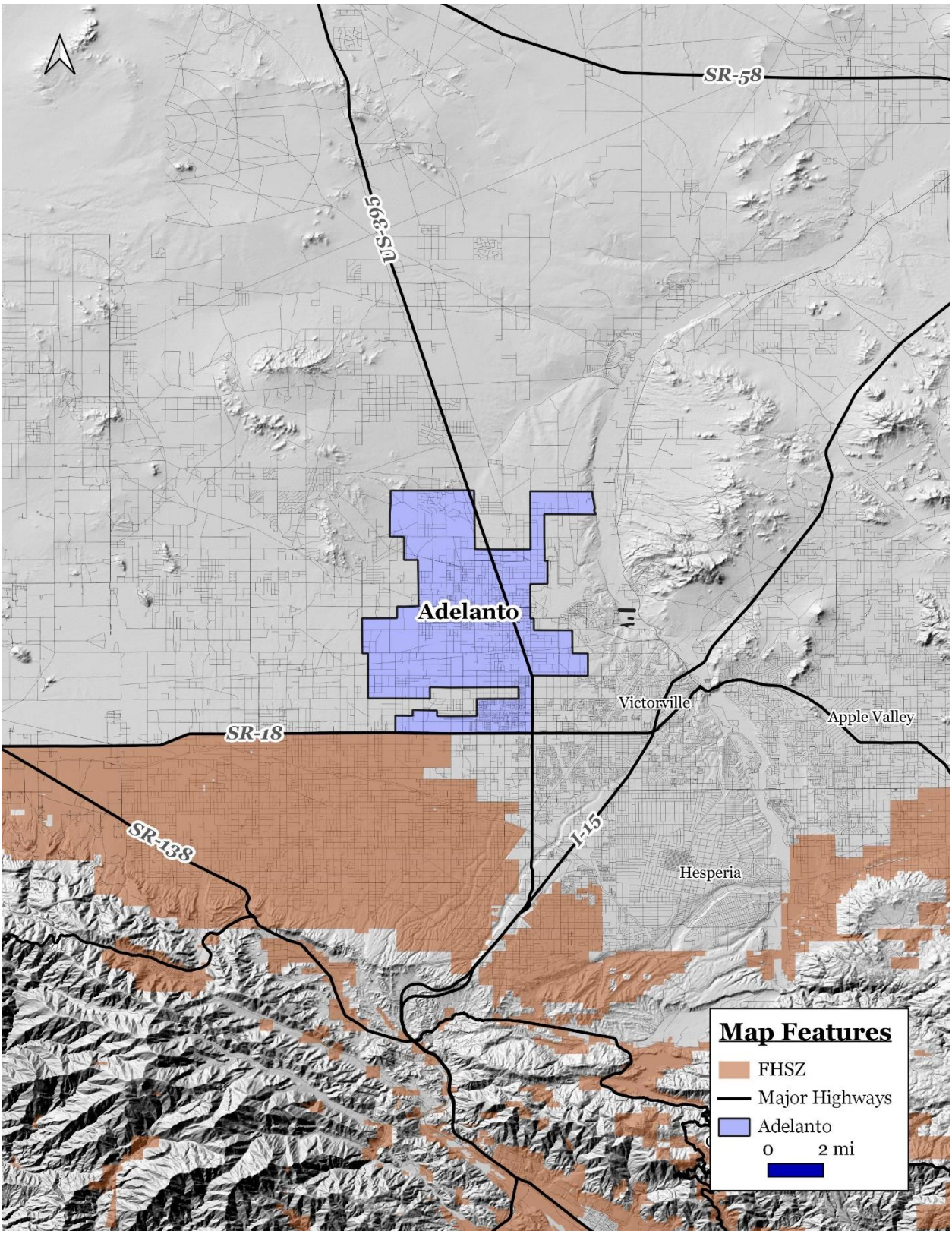

EXHIBIT 3-9
FIRE HAZARD SEVERITY MAP
SOURCE: CALFIRE

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this environmental assessment:

A. The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. As indicated in Section 3.1 through 3.20, the proposed project will not result in any significant unmitigable environmental impacts.

B. The proposed project *will not* have impacts that are individually limited, but cumulatively considerable. The proposed project is relatively small, and the attendant environmental impacts will not lead to a cumulatively significant impact on any of the issues analyzed herein.

C. The proposed project *will not* have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. As indicated in Section 3.1 through 3.20, the proposed project will not result in any significant unmitigable environmental impacts.

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SECTION 4 CONCLUSIONS

4.1 FINDINGS

The Initial Study determined that the proposed project is not expected to have significant adverse environmental impacts. The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this Initial Study:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory with the implementation of the recommended mitigation.
- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.
- The proposed project *will not* have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly, with the implementation of the recommended mitigation.

4.2 MITIGATION MONITORING

In addition, pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision-maker coincidental to the approval of a Negative Declaration. These findings shall be incorporated as part of the decision-maker's findings of fact, in response to AB-3180 and in compliance with the requirements of the Public Resources Code. In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the City of Adelanto can make the following additional finding that a mitigation monitoring and reporting program will be required.

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SECTION 5 REFERENCES

5.1 PREPARERS

Blodgett Baylosis Environmental Planning
2211 S Hacienda Heights, CA 91745
Hacienda Heights, CA 91745
(626) 336-0033

Marc Blodgett, Project Principal
Karla Nayakarathne, Project Planner

5.2 REFERENCES

Bugliarello, et. al., *The Impact of Noise Pollution,* Chapter 127, 1976.

California Department of Conservation, Division of Land Resource Protection, Farmland Mapping, and Monitoring Program. *California Important Farmland Finder*.

California Department of Fish and Wildlife, *Natural Diversity Database*.

California Department of Parks and Recreation, *California Historical Landmarks*.

California Division of Mines and Geology, *Seismic Hazards Mapping Program,* 2012.

California Office of Planning and Research, *California Environmental Quality Act and the CEQA Guidelines*, as amended 2018.

Google Earth.

Adelanto, City of, *Municipal Code,* Chapter 17.70, Signs.

Southern California Association of Governments, *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040,* April 2016.

United States Department of Agriculture. *Web Soil Survey*.

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APPENDICES
AIR QUALITY WORKSHEETS
BIOLOGICAL RESOURCES SURVEY
CULTURAL RESOURCES SURVEY

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AIR QUALITY WORKSHEETS

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

27 Acres Chamberlaine Way
Mojave Desert Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	136.00	Dwelling Unit	27.00	813,165.00	389

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - site plan

Construction Phase - Construction Characteristics

Grading - 27 acres site

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	60.00
tblConstructionPhase	NumDays	440.00	360.00
tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	45.00	90.00
tblConstructionPhase	NumDays	35.00	30.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	PhaseEndDate	9/24/2024	9/17/2024
tblConstructionPhase	PhaseEndDate	6/18/2024	1/16/2024
tblConstructionPhase	PhaseEndDate	7/12/2022	5/31/2022
tblConstructionPhase	PhaseEndDate	10/11/2022	11/1/2022
tblConstructionPhase	PhaseEndDate	8/6/2024	6/18/2024
tblConstructionPhase	PhaseEndDate	8/9/2022	7/12/2022
tblConstructionPhase	PhaseStartDate	8/7/2024	6/26/2024
tblConstructionPhase	PhaseStartDate	10/12/2022	8/31/2022
tblConstructionPhase	PhaseStartDate	8/10/2022	6/29/2022
tblConstructionPhase	PhaseStartDate	6/19/2024	5/8/2024
tblConstructionPhase	PhaseStartDate	7/13/2022	6/1/2022
tblGrading	AcresOfGrading	45.00	27.00
tblGrading	AcresOfGrading	270.00	27.00
tblLandUse	LandUseSquareFeet	244,800.00	813,165.00
tblLandUse	LotAcreage	44.16	27.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	6.9455	72.0133	49.9642	0.1031	25.6731	3.2491	28.9222	13.4611	2.9892	16.4503	0.0000	9,995.1249	9,995.1249	3.1455	0.0602	10,076.2342
2023	1.7736	15.0234	17.9428	0.0336	0.5043	0.7066	1.2108	0.1361	0.6649	0.8010	0.0000	3,238.3729	3,238.3729	0.6198	0.0533	3,269.7590
2024	424.2292	14.0655	17.7415	0.0334	0.5043	0.6201	1.1243	0.1361	0.5833	0.7194	0.0000	3,220.3320	3,220.3320	0.7169	0.0516	3,251.0916
Maximum	**424.2292**	**72.0133**	**49.9642**	**0.1031**	**25.6731**	**3.2491**	**28.9222**	**13.4611**	**2.9892**	**16.4503**	**0.0000**	**9,995.1249**	**9,995.1249**	**3.1455**	**0.0602**	**10,076.2342**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	6.9455	72.0133	49.9642	0.1031	25.6731	3.2491	28.9222	13.4611	2.9892	16.4503	0.0000	9,995.1249	9,995.1249	3.1455	0.0602	10,076.2342
2023	1.7736	15.0234	17.9428	0.0336	0.5043	0.7066	1.2108	0.1361	0.6649	0.8010	0.0000	3,238.3729	3,238.3729	0.6198	0.0533	3,269.7590
2024	424.2292	14.0655	17.7415	0.0334	0.5043	0.6201	1.1243	0.1361	0.5833	0.7194	0.0000	3,220.3320	3,220.3320	0.7169	0.0516	3,251.0916
Maximum	**424.2292**	**72.0133**	**49.9642**	**0.1031**	**25.6731**	**3.2491**	**28.9222**	**13.4611**	**2.9892**	**16.4503**	**0.0000**	**9,995.1249**	**9,995.1249**	**3.1455**	**0.0602**	**10,076.2342**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	232.8437	4.1940	268.1411	0.4661		36.0845	36.0845		36.0845	36.0845	3,776.9554	1,604.2031	5,381.1585	3.5049	0.2971	5,557.3134
Energy	0.1137	0.9713	0.4133	6.2000e-003		0.0785	0.0785		0.0785	0.0785		1,239.9755	1,239.9755	0.0238	0.0227	1,247.3440
Mobile	4.8810	6.0501	41.1743	0.0829	7.7860	0.0716	7.8575	2.0768	0.0672	2.1440		8,434.9521	8,434.9521	0.4641	0.4272	8,573.8563
Total	**237.8383**	**11.2154**	**309.7288**	**0.5551**	**7.7860**	**36.2346**	**44.0206**	**2.0768**	**36.2303**	**38.3071**	**3,776.9554**	**11,279.1307**	**15,056.0861**	**3.9928**	**0.7470**	**15,378.5137**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	232.8437	4.1940	268.1411	0.4661		36.0845	36.0845		36.0845	36.0845	3,776.9554	1,604.2031	5,381.1585	3.5049	0.2971	5,557.3134
Energy	0.1137	0.9713	0.4133	6.2000e-003		0.0785	0.0785		0.0785	0.0785		1,239.9755	1,239.9755	0.0238	0.0227	1,247.3440
Mobile	4.8810	6.0501	41.1743	0.0829	7.7860	0.0716	7.8575	2.0768	0.0672	2.1440		8,434.9521	8,434.9521	0.4641	0.4272	8,573.8563
Total	**237.8383**	**11.2154**	**309.7288**	**0.5551**	**7.7860**	**36.2346**	**44.0206**	**2.0768**	**36.2303**	**38.3071**	**3,776.9554**	**11,279.1307**	**15,056.0861**	**3.9928**	**0.7470**	**15,378.5137**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2022	5/31/2022	5	0	
2	Site Preparation	Site Preparation	6/1/2022	7/12/2022	5	30	
3	Grading	Grading	6/29/2022	11/1/2022	5	90	
4	Building Construction	Building Construction	8/31/2022	1/16/2024	5	360	
5	Paving	Paving	5/8/2024	6/18/2024	5	30	
6	Architectural Coating	Architectural Coating	6/26/2024	9/17/2024	5	60	

Acres of Grading (Site Preparation Phase): 27

Acres of Grading (Grading Phase): 27

Acres of Paving: 0

Residential Indoor: 1,646,659; Residential Outdoor: 548,886; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	2	8.00	158	0.38

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	49.00	15.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.0207	0.0000	19.0207	10.0337	0.0000	10.0337			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.0207**	**1.6126**	**20.6333**	**10.0337**	**1.4836**	**11.5173**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0713	0.0409	0.5802	1.3900e-003	0.1479	7.8000e-004	0.1487	0.0392	7.2000e-004	0.0399		140.9933	140.9933	4.3300e-003	3.9300e-003	142.2724
Total	**0.0713**	**0.0409**	**0.5802**	**1.3900e-003**	**0.1479**	**7.8000e-004**	**0.1487**	**0.0392**	**7.2000e-004**	**0.0399**		**140.9933**	**140.9933**	**4.3300e-003**	**3.9300e-003**	**142.2724**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.0207	0.0000	19.0207	10.0337	0.0000	10.0337			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.0207**	**1.6126**	**20.6333**	**10.0337**	**1.4836**	**11.5173**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0713	0.0409	0.5802	1.3900e-003	0.1479	7.8000e-004	0.1487	0.0392	7.2000e-004	0.0399		140.9933	140.9933	4.3300e-003	3.9300e-003	142.2724
Total	**0.0713**	**0.0409**	**0.5802**	**1.3900e-003**	**0.1479**	**7.8000e-004**	**0.1487**	**0.0392**	**7.2000e-004**	**0.0399**		**140.9933**	**140.9933**	**4.3300e-003**	**3.9300e-003**	**142.2724**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3402	0.0000	6.3402	3.3446	0.0000	3.3446			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**6.3402**	**1.6349**	**7.9751**	**3.3446**	**1.5041**	**4.8487**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0792	0.0454	0.6447	1.5500e-003	0.1643	8.7000e-004	0.1652	0.0436	8.0000e-004	0.0444		156.6592	156.6592	4.8100e-003	4.3700e-003	158.0804
Total	**0.0792**	**0.0454**	**0.6447**	**1.5500e-003**	**0.1643**	**8.7000e-004**	**0.1652**	**0.0436**	**8.0000e-004**	**0.0444**		**156.6592**	**156.6592**	**4.8100e-003**	**4.3700e-003**	**158.0804**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3402	0.0000	6.3402	3.3446	0.0000	3.3446			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**6.3402**	**1.6349**	**7.9751**	**3.3446**	**1.5041**	**4.8487**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0792	0.0454	0.6447	1.5500e-003	0.1643	8.7000e-004	0.1652	0.0436	8.0000e-004	0.0444		156.6592	156.6592	4.8100e-003	4.3700e-003	158.0804
Total	**0.0792**	**0.0454**	**0.6447**	**1.5500e-003**	**0.1643**	**8.7000e-004**	**0.1652**	**0.0436**	**8.0000e-004**	**0.0444**		**156.6592**	**156.6592**	**4.8100e-003**	**4.3700e-003**	**158.0804**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0288	0.6476	0.2754	3.0600e-003	0.1017	8.3600e-003	0.1101	0.0293	7.9900e-003	0.0373		321.9217	321.9217	1.6900e-003	0.0451	335.4050
Worker	0.1941	0.1113	1.5795	3.8000e-003	0.4025	2.1300e-003	0.4047	0.1068	1.9600e-003	0.1087		383.8150	383.8150	0.0118	0.0107	387.2970
Total	**0.2230**	**0.7589**	**1.8549**	**6.8600e-003**	**0.5043**	**0.0105**	**0.5147**	**0.1361**	**9.9500e-003**	**0.1460**		**705.7367**	**705.7367**	**0.0135**	**0.0558**	**722.7021**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0288	0.6476	0.2754	3.0600e-003	0.1017	8.3600e-003	0.1101	0.0293	7.9900e-003	0.0373		321.9217	321.9217	1.6900e-003	0.0451	335.4050
Worker	0.1941	0.1113	1.5795	3.8000e-003	0.4025	2.1300e-003	0.4047	0.1068	1.9600e-003	0.1087		383.8150	383.8150	0.0118	0.0107	387.2970
Total	**0.2230**	**0.7589**	**1.8549**	**6.8600e-003**	**0.5043**	**0.0105**	**0.5147**	**0.1361**	**9.9500e-003**	**0.1460**		**705.7367**	**705.7367**	**0.0135**	**0.0558**	**722.7021**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0219	0.5404	0.2562	2.9600e-003	0.1017	4.8500e-003	0.1066	0.0293	4.6400e-003	0.0339		311.7603	311.7603	1.3400e-003	0.0435	324.7497
Worker	0.1790	0.0981	1.4425	3.6700e-003	0.4025	2.0000e-003	0.4045	0.1068	1.8400e-003	0.1086		371.4027	371.4027	0.0106	9.8500e-003	374.6032
Total	**0.2009**	**0.6385**	**1.6988**	**6.6300e-003**	**0.5043**	**6.8500e-003**	**0.5111**	**0.1361**	**6.4800e-003**	**0.1426**		**683.1630**	**683.1630**	**0.0119**	**0.0533**	**699.3529**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0219	0.5404	0.2562	2.9600e-003	0.1017	4.8500e-003	0.1066	0.0293	4.6400e-003	0.0339		311.7603	311.7603	1.3400e-003	0.0435	324.7497
Worker	0.1790	0.0981	1.4425	3.6700e-003	0.4025	2.0000e-003	0.4045	0.1068	1.8400e-003	0.1086		371.4027	371.4027	0.0106	9.8500e-003	374.6032
Total	**0.2009**	**0.6385**	**1.6988**	**6.6300e-003**	**0.5043**	**6.8500e-003**	**0.5111**	**0.1361**	**6.4800e-003**	**0.1426**		**683.1630**	**683.1630**	**0.0119**	**0.0533**	**699.3529**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0212	0.5348	0.2482	2.9000e-003	0.1017	4.8600e-003	0.1066	0.0293	4.6500e-003	0.0340		305.2981	305.2981	1.2900e-003	0.0425	317.9933
Worker	0.1656	0.0869	1.3264	3.5600e-003	0.4025	1.8800e-003	0.4044	0.1068	1.7300e-003	0.1085		359.3350	359.3350	9.5000e-003	9.1200e-003	362.2906
Total	**0.1868**	**0.6217**	**1.5746**	**6.4600e-003**	**0.5043**	**6.7400e-003**	**0.5110**	**0.1361**	**6.3800e-003**	**0.1425**		**664.6331**	**664.6331**	**0.0108**	**0.0516**	**680.2839**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0212	0.5348	0.2482	2.9000e-003	0.1017	4.8600e-003	0.1066	0.0293	4.6500e-003	0.0340		305.2981	305.2981	1.2900e-003	0.0425	317.9933
Worker	0.1656	0.0869	1.3264	3.5600e-003	0.4025	1.8800e-003	0.4044	0.1068	1.7300e-003	0.1085		359.3350	359.3350	9.5000e-003	9.1200e-003	362.2906
Total	**0.1868**	**0.6217**	**1.5746**	**6.4600e-003**	**0.5043**	**6.7400e-003**	**0.5110**	**0.1361**	**6.3800e-003**	**0.1425**		**664.6331**	**664.6331**	**0.0108**	**0.0516**	**680.2839**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0507	0.0266	0.4061	1.0900e-003	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		110.0005	110.0005	2.9100e-003	2.7900e-003	110.9053
Total	**0.0507**	**0.0266**	**0.4061**	**1.0900e-003**	**0.1232**	**5.8000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**110.0005**	**110.0005**	**2.9100e-003**	**2.7900e-003**	**110.9053**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0507	0.0266	0.4061	1.0900e-003	0.1232	5.8000e-004	0.1238	0.0327	5.3000e-004	0.0332		110.0005	110.0005	2.9100e-003	2.7900e-003	110.9053
Total	**0.0507**	**0.0266**	**0.4061**	**1.0900e-003**	**0.1232**	**5.8000e-004**	**0.1238**	**0.0327**	**5.3000e-004**	**0.0332**		**110.0005**	**110.0005**	**2.9100e-003**	**2.7900e-003**	**110.9053**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	424.0146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**424.1954**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0338	0.0177	0.2707	7.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		73.3337	73.3337	1.9400e-003	1.8600e-003	73.9369
Total	**0.0338**	**0.0177**	**0.2707**	**7.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**73.3337**	**73.3337**	**1.9400e-003**	**1.8600e-003**	**73.9369**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	424.0146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**424.1954**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0338	0.0177	0.2707	7.3000e-004	0.0822	3.8000e-004	0.0825	0.0218	3.5000e-004	0.0221		73.3337	73.3337	1.9400e-003	1.8600e-003	73.9369
Total	**0.0338**	**0.0177**	**0.2707**	**7.3000e-004**	**0.0822**	**3.8000e-004**	**0.0825**	**0.0218**	**3.5000e-004**	**0.0221**		**73.3337**	**73.3337**	**1.9400e-003**	**1.8600e-003**	**73.9369**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8810	6.0501	41.1743	0.0829	7.7860	0.0716	7.8575	2.0768	0.0672	2.1440		8,434.9521	8,434.9521	0.4641	0.4272	8,573.8563
Unmitigated	4.8810	6.0501	41.1743	0.0829	7.7860	0.0716	7.8575	2.0768	0.0672	2.1440		8,434.9521	8,434.9521	0.4641	0.4272	8,573.8563

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	1,283.84	1,297.44	1162.80	3,602,668	3,602,668
Total	1,283.84	1,297.44	1,162.80	3,602,668	3,602,668

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	7.30	7.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.527784	0.055794	0.172538	0.138404	0.030772	0.007929	0.006926	0.022859	0.000522	0.000195	0.029025	0.001167	0.006083

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1137	0.9713	0.4133	6.2000e-003		0.0785	0.0785		0.0785	0.0785		1,239.9755	1,239.9755	0.0238	0.0227	1,247.3440
NaturalGas Unmitigated	0.1137	0.9713	0.4133	6.2000e-003		0.0785	0.0785		0.0785	0.0785		1,239.9755	1,239.9755	0.0238	0.0227	1,247.3440

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	10539.8	0.1137	0.9713	0.4133	6.2000e-003		0.0785	0.0785		0.0785	0.0785		1,239.9755	1,239.9755	0.0238	0.0227	1,247.3440
Total		**0.1137**	**0.9713**	**0.4133**	**6.2000e-003**		**0.0785**	**0.0785**		**0.0785**	**0.0785**		**1,239.9755**	**1,239.9755**	**0.0238**	**0.0227**	**1,247.3440**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	10.5398	0.1137	0.9713	0.4133	6.2000e-003		0.0785	0.0785		0.0785	0.0785		1,239.9755	1,239.9755	0.0238	0.0227	1,247.3440
Total		**0.1137**	**0.9713**	**0.4133**	**6.2000e-003**		**0.0785**	**0.0785**		**0.0785**	**0.0785**		**1,239.9755**	**1,239.9755**	**0.0238**	**0.0227**	**1,247.3440**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	232.8437	4.1940	268.1411	0.4661		36.0845	36.0845		36.0845	36.0845	3,776.9554	1,604.2031	5,381.1585	3.5049	0.2971	5,557.3134
Unmitigated	232.8437	4.1940	268.1411	0.4661		36.0845	36.0845		36.0845	36.0845	3,776.9554	1,604.2031	5,381.1585	3.5049	0.2971	5,557.3134

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.9701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	17.4017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	208.1337	4.0646	256.9185	0.4655		36.0224	36.0224		36.0224	36.0224	3,776.9554	1,584.0000	5,360.9554	3.4855	0.2971	5,536.6246
Landscaping	0.3381	0.1294	11.2227	5.9000e-004		0.0621	0.0621		0.0621	0.0621		20.2031	20.2031	0.0194		20.6888
Total	**232.8437**	**4.1940**	**268.1411**	**0.4661**		**36.0845**	**36.0845**		**36.0845**	**36.0845**	**3,776.9554**	**1,604.2031**	**5,381.1585**	**3.5049**	**0.2971**	**5,557.3134**

27 Acres Chamberlaine Way - Mojave Desert Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.9701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	17.4017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	208.1337	4.0646	256.9185	0.4655		36.0224	36.0224		36.0224	36.0224	3,776.9554	1,584.0000	5,360.9554	3.4855	0.2971	5,536.6246
Landscaping	0.3381	0.1294	11.2227	5.9000e-004		0.0621	0.0621		0.0621	0.0621		20.2031	20.2031	0.0194		20.6888
Total	**232.8437**	**4.1940**	**268.1411**	**0.4661**		**36.0845**	**36.0845**		**36.0845**	**36.0845**	**3,776.9554**	**1,604.2031**	**5,381.1585**	**3.5049**	**0.2971**	**5,557.3134**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

BIOLOGICAL RESOURCES SURVEY

November 30, 2021

CHAMBERLAINE DEVELOPMENT LLC
Contact: Nan Huang
5118 Artic Pl.
Rancho Cucamonga, California 91739

SUBJECT: **Biological Resources Assessment for an Approximately 27-Acre Project Site Located within Assessor Parcel Numbers 0459-331-36 thru -39 in the City of Adelanto, San Bernardino County, California**

Introduction

This report contains the findings of ELMT Consulting's (ELMT) biological resources assessment for an approximately 27-acre project located within Assessor Parcel Numbers 0459-331-36 thru -39 (project, project site) located in the City of Adelanto, San Bernardino County, California. The field investigation was conducted by biologist Travis J. McGill on November 17, 2021, to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur within the project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the project site to support special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the project site.

Project Location

The project site generally located south and west of United States Route 395, north of State Route 18 in the City of Adelanto, San Bernardino County, California. The site is depicted on the Adelanto quadrangle of the United States Geological Survey's (USGS) 7.5-minute map series within Section 19 of Township 6 North, Range 5 West. Specifically, the project site is bordered by Chamberlaine Way to the south, Raccoon Avenue to the west, Vintage Road to the north, and Stevens Street to the east. Refer to Exhibits 1-3 in Attachment A.

Project Description

The project proposes the development of a residential tentative tract map. Refer to Attachment B, *Site Plan*.

Methodology

A literature review and records search were conducted to determine which special-status biological

1 As used in this report, "special-status" refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted to document existing conditions and assess the potential for special-status biological resources to occur within the project site.

Literature Review

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1985-2021);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey[2];
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

Habitat Assessment/Field Investigation

Following the literature review, biologist Travis J. McGill inventoried and evaluated the condition of the habitat within a 200-foot buffer around the project site, where applicable, on November 17, 2021. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project site. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

2 A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.

Soil Series Assessment

Onsite and adjoining soils were researched prior to the field investigation using the USDA NRCS Soil Survey for San Bernardino County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community and/or land cover type in acres.

Plants

Common plant species observed during the field investigation were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

Wildlife

Wildlife species detected during the field investigation by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names in this report (first reference only).

Jurisdictional Drainages and Wetlands

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

Existing Site Conditions

The proposed project site is located in an area that supports a mix of developed and undeveloped land in the middle of the City of Adelanto. The land surrounding the site is composed of a mosaic of undeveloped,

vacant land and residential developments. The site is bounded immediately by undeveloped, vacant land to the north and west, Chamberlaine Way and undeveloped and developed land to the south, and a residential development to the east. The site itself is almost entirely undeveloped but has been heavily impacted by historic land uses, including weed abatement activities that were required by the City.

Topography and Soils

Onsite elevation ranges from approximately 2,853 to 2,860 feet above mean sea level and generally slopes from south to north, with no areas of significant topographic relief.

Based on the NRCS USDA Web Soil Survey, the project site is historically underlain by Helendale-Bryman loamy sands (0 to 5 percent slopes). Soils onsite have been compacted and disturbed by anthropogenic disturbances.

Vegetation

Due to historic and existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the project site. The project site consists primarily of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances, including weed abatement activities that were required by the City. These disturbances have eliminated and/or greatly disturbed the natural plant communities that historically occurred within the immediate vicinity of the project site. Refer to Attachment C, *Site Photographs*, for representative site photographs. No native plant communities will be impacted from implementation of the proposed project.

No natural plant communities occur within the boundaries of the project site. The site supports one (1) land cover types that would be classified as disturbed (refer to Exhibit 4, *Vegetation* in Attachment A). The disturbed portions of the site vary in vegetative density from unvegetated to densely vegetated with early successional and non-native plant species. Common plant species observed onsite include rubber rabbitbrush (*Ericameria nauseosa*), burrobush (*Ambrosia dumosa*), Mediterranean grass (*Schismus barbatus*), and Mediterranean mustard (*Hirschfeldia incana*), western ragweed (*Ambrosia psilostachya*).

Wildlife

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the project site. The discussion is to be used a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The project site provides limited habitat for wildlife species except those adapted to a high degree of anthropogenic disturbances and development.

Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent.

Reptiles

The survey area provides suitable foraging and cover habitat for local reptile species adapted to conditions within the Mojave Desert. The only reptilian species observed was western side-blotched lizard (*Uta stansburiana elegans*). Common reptilian species that could be expected to occur include Great Basin fence lizard (*Sceloporus occidentalis longipes*), Great basin gopher snake (*Pituophis catenifer deserticola*), red racer (*Coluber flagellum piceus*), and southwestern speckled rattlesnake (*Crotalus mitchellii pyrrhus*).

Birds

The project site provides suitable foraging and nesting habitat for bird species adapted to conditions within the Mojave Desert. Bird species detected during the field investigation include house finch (*Haemorhous mexicanus*), common raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), and white-crowned sparrow (*Zonotrichia leucophrys*).

Mammals

The survey area provides suitable foraging and cover habitat for mammalian species adapted to conditions within the Mojave Desert. Mammalian species detected during the field investigation include California ground squirrel (*Otospermophilus beecheyi*), and desert cottontail (*Sylvilagus audubonii*), and feral domestic cat (*Felis catus*). Common mammalian species that could be expected to occur include black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*).

Nesting Birds

No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted outside of breeding season. The project site has the potential to provide minimal nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. No raptors are expected to nest on-site due to lack of suitable nesting opportunities.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal,

seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both anthropogenic disturbance and natural fluctuations in resources.
According to the San Bernardino County General Plan, the project site has not been identified as occurring within a Wildlife Corridor or Linkage. As designated by the San Bernardino County General Plan Open Space Element, major open space areas documented in the vicinity of the project site include the Mojave River located approximately 5.5 miles east of the site. The site is separated from this identified regional wildlife corridors and linkages by existing development and roadways, and undeveloped land; however, there are no riparian corridors or creeks connecting the project site to these areas.

The undeveloped land in the immediate vicinity of the project site provides local wildlife movement opportunities for wildlife species moving through the immediate area; however, the project site does not function as a major wildlife movement corridor or linkage. As such, implementation of the proposed project is not expected to have a significant impact to wildlife movement opportunities or prevent local wildlife movement through the area since there is ample habitat adjacent to the project site to support wildlife movement opportunities.

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The USFWS NWI and the USGS National Hydrography Dataset were reviewed to determine if any blueline streams or riverine resources have been documented on the project site. Based on this review, no blueline streams or riverine resources have been identified on the project site.

The project site does not support any discernible drainage courses, inundated areas, wetland features, or hydric soils that would be considered jurisdictional by the Corps, Regional Board, or CDFW. query of the NWI database found on potential blueline streams, riverine, or other aquatic resources within or adjacent to the project site. Therefore, project activities will not result in impacts to Corps, Regional Board, or CDFW jurisdictional areas and regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Adelanto USGS 7.5-minute quadrangle. Only one quadrangle was queried due to the proximity of the site to quadrangle boundaries, regional topography, and conditions in the vicinity of the site. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified six (6) special-status plant species and twelve (12) special-status wildlife species as having potential to occur within the Adelanto USGS 7.5-minute quadrangle. No special-status

plant communities were identified as having potential to occur within this quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site is presented in Attachment D: *Potentially Occurring Special-Status Biological Resources*.

Special-Status Plants

According to the CNDDB and CNPS, six (6) special-status plant species have been recorded in the Adelanto quadrangle (refer to Attachment D). No special-status plant species were observed on-site during the field investigation. The project site consists vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred on-site which has removed ability of the habitat on the project site to provide suitable habitat for special-status plant species known to occur in the general vicinity. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and all are presumed to be absent. No focused surveys are recommended.

Special-Status Wildlife

According to the CNDDB, twelve (12) special-status wildlife species have been reported in the Adelanto quadrangle (refer to Attachment D). No special-status wildlife species were observed onsite during the field investigation. The project site has been subject to anthropogenic disturbances. These disturbances have eliminated the natural plant communities that once occurred onsite which has reduced potential foraging and nesting/denning opportunities for wildlife species. Based on habitat requirements for specific species and the availability and quality of onsite habitats, it was determined that the proposed project site has a moderate potential to provide suitable habitat for loggerhead shrike (*Lanius ludovicianus*); and a low potential to support prairie falcon (*Falco mexicanus*).

None of the aforementioned special-status wildlife species are state or federally listed as threatened or endangered. In order to ensure impacts to these avian species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of the pre-construction nesting bird clearance survey, impacts to special-status avian species will be less than significant and no mitigation will be required.

Critical Habitats

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a

Clean Water Act Permit from the United States Army Corps of Engineers). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. Further, the nearest Critical Habitat designations is located approximately 5.5 miles east of the project site for southwestern willow flycatcher (*Empidonax traillii extimus*). Therefore, no impacts to federally designated Critical Habitat will occur from implementation of the proposed project.

San Bernardino County Development Code

Section 88.01.060 of the County of San Bernardino Development Code provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to coincide with the Desert Native Plants Act (Food and Agricultural Code Section 8001 et seq.) and the State Department of Food and Agriculture to implement and enforce the Act.

Pursuant to Section 88.01.060 of the Development Code, the following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit:

1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
   (A) *Dalea spinosa* (smoke tree)
   (B) All species of the genus *Prosopis* (mesquites)
2) All species of the family *Agavaceae* (century plants, nolinas, yuccas)
3) Creosote Rings, 10 feet or greater in diameter
4) All Joshua trees (*Yucca brevifolia*)
5) Any part of any of the following species, whether living or dead:
   (A) *Olneya tesota* (desert ironwood)
   (B) All species of the genus *Prosopis* (mesquites)
   (C) All species of the genus *Cercidium* (palos verdes)

Based on the results of the field investigation, none of the trees protected by the San Bernardino County Development Code were observed onsite.

Conclusion

Based literature review and field survey, and existing site conditions discussed in this report, implementation of the project will have no significant impacts on federally or State listed species known to occur in the general vicinity of the project site. Additionally, the project will have no effect on designated Critical Habitat, or regional wildlife corridors/linkage because none exists within the area. No jurisdictional drainage and/or wetland features were observed on the project site during the field investigation. No further surveys are recommended. With completion of the recommendations provided below, no impacts to year-round, seasonal, or special-status avian residents or special-status species will occur from implementation of the proposed project.

Recommendations

Migratory Bird Treaty Act and Fish and Game Code

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions this report.

Sincerely,

Thomas J. McGill, Ph.D.
Managing Director

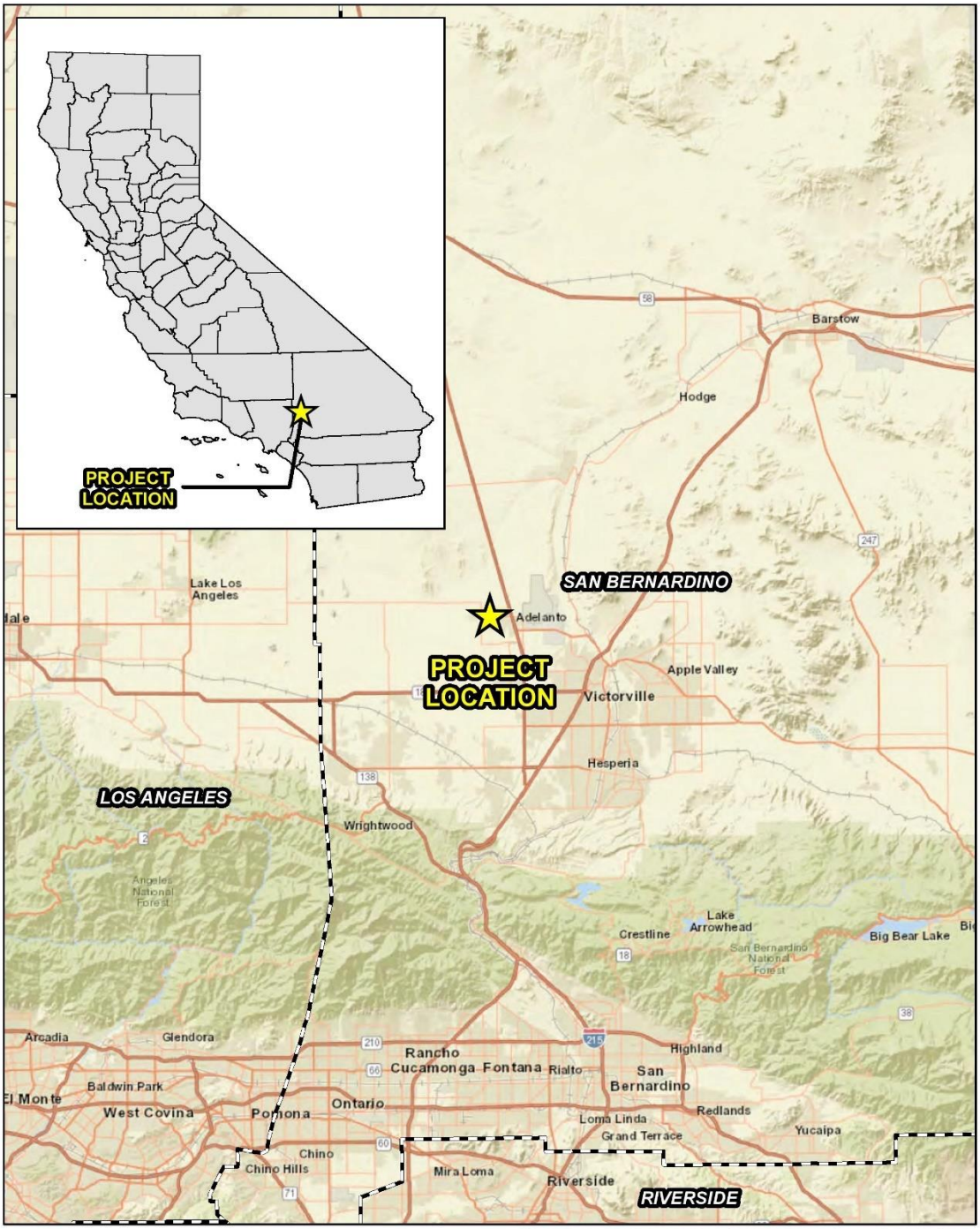
Travis J. McGill
Director

Attachments:

A. *Project Exhibits*
B. *Site Plan*
C. *Site Photographs*
D. *Potentially Occurring Special-Status Biological Resources*
E. *Regulations*

Attachment A

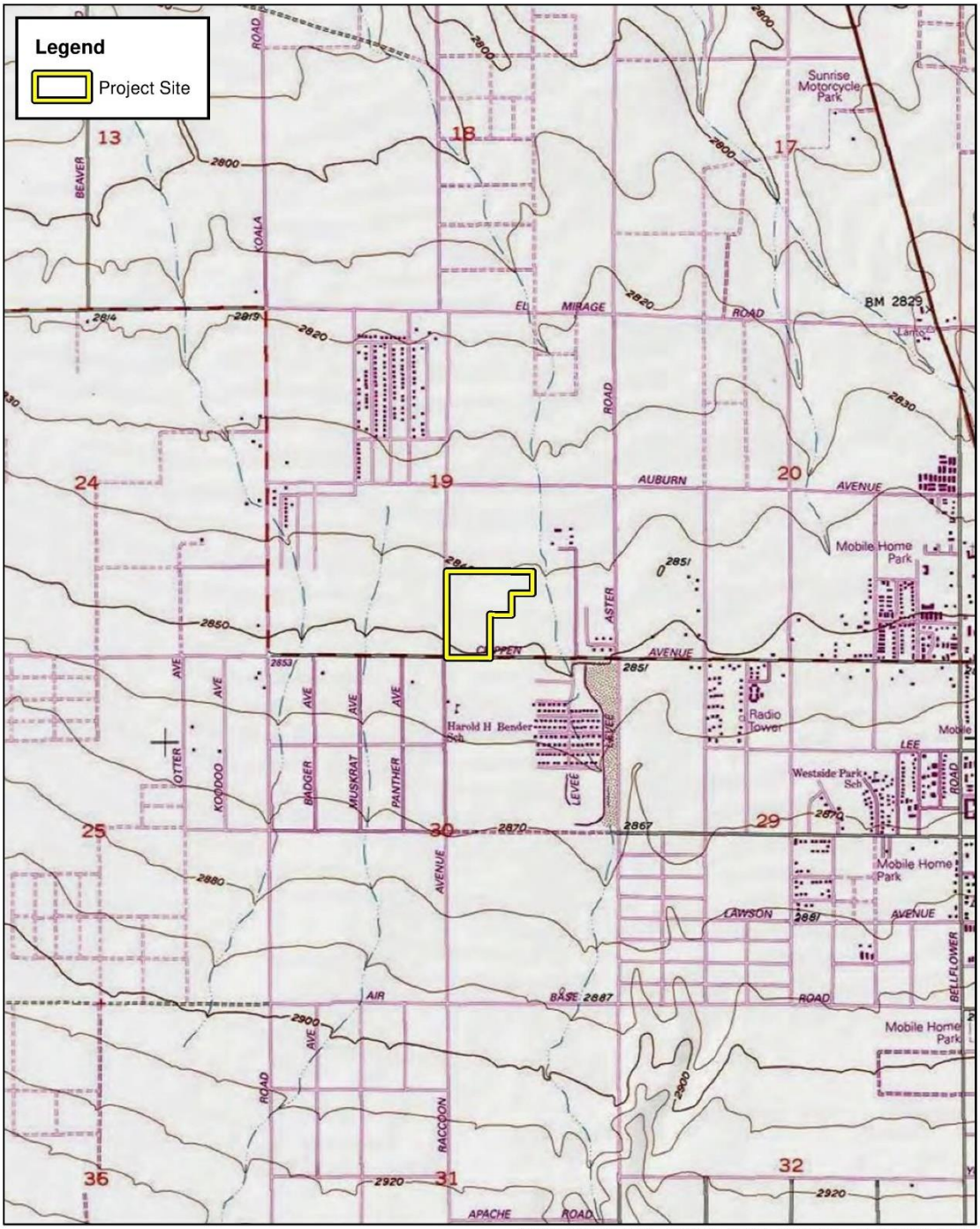
Project Exhibits



CHAMBERLAINE DEVELOPMENT LLC - 27 ACRE SITE
BIOLOGICAL RESOURCES ASSESSMENT

Regional Vicinity

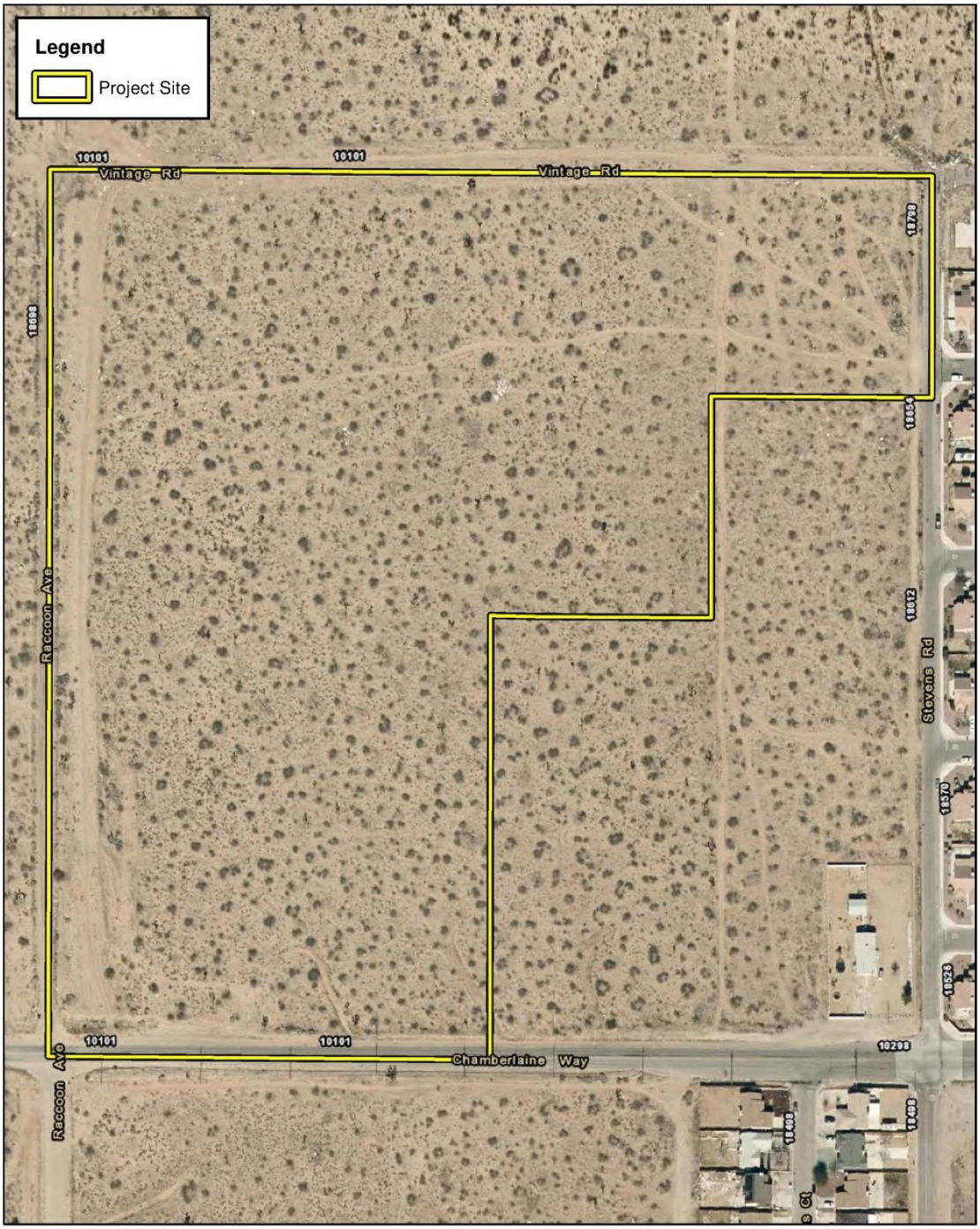
Exhibit 1



CHAMBERLAINE DEVELOPMENT LLC - 27 ACRE SITE
BIOLOGICAL RESOURCES ASSESSMENT

Site Vicinity

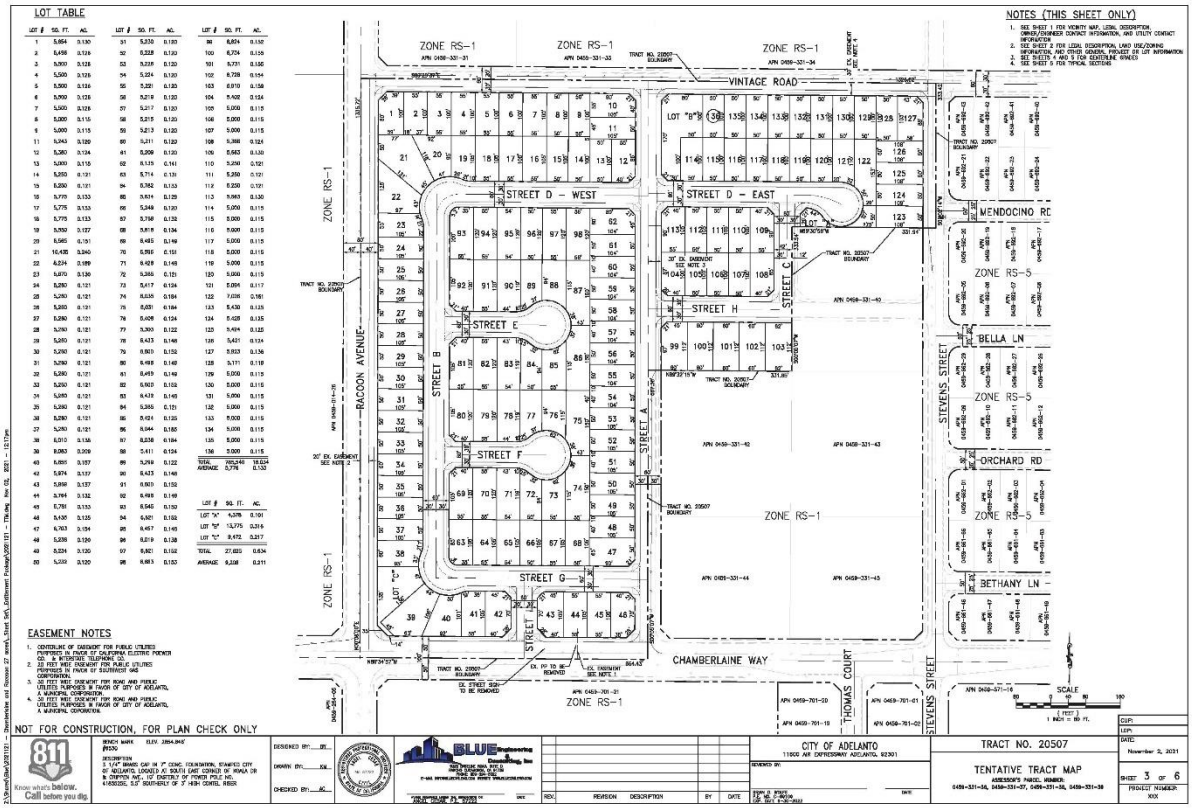
Exhibit 2


Legend
Project Site
Vintage Rd
Raccoon Ave
Stevens Rd
Chamberlaine Way
10101
10298
0
125
250
500
Feet
Source: ESRI Aerial Imagery, San Bernardino County
ELMT CONSULTING
CHAMBERLAINE DEVELOPMENT LLC - 27 ACRE SITE
BIOLOGICAL RESOURCES ASSESSMENT
Project Site
Exhibit 3


Legend
Project Site
Disturbed
Vintage Rd
Raccoon Ave
Stevens Rd
Chamberlaine Way
10101
0
125
250
500
Feet
CHAMBERLAINE DEVELOPMENT LLC - 27 ACRE SITE
BIOLOGICAL RESOURCES ASSESSMENT
Vegetation
ELMT CONSULTING
Source: ESRI Aerial Imagery, San Bernardino County
Exhibit 4

Attachment B

Site Plan


LOT TABLE
NOTES (THIS SHEET ONLY)
EASEMENT NOTES
NOT FOR CONSTRUCTION, FOR PLAN CHECK ONLY
VINTAGE ROAD
CHAMBERLAINE WAY
RACCOON AVENUE
STREET D – WEST
STREET D – EAST
STREET E
STREET F
STREET G
STREET H
STREET A
STREET B
STREET C
MENDOCINO RD
BELLA LN
ORCHARD RD
BETHANY LN
STEVENS STREET
THOMAS COURT
ZONE RS-1
ZONE RS-5
CITY OF ADELANTO
11600 AIR EXPRESSWAY ADELANTO, 92301
TRACT NO. 20507
TENTATIVE TRACT MAP
SHEET 3 OF 6
Know what's below. Call before you dig.

Attachment C

Site Photographs

Photograph 1: From the northeast corner of the project site looking west along the northern boundary.

Photograph 2: From the northeast corner of the project site looking south along the eastern boundary of the project site.

Photograph 3: From the northwest corner of the project site looking south along the western boundary.

Photograph 4: From the northwest corner of the project site looking southeast across the site.

Photograph 5: From the middle of the western boundary looking east.

Photograph 6: From the southwest corner of the project site looking north along the western boundary.

Photograph 7: From the southwest corner of the project site looking east along the southern boundary.

Photograph 8: From the southeast corner of the project site looking northwest across the site.

Attachment D

Potentially Occurring Special-Status Biological Resources

Table D-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS WILDLIFE SPECIES				
Athene cunicularia burrowing owl	Fed: None CA: SSC	Prefers habitat with short, sparse vegetation with few shrubs and well-drained soils in grassland, shrub steppe, and desert habitats. Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	**Presumed Absent** Portions of the project site support line-of-sight opportunities favored by burrowing owls; however, no suitable burrows (>4 inches in diameter) are present. In addition, adjacent and surrounding development supports tall structures that provide perching opportunities for predators of burrowing owls.
Buteo swainsoni Swainson's hawk	Fed: None CA: **THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Circus hudsonius northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	No	**Low** Suitable foraging habitat is present on-site; no suitable nesting habitat is present within or adjacent to the site.
Gopherus agassizii Mojave desert tortoise	Fed: **THR** CA: **THR**	Occurs in desert scrub, desert wash, and Joshua tree habitats with friable, sandy, well-drained soils for nest and burrow construction. Highest densities occur in creosote bush scrub with extensive annual wildflower blooms and succulents with little to no non-native plant species.	No	**Presumed Absent** No desert tortoises, sign, or burrows were observed during the habitat assessment. Marginal habitat is present within the project site; however, the majority of the site is too densely vegetated for this species. In addition, adjacent and surrounding development has fragmented habitats in the vicinity of the site and excluded the site from more suitable areas.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper, desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches.	No	**Moderate** Suitable foraging and nesting habitat are present within the project site and surrounding area.
Onychomys torridus ramona southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrub, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Spizella breweri Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush and brushy plains.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Taxidea taxus American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Toxostoma lecontei Le Conte's thrasher	Fed: None CA: SSC	An uncommon to rare, local resident in southern California deserts from southern Mono Co. south to the Mexican border, and in western and southern San Joaquin Valley. Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent shrub habitats; also occurs in Joshua tree habitat with scattered shrubs.	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Xerospermophilus mohavensis Mohave ground squirrel	Fed: None CA: **THR**	Restricted to the Mojave Desert in open desert scrub, alkali desert scrub, annual grassland, and Joshua tree woodland. Prefers sandy to gravelly soils and tends to avoid rocky areas. Occurs sympatrically with the white-tailed antelope squirrel.	No	**Presumed Absent** Suitable foraging and burrowing habitat are present within the project site. Based on surrounding development and known distributions and occurrences, this species is likely precluded from the site.

Scientific Name Common Name	**Status**	**Habitat Description**	**Observed On-site**	**Potential to Occur**
SPECIAL-STATUS PLANT SPECIES				
Canbya candida white pygmy-poppy	Fed: None CA: None CNPS: 4.2	Occurs on gravelly, sandy, granitic soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. Found at elevations ranging from 2,297 to 5,249 feet above mean sea level (msl). Blooming period is from March to June.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Chorizanthe spinosa Mojave spineflower	Fed: None CA: None CNPS: 4.2	Grows in alkaline or non-alkaline soils in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas. Found at elevations ranging from 20 to 4,265 feet. Blooming period is from March to July.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Loeflingia squarrosa* var. *artemisiarum sagebrush loeflingia	Fed: None CA: None CNPS: 2B.2	Grows in sandy soils within desert dunes, Great Basin scrub, and Sonoran desert scrub habitats. Blooming period is from April to May. Grows in elevation from 2,297 to 5,299 feet.	No	**Presumed absent.** No suitable habitat is present within the project site.
Muilla coronata crowned muilla	Fed: None CA: None CNPS: 4.2	Found in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Blooming period is from May to April. Grows in elevation from 2,198 to 6,430 feet.	No	**Presumed Absent** There is no suitable habitat within or adjacent to the project site.
Pediomelum castoreum Beaver dam breadroot	Fed: None CA: None CNPS: 1B.2	Occurs in sandy soils, washes, and roadcuts within Joshua tree woodland and Mojavean desert scrub. Found at elevations ranging from 2,000 to 5,000 feet. Blooming period is from April to May.	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Yucca brevifolia western Joshua tree	Fed: None CA: CE CNPS: N/A	Occurs in a variety of arid habitats within the Mojave Desert. Found at elevations ranging from 1,600 to 6,600 feet. Blooming period is from March to June.	No	**Presumed Absent** Remnant stumps were observed onsite, that were dead at the time of the survey

U.S. Fish and Wildlife Service (Fed) - Federal
END – Federal Endangered
THR – Federal Threatened
DL - Delisted

California Department of Fish and Wildlife (CA) - California
END – California Endangered
THR – California Threatened
CTHR – California Candidate Threatened
DL - Delisted
FP – California Fully Protected
SSC – California Species of Special Concern
WL – California Watch List
CE – Candidate Endangered

California Native Plant Society (CNPS) - *California Rare Plant Rank*
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
4 Plants of Limited Distribution – A Watch List

Threat Ranks
0.2- Moderately threatened in California
0.3- Not very threatened in California

Attachment E

Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Regulations

San Bernardino County Development Code

Section 88.01.060 of the County of San Bernardino Development Code provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. The provisions are intended to coincide with the Desert Native Plants Act (Food and Agricultural Code Section 8001 et seq.) and the State Department of Food and Agriculture to implement and enforce the Act.

Pursuant to Section 88.01.060 of the Development Code, the following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit:

1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:

   (A) *Dalea spinosa* (smoke tree)
   (B) All species of the genus *Prosopis* (mesquites)

2) All species of the family *Agavaceae* (century plants, nolinas, yuccas)

3) Creosote Rings, 10 feet or greater in diameter

4) All Joshua trees

5) Any part of any of the following species, whether living or dead:

   (A) *Olneya tesota* (desert ironwood)
   (B) All species of the genus *Prosopis* (mesquites)
   (C) All species of the genus *Cercidium* (palos verdes)

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands[1].

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries[2] of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent[3] to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

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[1] The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

[2] The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

[3] The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as "waters of the United States" even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:

- (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

- (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
- (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
- (C) Artificial reflecting pools or swimming pools created in dry land;
- (D) Small ornamental waters created in dry land;
- (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
- (G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

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CULTURAL RESOURCES SURVEY

DUKE CRM

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Irvine, CA 92618
949-356-6660
www.dukecrm.com

November 24, 2021

Nan Huang
Chamberlaine Development LLC
5118 Arctic Place
Rancho Cucamonga, CA 91739

Subject: Cultural/Paleontological Resources Assessment for 27.5 Acre Project, San Bernardino County, California (Project Number C-0376)

Dear Mr. Huang:

At the request of the Chamberlaine Development LLC (CLIENT), Duke Cultural Resources Management, LLC (DUKE CRM) has prepared a cultural and paleontological resources assessment for the 27.5-Acre Adelanto (Project), located in the City of Adelanto, San Bernardino County, California. The Project is 27.5 acres in size. The City of Adelanto is the lead agency for California Environmental Quality Act (CEQA).

The Project is located in the High Desert within APNs 0459-331-36, -37, -38, and -39. The Project is located in Section 19, Township 6 North, Range 5 West, as shown on the USGS *Adelanto, Calif.* 7.5 quadrangle maps (see Attachment 1 for Project Maps). The Project will construct 139 single family homes (four models) with a maximum depth of excavation of approximately six feet.

This report includes the result of our research and field survey for cultural and paleontological resources.

Research

On September 1, 2021, DUKE CRM submitted a request for a records search by the South Central Coastal Information Center (SCCIC) (See Attachment 2). The SCCIC located at the California State University, Fullerton is part of the California Historical Resources Information System (CHRIS). The records search included a review of all recorded cultural resources within a ½-mile radius of the Project, as well as a review of known cultural resource survey and excavation reports. Record search results were received on November 18, 2021.

The records search identified one cultural resources within ½ mile of the Project. Resource P-36-007090 is located approximately 680 feet south of the Project. The resource is a small scatter of historic trash, including discarded and miscellaneous metal. Additionally, the SCCIC identified three cultural reports within the Project, however only one was available to the SCCIC staff due to COVID-19 closures. Table 1 summarizes the reports within the Project.

Table 1. Reports within the Project Boundary

Report No.	Year	Report Title	Author(s)
SB-00354	1976	Cultural Resources Technical Plan: Big Bear Lake General Plan, City of Big Bear Lake, San Bernadino County, CA. 47PP	Ruth Harris
SB-06794	2010	Cultural Resource Records Search and Site Visit Results for T-Mobile USA Candidate 1E24878-A (Marconi Park), 18245 Verbena Road, Adelanto, San Bernardino County, California	Wayne H. Bonner and Marnie Aislin-Kay
SB-07982	2013	Cultural Resources Impact Mitigation Analysis for the Adelanto North 2035 Sustainable Community Plan, City of San Bernardino County, California	Sara Dietler, Elizabeth Denniston, and Steven Treffers

Additionally, an inquiry to the Native American Heritage Commission (NAHC) was submitted to ascertain the presence of known sacred sites, Native American cultural resources, and/or human remains within the boundaries of the proposed Project. On October 5, 2021, the NAHC indicated that there have been no Native American cultural resources identified within the Sacred Lands File for the Project location (see Attachment 3).

DUKE CRM conducted a review of online historical aerial photographs and historic USGS quad maps utilizing UCSB FrameFinder, historicaerials.com, and USGS Historical Topographic Map Explorer. The *San Bernadino* 1:125,000 scale map from 1952 does not show any trails, roads, buildings or structures within Section 29. The *San Bernadino* 1:125,000 scale map from 1994 shows multiple paths running through the Project site which continue to run in various directions through the site (historicaerials.com).

The geology in the vicinity of the Project has been mapped by Dibblee (1960). A review of this map indicates the proposed Project is located on unconsolidated alluvial sediments from valley fill, mostly silt and sand of Holocene age (*Qa*) with a maximum thickness of 100 feet.

DUKE CRM requested that the Natural History Museum of Los Angeles County perform a paleontological records search for known fossil localities within, and in the vicinity of, the Project. On October 7, 2021, the Natural History Museum of Los Angeles County found that there have been no paleontological resources discovered within the Project. The nearest fossil locality is located approximately 3.9 miles east. This fossil locality (LACM VP 7786) occurred within the Shoemaker Gravel Formation (*Qsh*). The Shoemaker Gravel Formation is a Quaternary alluvial gravel composed of detritus from the transverse ranges.[1] Locality LACM VP 7786 unearthed pre-mineralized rodent (*Microtus mexicanus*) remains in surficial older Pleistocene alluvium deposits. Located 8.10 miles southeast of the proposed project is locality LACM VP CIT209, which unearthed pre-mineralized Mammoth (*Mammuthus*) and Horse (*Equus*) remains within the Shoemaker Gravel Formation. Approximately nine miles southeast of the proposed project is LACM VP 3353, which yielded pre-mineralized horse (*Equus*) remains within the Shoemaker Gravel Formation as well. Approximately 8.76 miles East of the proposed project is locality LACM VP 3498 which unearthed pre-mineralized Horse (*Equus*), deer (*Cervidae*), and antelope (*Antilocapridae*) within the Shoemaker Gravel Formation. Lastly, 14.89 miles west of the project are localities LACM VP 5942-5950. They are located along Avenue S from Palmdale to Los Angeles in Holocene aged sediment. Localities LACM VP 5942-5950

[1] Ponti, D. J. 1985. The Quaternary alluvial sequence of the Antelope Valley, California. Geological Society of America Special Paper 203:79-96.

yielded various pre-mineralized snakes (*Pituophis*, *Lampropeltis*), lizards (*Gambelia*) rabbit (*Lagomorpha*), rodents (*Thomomys*, *Chaetodippus*, and *Dipodomys*) and birds (Aves).

Field Survey

Morgan Bender, M.A., RPA, Archaeologist, and Adrian Garibay, Paleontologist, conducted an intensive pedestrian survey and several surface scrapes of the Project on September 29, 2021. The survey area included 27.5 acres in the area of the proposed Project. Transects were spaced no more than 15 meters apart. The surface visibility was good, ranging from 90-100 percent. The area has sparsely scattered small bushes and debris with a mean elevation of approximately 3000 feet above sea level. Two minor roads have been graded through the site. See photographs in Attachment B. No cultural resources were observed as a result of the field survey.

Conclusions

DUKE CRM evaluated the proposed project for impacts to cultural resources according to CEQA. As a result of negative findings during the field survey and negative findings within the Project boundary from the SCCIC, our assessment is that the Project has a low potential to impact any cultural resource. Therefore, no mitigation is recommended for cultural resources.

The Project is considered to have a low potential to impact paleontological resources. The Project is located on Holocene age (*Qa*) sediments. The nearest paleontologically significant resource is about 3.9 miles away from the Project site at a depth of 10 to 11 ft in older sediments (*Qsh*), not the sediments within the current Project. The sediment within the Project boundary has the potential to preserve remains, but due to the young age it is unlikely paleontologically significant remains will be uncovered. The Project is anticipated to disturb sediments to a maximum depth of six feet. Given that the sediments are Holocene and the unconsolidated alluvium has maximum depth of 100 feet, it is unlikely any significant paleontological resources will be uncovered. Therefore, no mitigation is recommended for paleontological resources.

If previously unidentified cultural and/or paleontological materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist/paleontologist can assess the significance of the find. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Thank you for contacting DUKE CRM on this interesting project. If you have any questions or comments, you can contact me at (949) 356-6660, or by e-mail at morganbender@dukecrm.com.

Sincerely,

DUKE CULTURAL RESOURCES MANAGEMENT, LLC

Morgan Bender

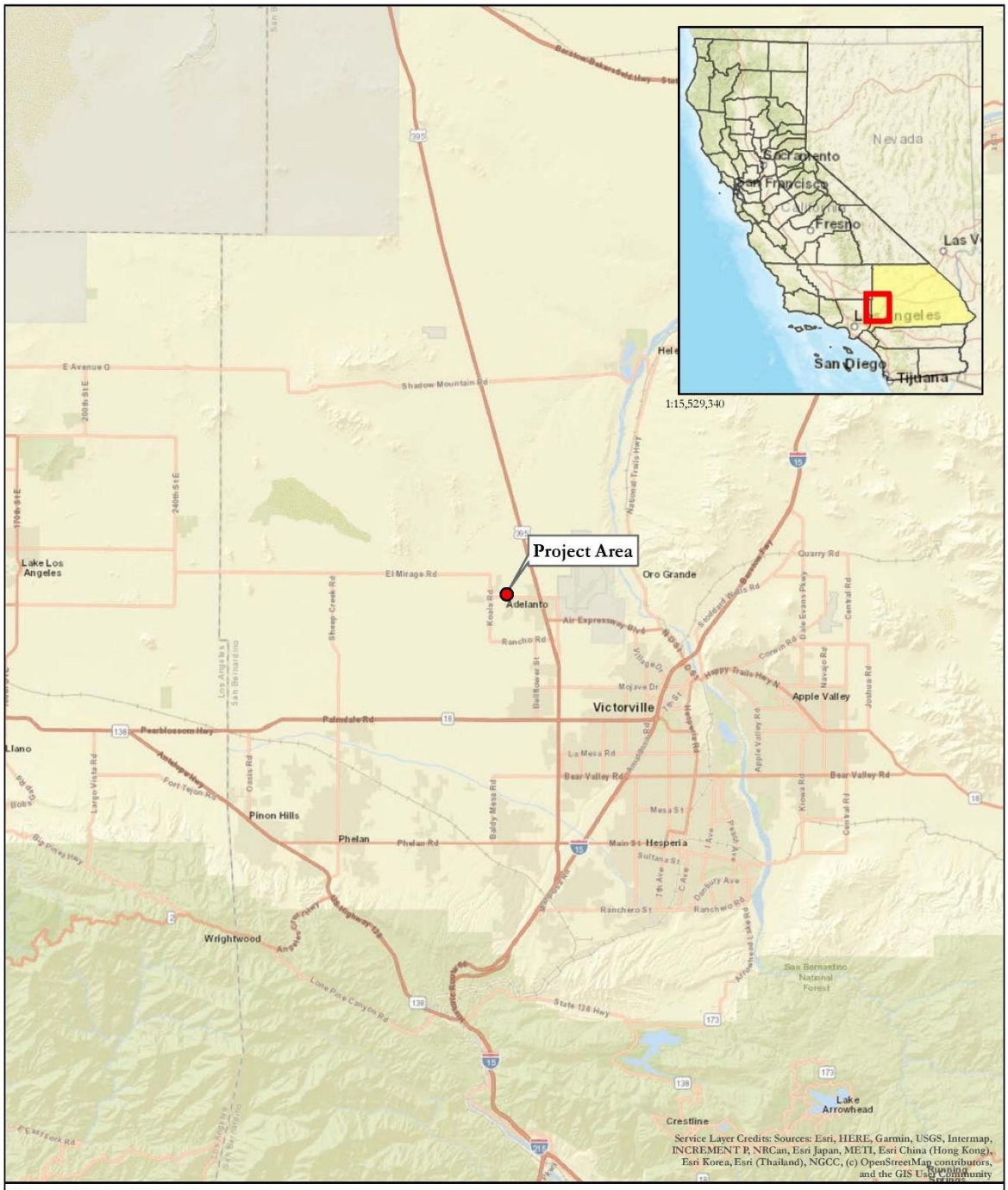
Morgan Bender, M.A., RPA
Archaeologist

Attachments

1: Project Maps
2: Native American Heritage Commission Letter
3: Project Photographs

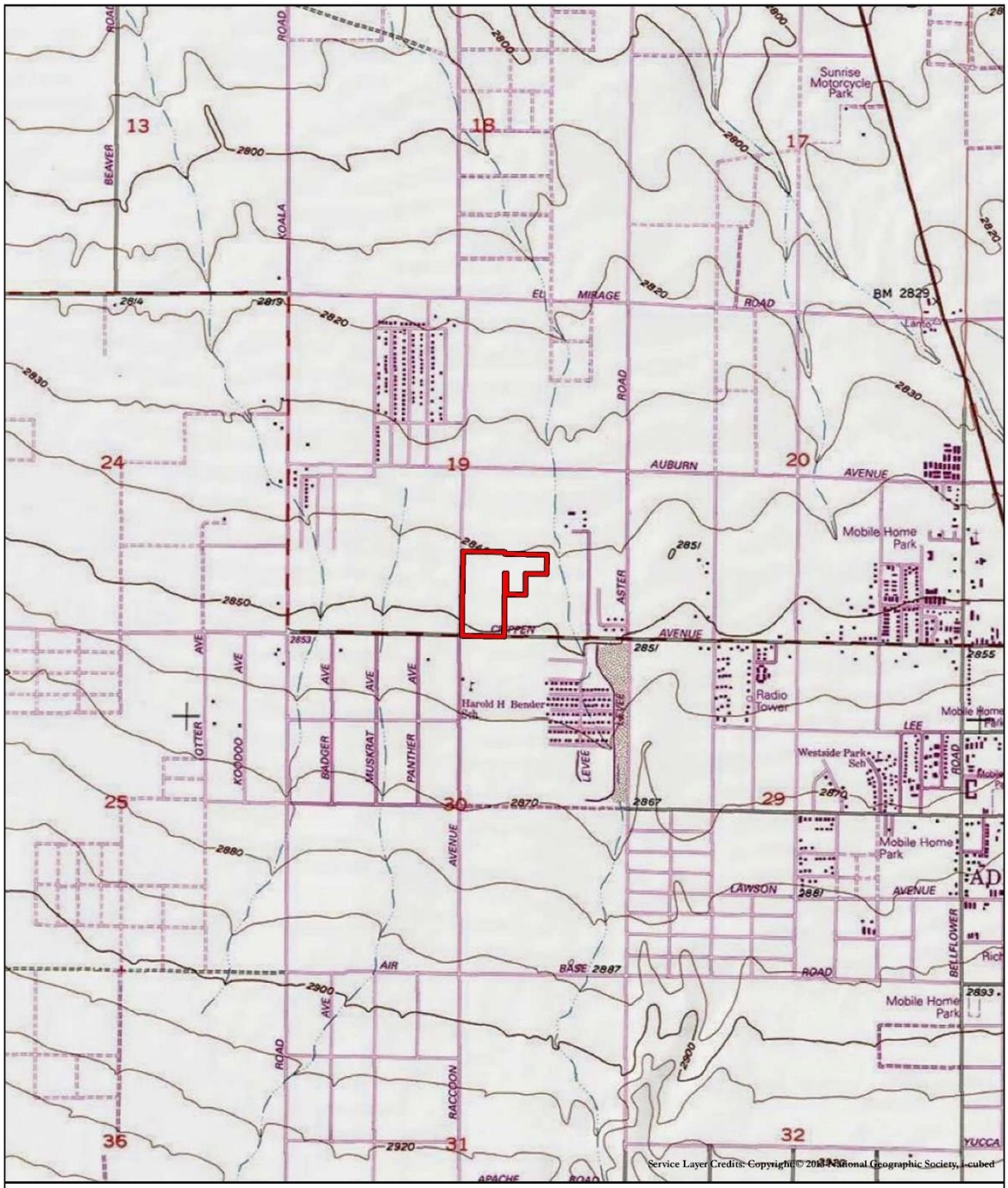
ATTACHMENT 1

PROJECT MAPS



Map 1 - Project Vicinity
27.5 Acre Adelanto, C-0376

DUKE CRM



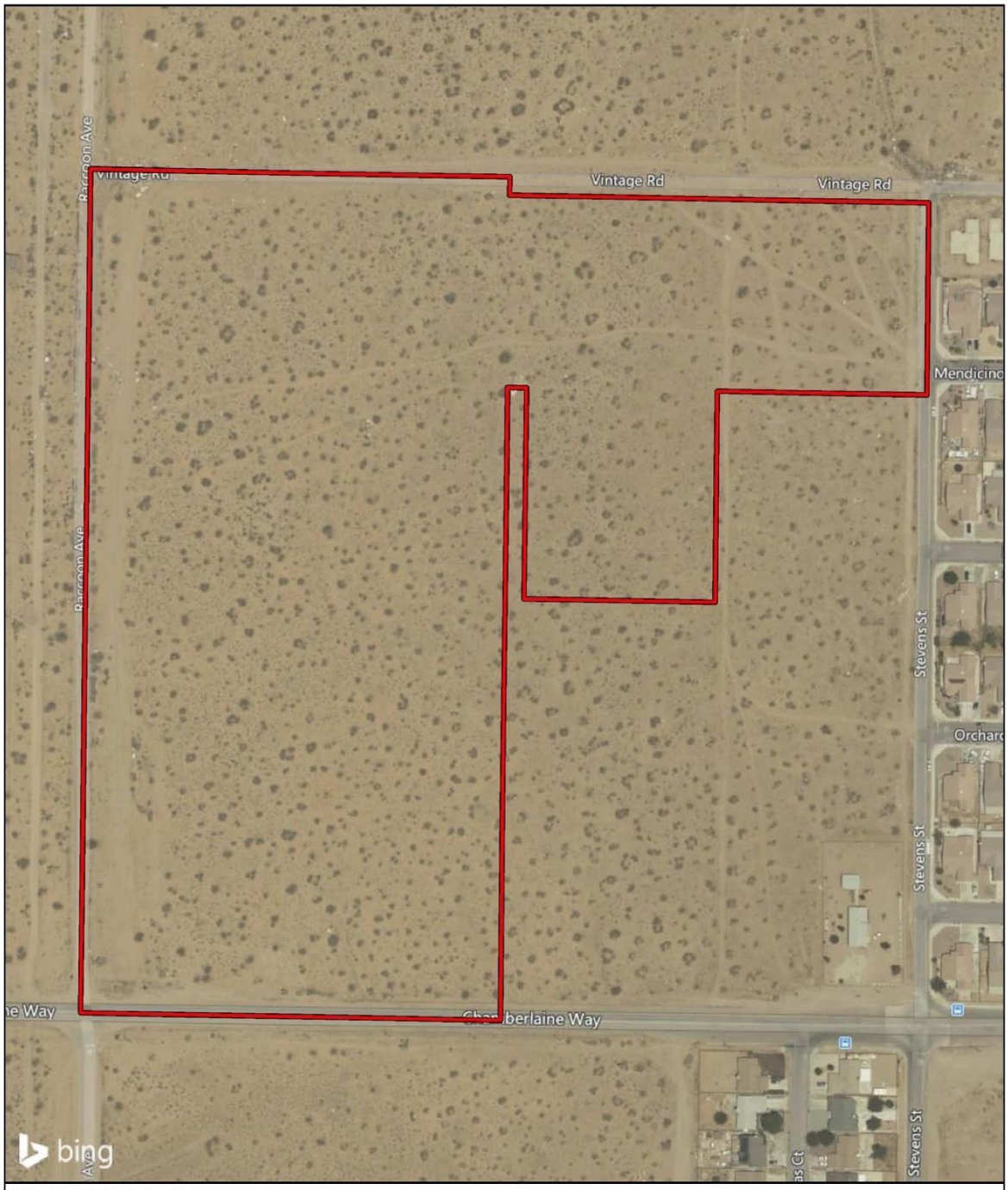
Map 2 - Project Location
27.5 Acre Adelanto, C-0376

DUKE CRM

Adelanto, Calif USGS 7.5-Minute Quadrangle
T6N, R5W, Section 19
Date of Map: 1956 / Photorevised: 1980

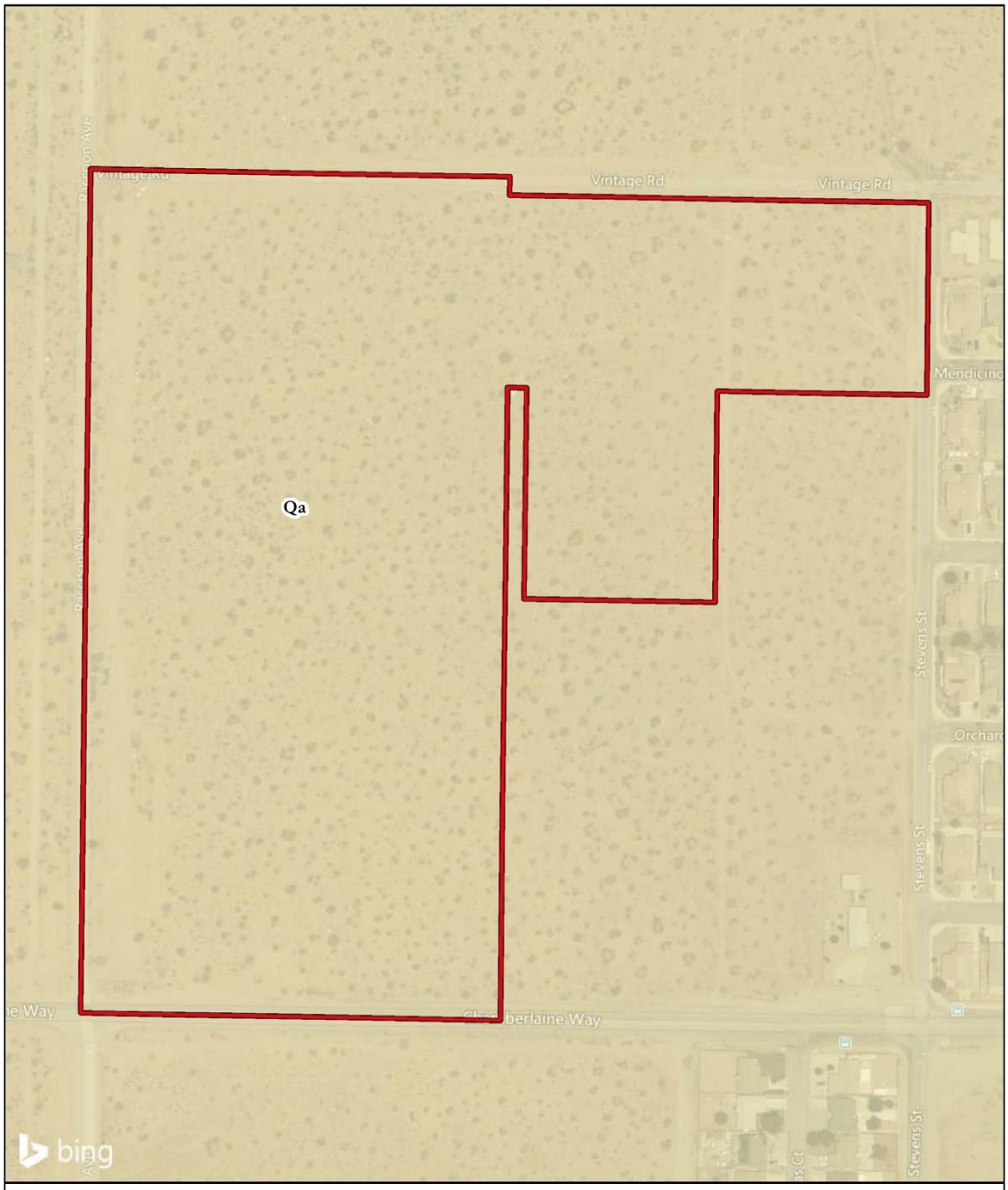
Project Area

0 0.25 0.5 Miles
0 0.25 0.5 Kilometers
1 inch = 2,000 feet 1:24,000
N



Map 3 - Project Aerial
27.5 Acre Adelanto, C-0376

DUKE CRM



Map 4 - Project Geology
27.5 Acre Adelanto, C-0376

DUKE CRM

Geology from Dibblee (1960):
Project Area
Qa: alluvial silt, sand, and gravel derived from adjacent higher ground

0 100 200 Feet
1 inch =200 feet
N
1:2,400

ATTACHMENT 2

NATIVE AMERICAN HERITAGE COMMISSION LETTER

October 5, 2021

Morgan Bender
DUKE CRM

Via Email to: morganbender@dukecrm.com

Re: 27.5-Acre Adelanto Project, San Bernardino County

Dear Ms. Bender:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Page 1 of 1

ATTACHMENT 3

PROJECT PHOTOGRAPHS

Site overview. View to north.

Site overview. View to south.

Site overview. View to east.

Site overview. View to west.

Vegetation throughout site. View to southwest.

Vegetation and ground visibilty. View to northeast.

Small faunal bones. Plan view.

Small faunal bone. Plan view.

Tire marks running through site. View to northwest.

Small wash running through site. View to west.