

California Environmental Quality Act (CEQA)

Initial Study/Mitigated Negative Declaration Tentative Tract Map No.20434



Lead Agency

City of Hesperia
Development Services Department
9700 7th Avenue
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Project Proponent:

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September 22, 2022

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DETERMINATION

Based on this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be recommended for adoption.

☐

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project Applicant. A **MITIGATED NEGATIVE DECLARATION** will be recommended for adoption.

☒

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

☐

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

☐

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

☐

Signature

Edgar Gonzalez, Associate Planner

Printed Name/Title

City of Hesperia

Lead Agency

September 22, 2022

Date

1.0 Background Information

1. Project Title: Tentative Tract Map (TTM) No. 20434.

2. Lead Agency Name, Address, and Telephone Number: City of Hesperia, Development Services Department, 9700 7th Avenue, Hesperia, California 92345.

3. Description of Project: Subdivide approximately 28.8 gross acres into 112 single family residential lots with a minimum lot size of 7,200 square feet. The average lot size of 7,886 square feet. (See Section 3.0, *Project Description*, for additional details).

4. Project Location: The Project site is located on the northside of Mesquite Street, adjacent to the California Aqueduct on the east. The Project site is also identified by the following Assessor Parcel Numbers: 3046-131-20, 36 ,76, and 77.

5. General Plan and Zoning Designation: R-1 (Single Family Residence, 2.5-4.5du/ac). The proposed density is 3.8 du/ac.

6. Environmental Resources Requiring Mitigation

The following environmental factors have been identified as requiring mitigation measures to reduce impacts to a less than significant level. See Table 1.1, *Summary of Environmental Impacts Requiring Mitigation* on page 2 for additional information.

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

Table 1-1. *List of Mitigation Measures*, identifies the environmental resources that require mitigation to reduce impacts to a less than significant level. All other resources either have “No Impact” or a “Less than Significant Impact” as identified throughout this Initial Study.

Table 1.1. List of Mitigation Measures

Environmental Topic	Mitigation Measures
Biological Resources	<p>Mitigation Measure BIO-1. Western Joshua Tree Mitigation. If any western Joshua trees (WJT) are to be relocated, removed, or otherwise taken, the Project Proponent shall obtain an incidental take permit (ITP) from the California Department of Fish and Wildlife (CDFW) under CDFW under §2081 of the California Endangered Species Act (CESA), prior to the relocation, removal, or take. (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of western Joshua tree, a Candidate for Threatened CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate project-related impacts of the taking of CESA-listed species. CDFW recommends permanent protection through either the purchase of conservation or mitigation bank credits or the establishment of a conservation easement, development of a long-term management plan, and securing funding sufficient to implement management plan tasks in perpetuity. These tasks should be completed, or financial security must be provided before starting any Project activities. To execute an ITP, CDFW requires documentation of CEQA compliance. CDFW requires the CEQA document have a State Clearing House number, show proof of filing fees, and proof the document has been circulated.</p> <p>Mitigation Measure BIO-2. Burrowing Owl Pre-Construction Surveys. Pre-construction surveys for Burrowing Owls on the Project site and in the surrounding area shall be conducted by a qualified biologist no more than 14 days prior to initiation of Project ground-disturbing activities in accordance with guidelines identified by the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation (Department of Fish and Game Code, March 2012). If Project activities are delayed for more than 30-days (including the restarting of activities after project/ground disturbing delays of 30-days or more), additional surveys will be required, including but not limited to a take avoidance survey within 24 hours of ground disturbance. If burrowing owls are observed on the Project site during the Pre-construction survey the California Department of Fish and Wildlife shall be immediately notified, and Mitigation Measure BIO-3 shall be required. If burrowing owl(s) are not observed onsite during any pre-construction surveys, a letter shall be prepared by the qualified biologist documenting the results of the survey. The letter shall be submitted to CDFW prior to issuance of any grading permits, and no further action is required.</p> <p>Mitigation Measure BIO-3. Burrowing Owl Mitigation if Detected On-site. If burrowing owls are observed on the project site during any preconstruction survey as per MM BIO-2, the California Department of Fish and Wildlife (CDFW) shall be immediately notified, and the applicant shall conduct an impact assessment in accordance with the 2012 Staff Report on Burrowing Owl Mitigation prior to commencing Project activities to determine appropriate mitigation and any areas occupied by burrowing owls shall be</p>

	<p>avoided. No ground-disturbing activities shall be permitted within 500 meters of an occupied burrow. A smaller buffer may be established if the qualified biologist determines that a reduced buffer would not adversely affect the burrowing owl(s).</p> <p>If burrowing owls cannot be avoided by the Project, then a qualified biologist shall prepare and submit a passive relocation program to CDFW for review/approval prior to the commencement of Project activities in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 Staff Report on Burrowing Owl Mitigation and mitigation shall be required as described below (see g) to reduce impacts to less than significant, including the following steps as approved by the California Department of Fish and Wildlife and in accordance with the updated CDFW Staff Report on Burrowing Owl Mitigation (2012) shall be implemented if burrowing owl are present onsite:</p> <p>a) Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the California Department of Fish and Game verifies through non-invasive methods either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.</p> <p>b) A burrowing owl survey shall be conducted on all portion of the site between September and January to determine the location of active (non-breeding) burrows.</p> <p>c) If the Project cannot avoid burrowing owl, qualified biologists shall exclude all owls from active burrows using one-way doors during the non-breeding season (September 1– January 31) or during the breeding season (February 1– August 31), only after a qualified biologist has determined there are no nesting owls and/or juvenile owls are no longer dependent on the burrows. Concurrently, all inactive burrows and other sources of secondary refuge for burrowing owls shall be collapsed and removed from the site.</p> <p>d) Following a 48-hour observation period and 48-hours after installation of one-way doors, all vacated burrows shall be collapsed.</p> <p>e) A qualified biologist shall conduct a post-exclusion survey confirming the absence of borrowing owls on the site. When a qualified biologist determines that burrowing owls are no longer occupying the Project site and passive relocation is complete, construction activities may begin. A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation and provided to CDFW. Should newly occupied burrows be discovered on the site the exclusion shall be repeated as outlined in the CDFW-approved passive relocation program.</p> <p>f) A final clearance survey confirming the absence of active burrowing owls burrows shall be conducted within three days of initiating Project activities.</p> <p>g) Compensatory mitigation lands for permanent impacts to nesting, occupied, and satellite burrows and burrowing owl habitat shall be provided by the applicant/developer at a minimum ratio of 2:1 and permanent conservation and management of burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owl impacts are replaced consistent with the Staff Report on Burrowing Owl Mitigation including its Appendix A within designated adjacent conserved lands identified through coordination with CDFW. A qualified biologist shall confirm the natural or artificial burrows on the conservation lands are suitable for use by the owls. Monitoring and management of the replacement burrow site(s) shall be conducted, and a reporting plan shall be prepared for CDFW review and approval. The objective shall be to manage the replacement burrow sites for the benefit of burrowing owls (e.g.,</p>
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Environmental Topic	Mitigation Measures
	<p>minimizing weed cover), with the specific goal of maintaining the functionality of the burrows for a minimum of 2 years. When a qualified biologist determines that burrowing owls are no longer occupying the Project site and passive relocation is complete, Project activities may begin. A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW prior to the start of Project activities.</p> <p>Mitigation Measure BIO-4. Pre-Construction Desert Tortoise Surveys. No more than 30 calendar days prior to start of Project Activities a qualified biologist shall conduct pre-construction presence/absence surveys for desert tortoise. Pre-construction surveys shall be completed using perpendicular survey routes within the Project site and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project Activities cannot start until 2 negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Should desert tortoise presence be confirmed during the survey, all desert tortoises encountered during clearance surveys and subsequent monitoring efforts will be permanently removed from the Project site and translocated to an off-site recipient site. The Project Proponent shall prepare a site-specific Desert Tortoise Translocation Plan that will provide details on the proposed recipient site, desert tortoise clearance surveys and relocation, definitions for Authorized Biologists and qualified desert tortoise biologists, exclusion fencing guidelines, protocols for managing desert tortoise found during active versus inactive seasons, protocols for incidental tortoise death or injury, and will be consistent with project permits and current USFWS guidelines. The Plan will also include a requirement for communication and coordination with the Bureau of Land Management (BLM) regarding the desert tortoise recipient site. Prior to construction, the Plan will be subject to the approval of the CDFW and the USFWS. Impacts shall be offset through acquisition of compensatory land within suitable and occupied desert tortoise habitat and/or monetary contributions to other recovery efforts in the West Mojave habitat mitigated for at a ratio of 1:1. Final mitigation acreage are subject to the approval of the State and federal wildlife agencies.</p> <p>Mitigation Measure BIO-5- Nesting Bird Pre-Construction Survey. All Project activities on-site shall be conducted outside of nesting season {January 15 to August 31} to the maximum extent feasible. During the nesting bird season, a qualified biologist shall conduct pre-project nesting bird surveys, implement nest buffers, and conduct monitoring at all active nests within the work area and surrounding 300-foot buffer. Nesting bird surveys shall be conducted by a qualified biologist within 300 feet of all work areas, no more than 3 days prior to commencement of project activities. If active nests containing eggs or young are found, a qualified biologist shall establish an appropriate nest buffer. Nest buffers are species-specific and range from 15 to 100 feet for passerines and 50 to 300 feet for raptors, depending on the planned activity's level of disturbance, site conditions, and the observed bird behavior. Established buffers shall remain until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests shall be monitored until the biologist has determined the young have fledged or the project is finished. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.</p>

Environmental Topic	Mitigation Measures
Cultural Resources	<p>CR-1: Discovery of Unknown Archaeological Resources. Prior to the issuance of a grading permit, the following notes shall be placed on the grading plan:</p> <p><u>“Discovery of Unknown Archaeological Resources:</u> If archaeological resources are encountered during implementation of the Project, ground-disturbing activities will be temporarily redirected from the vicinity of the find. The Project Archaeologist will be allowed to temporarily divert or redirect grading or excavation activities in the vicinity to make an evaluation of the find. If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, the Project Proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural deposit). At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Department and the South-Central Coastal Information Center.</p>
Geology and Soils (Paleontology)	<p>GEO-1: Discovery of Unknown Paleontological Resources. Prior to the issuance of a grading permit, the following notes shall be placed on the grading plan:</p> <p><u>“Discovery of Unknown Paleontological Resources:</u> If paleontological resources are encountered during ground disturbance, work in the immediate area of the find shall be redirected and a qualified paleontologist shall be retained to assess the find for scientific significance. If determined to be significant, the fossil shall be collected from the field. The paleontologist may also make recommendations regarding additional mitigation measures, such as paleontological monitoring. Scientifically significant resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository.</p>
Tribal Cultural Resources	<p>Mitigation Measure TCR-1. Inadvertent Discovery. If 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 Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, to provide Tribal input with regards to significance and treatment.</p>

Environmental Topic	Mitigation Measures
	<p>Mitigation Measure TCR-2. Monitoring and Treatment Plan. If significant pre-contact and/or historic-era 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 YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.</p> <p>Mitigation Measure TCR-3. Human Remains. 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.</p> <p>Mitigation Measure TCR-4. Pre-Contact Historic Cultural Resources. The YSMN shall be contacted, as detailed in Mitigation Measure CR-1 of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the find, to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should YSMN elect to place a monitor on-site.</p> <p>Mitigation Measure TCR-5. Documentation. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.</p>
Utilities and Service Systems	Mitigation Measures BIO-1 through BIO-5, CR-1, GEO-1, and TCR 1 through TCR-5 apply.

2.0-Introduction

2.1-Purpose of the Initial Study/Mitigated Negative Declaration

An Initial Study is a preliminary analysis to determine whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or an Environmental Impact Report (EIR) is required for a Project. Based on the Initial Study prepared for the Project, it is recommended that a Mitigated Negative Declaration be adopted. A Mitigated Negative Declaration is a statement by the City of Hesperia, as the Lead Agency under CEQA, that the Initial Study has identified that no significant or potentially significant impacts on the environment with incorporation of the mitigation measures identified in this Initial Study and summarized in Table 1.1, *Summary of Environmental Impacts Requiring Mitigation* on page 3.

3.0-Project Description/Environmental Setting

3.1 – Project Location

The Project site is located on the northside of Mesquite Street, adjacent to the California Aqueduct on the east. The Project site is also identified by the following Assessor Parcel Numbers: 3046-131-20, 36,76, and 77. (See Figure 3.1- *Location Map and Aerial Photo*).

3.2 -Project Description

The Project proposes a Tentative Tract Map to subdivide approximately 28.8 gross acres into 112 single family residential lots with a minimum lot size of 7,200 square feet. The average lot size of 7,886 square feet.

Street Improvements and Access

Primary access is from Mesquite Street. The Project proposes to improve the north side of Mesquite Street adjacent to the Project site with pavement, curb, gutter, sidewalk, and a landscaped parkway within a 40-foot, half-width right-of-way. The east side of Tamarisk Avenue adjacent to the Project site will be improved pavement, curb, gutter, sidewalk, and a landscaped parkway within a 30-foot, half-width right-of-way. Proposed internal streets will be public roads improved with pavement, curb, gutter, sidewalk, driveway approaches, and landscaped parkway within a 60-foot, full-width right-of-way.

Water and Sewer Improvements

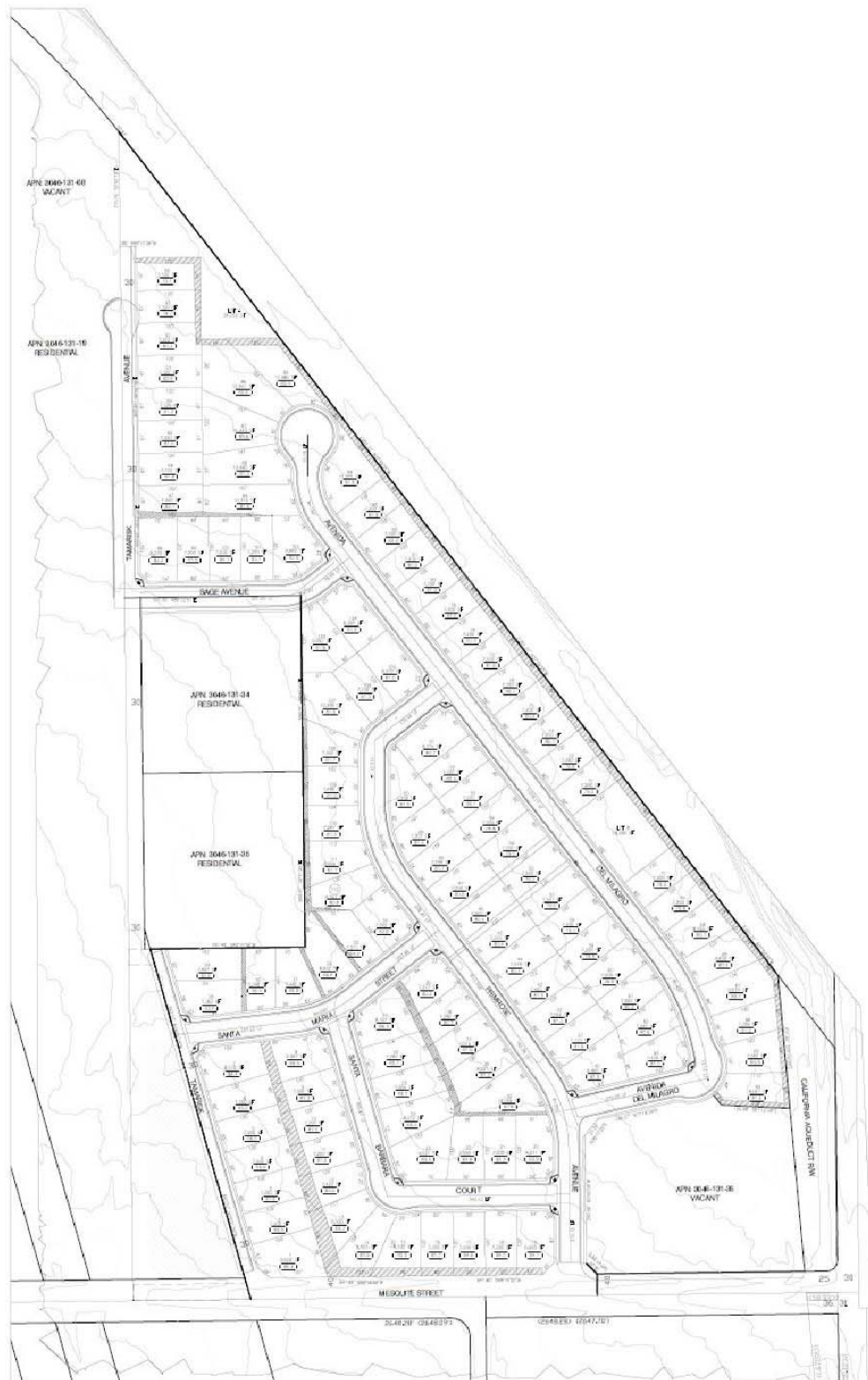
The Project will connect to the existing waterlines located in the immediate vicinity of the Project site. The Project will connect to the existing sewer line located in the immediate vicinity of the Project site.

Storm Drainage Improvements

Post development runoff will be conveyed by the internal street system and then routed through the proposed basin located in the northern portion of the site (Lot A). The basin is designed with a sufficient size to handle water quality through infiltration, and flood mitigation through detention.



Figure 3.2- Tentative Tract Map No. 2043



3.4- Construction and Operational Characteristics

Construction Schedule

Houses will be constructed based on market demand and absorption. Construction of the Project is assumed to begin in the year 2022 and last approximately 22 months. Construction phases are assumed to consist of site preparation, grading, building construction, paving and architectural coating. The Project is expected to be operational in the year 2023. Construction phases are not expected to overlap.

Operational Characteristics

The Project would be operated as a residential community. Typical operational characteristics include residents and visitors traveling to and from the site, leisure and maintenance activities occurring on individual residential lots, and in the on-site recreational. Low levels of noise and a moderate level of artificial exterior lighting typical of a residential community is expected.

3.5-Environmental Setting

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as “...*the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time the environmental analysis is commenced...*” (CEQA Guidelines §15125[a]). Because a Notice of Preparation was not required, the environmental setting for the Project is June 2021, which is the date that the Project’s environmental analysis commenced.

The Project site consists of vacant land with no improvements. Access to the Project site is provided by Mesquite Street, which is a paved 2-lane roadway without curb, gutter and sidewalk adjacent to the southern boundary of the site.

The Project site is relatively flat with a 2 to 5 percent slope. The vegetation community present on site supports a moderately disturbed desert scrub habitat encompassing mainly native plants and some non-native grasses. Onsite and adjacent land uses, General Plan land use designations, and zoning classifications are shown in Table 3.1, *Land Uses, General Plan Land Use Designations, and Zoning Classifications* on page 9.

Table 3.1: Land Uses, General Plan Land Use Designations, and Zoning Classifications

Location	Current Land Use	General Plan Land Use/Zoning Designations
Site	Vacant undeveloped land	R-1 (Single Family Residence)
North	Single -family residence and vacant undeveloped land	R-1 (Single Family Residence) AQ (Aqueduct)
South	Mesquite Street followed by vacant undeveloped land	C-1 (Convenience Commercial) R-R 2.5 (Rural Residential)
East	California Aqueduct and vacant undeveloped land	C-1 (Convenience Commercial) AQ (Aqueduct)
West	Vacant undeveloped land	UC (Utility Corridor) R-1 (Single Family Residence)

Source: Field inspection, City of Hesperia -General Plan Land Use Map, Google Earth Pro, June 2021.

4.0-Environmental Analysis Methodology

The Project is evaluated based on its potential effect on twenty-one (21) environmental resources. Each of environmental resources are analyzed by responding to a series of questions pertaining to the impact of the Project on the particular topic. Based on the results of the Impact Analysis, the effects of the Project are then placed in one of the following four categories, which are each followed by a summary to substantiate the factual reasons why the impact was placed in a certain category.

Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Significant or Potentially significant impact(s) have been identified or anticipated that cannot be mitigated to a level of insignificance. An Environmental Impact Report must therefore be prepared.	Potentially significant impact(s) have been identified or anticipated, but mitigation is possible to reduce impact(s) to a less than significant category. Mitigation measures must then be identified.	No “significant” impact(s) identified or anticipated. Therefore, no mitigation is necessary.	No impact(s) identified or anticipated. Therefore, no mitigation is necessary.

Throughout the impact analysis in this Initial Study, reference is made to the following:

- **Mandatory Requirements** - These include existing regulatory requirements such as General Plan policies, Municipal Code requirements, or other regulatory requirements applied to the Project based on federal, state, or local law currently in place which effectively reduce environmental impacts. Mandatory requirements were assumed and accounted for in the assessment of impacts for each issue area.
- **Mitigation Measures** – These measures include requirements that are imposed where the impact analysis determines that implementation of the proposed Project would result in significant impacts. Mitigation Measures were formulated only for those issue areas where the results of the impact analysis identified significant impacts and are required to reduce impacts to less than significant levels, in accordance with the requirements of CEQA.

4.1 Aesthetics

Threshold 4.1 (a). Would the Project (Except as	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Have a substantial adverse effect on a scenic vista?			✓	

Impact Analysis

According to the General Plan, natural resources that provide scenic vistas to the City of Hesperia are the Mojave River, the San Bernardino and San Gabriel Mountain ranges to the south, the neighboring hillsides and the natural desert environment.¹ In addition to these scenic resources, numerous washes and other natural water courses traverse the City which provides both physical and visual relief from the urban developments which surrounds them.²

In relation to the above-described natural resources, the Project site is located approximately 6 miles east of the Mojave River and 3 miles north of the San Bernardino and San Gabriel Mountains. The nearest desert washes are in excess of 3 miles from the Project site.³

Impacts to scenic vistas are analyzed from points or corridors that are accessible to the public and that provide a view of a scenic vista. Structures within a viewer's line of sight of a scenic vista may interfere with a public view of a scenic vista, either by physically blocking or screening the scenic vista from view, or by impeding or blocking access to a formerly available viewing position.

¹ City of Hesperia General Plan, Open Space Element, p. OS-13.

² City of Hesperia General Plan, Open Space Element, p. OS-14.

³ City of Hesperia General Plan, Open Space Element, Figure OS-4, *South/East Wash Location Map*, and Figure OS-5, *North/East Wash Location Map*.

Those viewers may see the scenic areas prior to development; but would have those views blocked post development.

Because the distance of the Mojave River and various desert washes from the Project site, there are no public views of these resources available. Existing public vantage points to the San Bernardino and San Gabriel Mountain ranges to the south are from Tamarisk Avenue adjacent to the residential development to the north. Upon development of the Project site, new public vantage points from the internal public streets will be available. As required by the Hesperia Development Code § 16.20.450 - *R-1 and RR Zone Districts, property development standards*, the residential structures proposed of the property are restricted to: thirty-five (35) in height; maximum lot coverage of 40%; and building setbacks for the front, rear, and side lot lines. These standards will serve to create space between structures. As such, the homes built on the site would not block or completely obstruct views from surrounding public vantage points (i.e., Tamarisk Avenue and the internal streets) to the San Bernardino and San Gabriel Mountains.

Threshold 4.1 (b). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓

Impact Analysis

According to the California Department of Transportation, the Project site is not located within a State scenic highway⁴. As such, there is no impact.

Threshold 4.1 (c). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
If located in an Urbanized Area, conflict with applicable zoning and other regulations governing scenic quality?			✓	

⁴California Department of Transportation, State Scenic Highway Program, <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed April 5, 2021.

Impact Analysis

Because the Project site is located within an incorporated city located contiguous to not more than two contiguous incorporated cities that combined equals at least 100,000 persons, it is classified as being within an “urbanized area,” as defined by Public Resources Code Section 21071. In addition, according to US Census Bureau, Hesperia is located within the Victorville-Hesperia, CA Urbanized Area⁵. As such, the Project is subject to the City’s applicable regulations governing scenic quality.⁶

The salient regulations governing scenic quality are the following:

Development Code §16.16.140 - Architectural design standards and guidelines.

This section of the Code includes guidelines for facades and architectural detailing, height and roof lines, front entries, doors and windows, garage doors, and materials and finishes.

Development Code §16.16.145 - Site design standards and guidelines. This section of the Code includes guidelines for compatibility with the setback, proportion, and sale of the houses in the neighborhood. In addition, the guidelines also address compatibility with the existing on-site relationships of the surrounding neighborhood such as front facade orientation, scale of front entries, front porches, and front yard landscaping.

Compliance with the above-described provisions of the Development Code ensures that the Project will not conflict with regulations governing scenic quality.

Threshold 4.1 (d). Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			✓	

Outdoor Lighting and Glare

The Project would increase the amount of light in the area above what is being generated by the vacant site by directly adding new sources of illumination including security and decorative

⁵ United States Census Bureau, 2010 Census Urban Area Reference Maps, https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua90541_victorville--hesperia_ca/DC10UA90541_001.pdf accessed April 2021.

⁶ City of Adelanto General Plan, page XI 4.

lighting for the proposed structures. All outdoor lighting is required to be designed and installed to comply with Development Code §16.16. 145.J - *Exterior Lighting* ⁷ which stipulates:

- 1. Exterior lighting includes all lighting fixtures on front facades, security lighting, and landscape lighting. Adequate exterior lighting shall be provided on the front of the house to ensure neighborhood safety and security. Exterior lighting that accentuates architectural and landscape elements of the property is encouraged.*
- 2. Recessed porches must be lit.*
- 3. Light fixtures should complement the design of the house.*
- 4. Photo-sensitive off/on switches are strongly encouraged for energy conservation and safety.*
- 5. Exterior lighting should be positioned so that no direct light extends into neighboring properties or public rights-of-way. Illumination should be screened from adjacent properties. Cut-off luminaires should be used to prevent nighttime light pollution.*

Building Material Glare

According to Development Code §16.16.140 - *Architectural design standards and guidelines*, the architectural style and design of building elements should be consistent within itself and complementary with the neighborhood and with adjacent houses. To be consistent with the residential development in the immediate area and throughout the City, the Project will be developed with homes that feature stucco, wood, brick, stone, or decorative concrete block. These materials are non-reflective materials and do not result in glare. In addition, windows in single family homes are not of the size and scale where a large expanse of glass surface area will produce glare.

Compliance with the above referenced Development Code requirements will ensure that the Project will not adversely affect day or nighttime views in the area.

⁷ Zoning Ordinance.

4.2 Agriculture and Forestry Resources

Threshold 4.2 (a) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓

Impact Analysis

The Project site is designated is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program.⁸ As such, development of the Project will not convert any type of farmland to a non-agricultural use.

Threshold 4.2 (b) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with existing zoning for agricultural use, or a Williamson Act contract?			✓	

Impact Analysis

Agricultural Zoning

The primary agricultural in Hesperia is A-2 (General Agricultural). The A-2 zoning classification encompasses those uses which are customarily conducted in areas not yet suited for urban development or which should be permanently set aside for general agricultural purposes. This district provides areas for commercial agricultural operations, agricultural support services, livestock keeping, rural residential uses, and similar uses.⁹ The current zoning classification for the site and adjacent properties is R-1 (Single Family Residence). The Single-family Residence designation is intended for detached single family residential uses characterized by a more

⁸ <https://databasin.org/maps/new/#datasets=b83ea1952fea44ac9fc62c60dd57fe48>, accessed on March 6, 2021.

⁹ General Plan Table LU-18, A2 (General Agricultural).

suburban setting. Therefore, the Project would not conflict with existing zoning for agricultural use.

Williamson Act

A Williamson Act Contract enables private landowners to voluntarily enter contracts with local governments for the purpose of establishing agricultural preserves. The Project site is not under a Williamson Act Contract.¹⁰

Threshold 4.2 (c) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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))?				✓

Impact Analysis

California Public Resources Code §12220(g) defines forest land as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

§4526 of the Code defines timberland as land, other than land owned by the federal government or land designated by the state as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.

The Project site does not contain any forest lands, timberland, or timberland zoned as Timberland Production, nor are any forest lands or timberlands located on or nearby the Project site. Because no lands within the Project site are currently zoned or proposed for forestland or timberland, there is no potential to impact such zoning.

¹⁰ <https://sbcountyarc.org/wp-content/uploads/arcforms/NPP874-WilliamsonActParcels.pdf>, accessed March 6, 2021.

Threshold 4.2 (d) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in the loss of forest land or conversion of forest land to non-forest use?				✓

Impact Analysis

As noted in the response to Threshold 4.2(c) above, the Project site and surrounding properties do not contain forest lands, are not zoned for forest lands, nor are they identified as containing forest resources by the General Plan. Because forest land is not present within the Project site or in the immediate vicinity of the site, the Project has no potential to result in the loss of forest land or the conversion of forest land to non-forest use.

Threshold 4.2 (e) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				✓

Impact Analysis

As noted under Threshold 4.2 (a), the Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. In addition, the site is not under agricultural production and there is no land being used primarily for agricultural purposes on or in the vicinity of the site.

4.3 Air Quality

The following analysis is consistent with the MDAQMD *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*, February 2020.

Air Quality Setting

Topography and Climate

The Project site is located within the Mojave Desert portion of the Mojave Desert Air Basin (MDAB) which is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel's by the Cajon Pass (4,200 ft). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley). The MDAB is classified as a dry-hot desert (BWh), with portions classified as dry-very hot desert (BW_hh), to indicate at least three months have maximum average temperatures over 100.4° F.¹¹

Air Pollutants and Health Effects

Air Pollutants are the amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation and/or materials. The Air Pollutants regulated by the MDAQMD that are applicable to the Project are described below.¹²

Carbon Monoxide (CO). A colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels. Over 80 percent of the CO emitted in urban areas is contributed by motor vehicles. Carbon monoxide is harmful when breathed because it displaces oxygen in the blood and deprives the heart, brain and other vital organs of oxygen.

Nitrogen Dioxide NO_x. Nitrogen dioxide (NO₂) is a byproduct of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO_x can irritate eyes, nose, throat and lungs, possibly leading to coughing, shortness of breath, tiredness and nausea.

Particulate Matter (PM_{2.5} and PM₁₀): One type of particulate matter is the soot seen in vehicle exhaust. Fine particles — less than one-tenth the diameter of a human hair — pose a serious threat to human health, as they can penetrate deep into the lungs. PM can be a primary pollutant or a secondary pollutant from hydrocarbons, nitrogen oxides, and sulfur dioxides. Diesel exhaust is a major contributor to PM pollution.

¹¹ MDAQMD CEQA Guidelines, February 2020, Page 6-7.

¹² <http://www.aqmd.gov/home/air-quality>

Sulfur Dioxide (SO₂). A strong smelling, colorless gas that is formed by the combustion of fossil fuels. Power plants, which may use coal or oil high in sulfur content, can be major sources of SO₂. Sulfur dioxide irritates the skin and mucous membranes of the eyes, nose, throat, and lungs.

Ozone: Ozone is formed when several gaseous pollutants react in the presence of sunlight. Most of these gases are emitted from vehicle tailpipe emissions. Ozone can reduce lung function worsen bronchitis, emphysema, and asthma.

Volatile Organic Compounds (VOCs): VOCs contribute to the formation of smog and/or may themselves be toxic. VOCs often have an odor, and some examples include gasoline, alcohol and the solvents used in paints. Health effects may include eye, nose and throat irritation, headaches, loss of coordination, and nausea.

Non-attainment Designations and Classification Status

The United States Environmental Protection Agency and the California Air Resources Board have designated portions of the MDAQMD non-attainment for a variety of pollutants. An “attainment” designation for an area signifies that criteria pollutant concentrations did not exceed the established standard. In contrast to attainment, a “nonattainment” designation indicates that a criteria pollutant concentration has exceeded the established standard. Table 4.3-1 shows the attainment status of criteria pollutants in the MDAB.

Table 4.3-1- Attainment Status of Criteria Pollutants in the Mojave Desert Air Basin

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1-hour standard	Nonattainment	No Standard
Ozone – 8-hour standard	Nonattainment	Nonattainment
Respirable Particulate Matter (PM ₁₀)	Nonattainment	Attainment
Fine Particulate Matter (PM _{2.5})	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO _x)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO ₂)	Unclassified /Attainment	Unclassified/Attainment
Lead	Attainment	Attainment

Source: California Air Resources Board, 2015.

As shown in Table 4.3-2 above, the MDAB is classified as Nonattainment for Ozone – 1-hour standard, Ozone – 8-hour standard, Respirable Particulate Matter (PM₁₀) and Fine Particulate Matter (PM_{2.5})

Threshold 4.3 (a). Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with or obstruct implementation of the applicable air quality plan?			✓	

Impact Analysis

The following analysis is consistent with the preferred analysis approach recommended by the MDAQMD *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*.

Conformity with Air Quality Management Plans

Under the Federal Clean Air Act the MDAQMD has adopted a variety of attainment plans (i.e., “Air Quality Management Plans”) for a variety of non-attainment pollutants. A complete list of the various air quality management plans is available from the MDAQMD located at 14306 Park Avenue, Victorville, CA 92392 or on their website at:

<https://www.mdaqmd.ca.gov/rules/overview>.

A project is in conflict if it does not conform with the applicable control measures identified in attainment or maintenance plan(s). Compliance with the MDAQMD *Rules and Regulations of the Mojave Desert Air Quality Management District*, constitutes compliance with the attainment or maintenance plan(s). Compliance is a mandatory requirement, therefore, with adherence to the applicable rules, the Project would not conflict or obstruct implementation of the MDAQMD attainment or maintenance plan(s).

In addition, the Project site is designated as R-1 (Single Family Residence) by the General Plan Land Use & Zoning Map. This land use designation is consistent with the land use plan that was used by the MDAQMD to generate the growth forecasts for the air quality plans referenced above.

Threshold 4.3 (b). Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

MDAQMD Significance Thresholds

The following provides an analysis based on the applicable regional significance thresholds established by the Mojave Desert Air Quality Management District in order to meet national and state air quality standards.

Table 4.3.2. MDAQMD Air Quality Significance Thresholds

Pollutant	Daily Emissions (pounds/day)
Carbon Monoxide (CO)	548
Oxides of Nitrogen (NOx)	137
Volatile Organic Compounds (VOC)	137
Oxides of Sulphur (SOx)	137
Particulate Matter (PM10)	82
Particulate Matter (PM 2.5)	65

Source: MDAQMD CEQA Guidelines, February 2020, Table 6.

Both construction and operational emissions for the Project were estimated based on a worst-case scenario of 112 dwelling units by using the California Emissions Estimator Model (CalEEMod) which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model is authorized for use by the MDAQMD.

Construction Emissions

Construction of the Project is assumed to begin in the year 2021 and last approximately 19 months. Construction phases are assumed to consist of site preparation, grading, building construction, paving and architectural coating. The Project is expected to be fully operational in the year 2025. Construction phases are not expected to overlap. Construction activities produce combustion emissions from various sources (utility engines, tenant improvements, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The Project will be required to comply with several standard fugitive dust control measures, per MDAQMD Rule 402-*Nuisance*, and 403-*Fugitive Dust*. Daily construction emissions are shown in Table 4.3.3 on page 20.

Table 4.4.3. Daily Construction Emissions (Rule 402/403 Requirements)

Maximum Daily Emissions	Emissions (pounds per day)					
	NOx	ROG	CO	SOx	PM10	PM2.5
	46.45	37.01	31.56	0.06	9.85	5.86
Regional Threshold	137	137	548	150	82	82
Exceeds Regional Threshold?	NO	NO	NO	NO	NO	NO

Source: MDAQMD and CalEEMod 2020.4.1

As shown on Table 4.4.3 above, construction emissions do not exceed the MDAQMD thresholds and impacts are less than significant.

Operational Emissions

The Project would be operated as a residential subdivision. Typical operational characteristics include residents and visitors traveling to and from the site, delivery of goods and services to the residents, and maintenance activities. Table 4.3-4, *Operational Emissions*, shows the MDAQMD's thresholds for operational emissions compared to the Project's maximum daily emissions.

Table 4.3.4. Operational Emissions

Maximum Daily Emissions	Emissions (pounds per day)					
	NOx	ROG	CO	SOx	PM10	PM2.5
	5.31	10.19*	40.53	0.07	6.57	1.87
Regional Threshold	137	137	548	150	82	82
Exceeds Regional Threshold?	NO	NO	NO	NO	NO	NO

Source: MDAQMD and CalEEMod 2020.4.1. *No Hearth Selected for Model.

As shown in Table 4.3.4 above, both construction and operational related emissions would not exceed Mojave Desert Air Quality Management District thresholds. Accordingly, the Project would not emit substantial concentrations of these pollutants during operation and would not contribute to an existing or projected air quality violation, on a direct or cumulative basis. As such, impacts are less than significant, and no mitigation measures are required.

Threshold 4.3 (d). Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Expose sensitive receptors to substantial pollutant concentrations?			✓	

Impact Analysis

Construction

The California Office of Environmental Health Hazard Assessment (OEHHA) adopted the *Guidance Manual for Preparation of Health Risk Assessments*¹³ (HRA Guidelines) to provide procedures for use in the Air Toxics Hot Spots Program or for the permitting of existing, new, or modified stationary sources.

The HRA Guidelines provide risk factors for DPM based on exposure over a 30-year span. Short-term risk from construction activities has not been developed for DPM. In addition, MDAQMD does not typically require the evaluation of long-term cancer risk or chronic health impacts for construction operations of a short-term project. Hence, the impacts from short-term exposure to DPM during project construction may be presumed to be less than significant without the need for a detailed HRA study.

Operations

The Project is a residential subdivision and does not produce toxic air emissions such as those generated by industrial manufacturing uses or uses that generate heavy-duty diesel truck emissions. According to the MDAQMD¹⁴, sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. The closest sensitive land use is the single-family detached homes located adjacent to the northern boundary of the site and across Mesquite Street to the south. The other residential land uses located in the immediate area are approximately 500 feet or more in distance from the site.

The Project does not consist of a land use that has been identified by the MDAQMD as potentially significant generator of TACs that could cause the exposure of sensitive receptors to substantial pollutant concentrations. Therefore, since the Project is not considered a substantial source of stationary pollution, the Project's operational impact is presumed to cause a less than significant impact without the need for further evaluation.¹⁵

¹³ OEHHA. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance for Preparation of Health Risk Assessments. February 2015, available at: <https://oehha.ca.gov/air/air-toxics-hot-spots>.

□ ¹⁴ MDAQMD *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, February 2020*, available at: <https://www.mdaqmd.ca.gov/rules/overview>.

¹⁵ Ibid.

Threshold 4.3 (d). Would the Project	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

Impact Analysis

Potential odor sources associated with the Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's long-term operational uses.

The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

4. Biological Resources

The analysis in this section is based in part on the following technical report:

- *General Biological Resources Assessment, Hesperia, San Bernardino County, California (APN: 3046-131-20, 36, 76, & 77), RCA Associates, Inc., which is dated May 31, 2021, and is included as Appendix B to this Initial Study.*
- *Protected Plant Preservation Plan, Hesperia, San Bernardino County, California (APN: 3046-131-20, 36, 76, & 77), RCA Associates, Inc., which is dated May 31, 2021, and is included as Appendix C to this Initial Study.*

Threshold 4.4 (a) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		✓		

Impact Analysis

Plant Species

Federal and State Listed Plant Species

Mohave Tui Chub: The Mohave Tui Chub is a federally and state endangered species that is fully protected. The site is located within the documented Hesperia quad habitat according to CNDDDB (2021). There are only three populations of Mohave tui chub, with a fourth population having been recently introduced to the Mojave river. The site, however, does not contain or is connected to the Mojave River, and no Mohave tui chub will occur on site.

Booth's Evening-Primrose: The Booth's evening primrose is a California threatened annual plant species. The flower's optimal preferred habitat includes Joshua tree and pinyon/juniper woodland that have sandy flats and steep loose slopes. Although the site contains California juniper, Joshua trees, and little areas of sandy areas, the habitat is no prime habitat for the Booth's evening primrose given the lack of recent sightings, and the low number of sandy areas occurring on the site.

Sensitive Plants

There are two sensitive plant species that have been documented in the Hesperia quad, the short-joint beavertail cactus and white-pygmy-poppy. In recent years, only the short-joint beavertail has been seen within 20 years in the Hesperia quad, while the white pygmy-poppy has not been observed for over 20 years. The site currently does not support suitable habitat for the two species, and none were observed on site during the field investigations. These species are not expected to occur on the site in the foreseeable future based on the length of time they have been observed in the area and lack of suitable habitat, and therefore the project is not expected to impact any sensitive species.

Candidate Species

Western Joshua Tree

Background

On October 21, 2019, the California Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list the WJT as Threatened under the California Endangered Species Act (CESA). California Fish and Game Code Section 2073.5 requires that the California Department of Fish and Wildlife evaluate the petition and submit a written evaluation with a recommendation to the Commission, which was received at the Commission's April 2020 meeting.

On September 22, 2020, the Commission determined that Threatened listing may be warranted pursuant to Fish and Game Code (FGC) Section 2074.2 of the, and therefore western Joshua tree became a Candidate species, and the Department undertook a one-year status review. The process is still underway at the time of the preparation of this ISMND. The Fish and Game Commission meets in October of 2022 and may make a determination at that time as to what action (if any) is needed for protection of Joshua trees. Until a final determination is made, the WJT is afforded protection under the California Endangered Act and can only be removed with the approval of a Take Permit issued by the California Department of Fish and Wildlife (CDFW).

Results of Field Survey

During the field survey, 59 Joshua tree specimens were inventoried within the project boundary, and an additional four were assessed within the 186-foot buffer. These 23 trees were tagged, assessed, and details of the stature were recorded. See *Protected Plant Preservation Plan*, Appendix C.

Based on the results of the field investigations there are 59 Joshua trees which occur within the boundaries of the property. Based on the evaluation and analysis of each tree it was determined that 15 of the 59 Joshua trees (25.4%) are suitable for transplanting. These trees are marked in red in Table 4-1. The remaining 44 Joshua trees (74.6%) were determined to be unsuitable for transplanting due to a variety of factors such as size, condition, damage, dying, excessive leaning, possibly disease, clonal, etc.

Given the dispersal of the 15 trees throughout the Project site, preservation or relocation on-site is not a viable option and would essentially prevent development of the site as envisioned under the City's General Plan. Therefore, Mitigation Measure BIO- 1 is recommended.

Mitigation Measure BIO-1. Western Joshua Tree Mitigation. *If any western Joshua trees (WJT) are to be relocated, removed, or otherwise taken, the Project Proponent shall obtain an incidental*

take permit (ITP) from the California Department of Fish and Wildlife (CDFW) under CDFW under §2081 of the California Endangered Species Act (CESA), prior to the relocation, removal, or take. (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of western Joshua tree, a Candidate for Threatened CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate project-related impacts of the taking of CESA-listed species. CDFW recommends permanent protection through either the purchase of conservation or mitigation bank credits or the establishment of a conservation easement, development of a long-term management plan, and securing funding sufficient to implement management plan tasks in perpetuity. These tasks should be completed, or financial security must be provided before starting any Project activities. To execute an ITP, CDFW requires documentation of CEQA compliance. CDFW requires the CEQA document have a State Clearing House number, show proof of filing fees, and proof the document has been circulated

Sensitive Wildlife

Within the Hesperia Quad, seven species are listed as Species of Special Concern. These are the yellow warbler, burrowing owl, pallid bat, long-eared owl, coast horned lizard, Le Conte's thrasher, and gray vireo. The property does not contain suitable habitat for the yellow warbler, Le Conte's thrasher, long-eared owls, gray vireo, and pallid bat. The area has suitable habitat for coast horned lizards and burrowing owls but given the high disturbance of the site and lack of burrows and vegetations, these two species are not expected to occur on site and were not observed on the property. The site also does not contain any suitable burrows for burrowing owls, and no signs of owls (i.e., scat, feathers) were found on the property and are unlikely to inhabit the site in the future given the lack of occupiable burrows.

The Mohave ground squirrel is a California state threatened species. Occupiable burrows were found on the site, but no Mohave ground squirrels were detected. The habitat is not prime Mohave ground squirrel habitat and is very unlikely to support populations of the species based on the following criteria, that there have been two recent sightings, within 20 years of the species in the Hesperia quadrangle.

No federal or State-listed species were observed on the site during the field investigations including the Mohave ground squirrel and desert tortoise. In addition, there are no documented observations of these species either on the site or in the immediate area. The site is not expected to support populations of the desert tortoise based on the absence of habitat, suitable burrows, or signs.

Conclusions

There are no Federal and State listed species or Species of Special Concern present on the Project site. However, because the Project only consists of a Tentative Tract Map with no development proposed at the present time, given the potential for burrowing owl, desert tortoise, and nesting birds to occupy the site in the future because of their transitory nature, Mitigation Measures BIO-1 through BIO-3 are recommended.

Mitigation Measure BIO-2. Burrowing Owl Pre-Construction Surveys. Pre-construction surveys for Burrowing Owls on the Project site and in the surrounding area shall be conducted by a qualified biologist no more than 14 days prior to initiation of Project ground-disturbing activities in accordance with guidelines identified by the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation (Department of Fish and Game Code, March 2012). If Project activities are delayed for more than 30-days (including the restarting of activities after project/ground disturbing delays of 30-days or more), additional surveys will be required, including but not limited to a take avoidance survey within 24 hours of ground disturbance. If burrowing owls are observed on the Project site during the Pre-construction survey the California Department of Fish and Wildlife shall be immediately notified, and Mitigation Measure BIO-3 shall be required. If burrowing owl(s) are not observed onsite during any pre-construction surveys, a letter shall be prepared by the qualified biologist documenting the results of the survey. The letter shall be submitted to CDFW prior to issuance of any grading permits, and no further action is required.

Mitigation Measure BIO-3. Burrowing Owl Mitigation if Detected On-site. If burrowing owls are observed on the project site during any preconstruction survey as per MM BIO-2, the California Department of Fish and Wildlife (CDFW) shall be immediately notified, and the applicant shall conduct an impact assessment in accordance with the 2012 Staff Report on Burrowing Owl Mitigation prior to commencing Project activities to determine appropriate mitigation and any areas occupied by burrowing owls shall be avoided. No ground-disturbing activities shall be permitted within 500 meters of an occupied burrow. A smaller buffer may be established if the qualified biologist determines that a reduced buffer would not adversely affect the burrowing owl(s).

If burrowing owls cannot be avoided by the Project, then a qualified biologist shall prepare and submit a passive relocation program to CDFW for review/approval prior to the commencement of Project activities in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 Staff Report on Burrowing Owl Mitigation and mitigation shall be required as described below (see g) to reduce impacts to less than significant, including the following steps as approved by the California Department of Fish and Wildlife and in accordance with the updated CDFW Staff Report on Burrowing Owl Mitigation (2012) shall be implemented if burrowing owl are present onsite:

a) Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the California Department of Fish and Game verifies through non-invasive methods either: (1) the birds have not begun egg-laying and incubation; or

(2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

b) A burrowing owl survey shall be conducted on all portion of the site between September and January to determine the location of active (non-breeding) burrows.

c) If the Project cannot avoid burrowing owl, qualified biologists shall exclude all owls from active burrows using one-way doors during the non-breeding season (September 1– January 31) or during the breeding season (February 1– August 31), only after a qualified biologist has determined there are no nesting owls and/or juvenile owls are no longer dependent on the burrows. Concurrently, all inactive burrows and other sources of secondary refuge for burrowing owls shall be collapsed and removed from the site.

d) Following a 48-hour observation period and 48-hours after installation of one-way doors, all vacated burrows shall be collapsed.

e) A qualified biologist shall conduct a post-exclusion survey confirming the absence of borrowing owls on the site. When a qualified biologist determines that burrowing owls are no longer occupying the Project site and passive relocation is complete, construction activities may begin. A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation and provided to CDFW. Should newly occupied burrows be discovered on the site the exclusion shall be repeated as outlined in the CDFW-approved passive relocation program.

f) A final clearance survey confirming the absence of active burrowing owls burrows shall be conducted within three days of initiating Project activities.

g) Compensatory mitigation lands for permanent impacts to nesting, occupied, and satellite burrows and burrowing owl habitat shall be provided by the applicant/developer at a minimum ratio of 2:1 and permanent conservation and management of burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owl impacts are replaced consistent with the Staff Report on Burrowing Owl Mitigation including its Appendix A within designated adjacent conserved lands identified through coordination with CDFW. A qualified biologist shall confirm the natural or artificial burrows on the conservation lands are suitable for use by the owls. Monitoring and management of the replacement burrow site(s) shall be conducted, and a reporting plan shall be prepared for CDFW review and approval. The objective shall be to manage the replacement burrow sites for the benefit of burrowing owls (e.g., minimizing weed cover), with the specific goal of maintaining the functionality of the burrows for a minimum of 2 years. When a qualified biologist determines that burrowing owls are no longer occupying the Project site and passive relocation is complete, Project activities may begin. A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW prior to the start of Project activities.

Mitigation Measure BIO-4. Pre-Construction Desert Tortoise Surveys. No more than 30 calendar days prior to start of Project Activities a qualified biologist shall conduct pre-construction presence/absence surveys for desert tortoise. Pre-construction surveys shall be completed using perpendicular survey routes within the Project site and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project Activities cannot start until 2 negative results from consecutive surveys using

perpendicular survey routes for desert tortoise are documented. Should desert tortoise presence be confirmed during the survey, all desert tortoises encountered during clearance surveys and subsequent monitoring efforts will be permanently removed from the Project site and translocated to an off-site recipient site. The Project Proponent shall prepare a site-specific Desert Tortoise Translocation Plan that will provide details on the proposed recipient site, desert tortoise clearance surveys and relocation, definitions for Authorized Biologists and qualified desert tortoise biologists, exclusion fencing guidelines, protocols for managing desert tortoise found during active versus inactive seasons, protocols for incidental tortoise death or injury, and will be consistent with project permits and current USFWS guidelines. The Plan will also include a requirement for communication and coordination with the Bureau of Land Management (BLM) regarding the desert tortoise recipient site. Prior to construction, the Plan will be subject to the approval of the CDFW and the USFWS. Impacts shall be offset through acquisition of compensatory land within suitable and occupied desert tortoise habitat and/or monetary contributions to other recovery efforts in the West Mojave habitat mitigated for at a ratio of 1:1. Final mitigation acreage are subject to the approval of the State and federal wildlife agencies.

Threshold 4.4 (b). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				✓

Impact Analysis

No riparian vegetation (e.g., cottonwoods, willows, etc.) exist on the site or in the adjacent habitats.

Threshold 4.4 (c) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

The following sources were reviewed to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their location within the watersheds associated with the Project site, and other features that might contribute to federal or state jurisdictional authority located within watersheds associated with the Project site:

- ❑ National Wetlands Inventory (NWI) maps. The NWI database indicates potential wetland areas based on changes in vegetation patterns as observed from satellite imagery. This database is used as a preliminary indicator of wetland habitats because the satellite data are not precise.
- ❑ USGS National Hydrography Dataset (NHD) provides the locations of "blue-line" streams as mapped on 7.5-Minute Topographic Map coverage.
- ❑ Aerial Imagery (Google Earth) (Google 2021).
- ❑ USGS 7.5-Minute Topographic Maps; and
- ❑ Natural Resources Conservation Service (NRCS) Soil Survey.

No jurisdictional non-wetland Waters of the U.S. are present on the Project site nor were any jurisdictional riparian waters of the State or streambed waters of the State observed on the site. The small drainage swales on the site were determined to not be within USACE jurisdiction due to the lack of connectivity to adjacent jurisdictional features and the lack of wetlands. All jurisdictional Waters of the U.S. under the jurisdiction of the USACE and RWQCB, Waters of the State under the jurisdiction of CDFW and RWQCB, that are present in the surrounding region will not be directly impacted by the Project. To avoid indirect impacts to jurisdictional waters during construction, standard BMPs will be implemented. To prevent direct and indirect impacts to jurisdictional waters post-construction, a storm drain system, and a water quality or detention basin will be implemented.

Threshold 4.4 (d). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		✓		

Impact Analysis

Habitat fragmentation occurs when a single, contiguous habitat area is divided into two or more areas, or where an action isolates two or more new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or to/from one habitat type to another. As discussed under Threshold 4.4 (d) above, the Project site does not provide suitable habitat to serve as a wildlife corridor. Although wildlife could utilize the linear nature of the adjacent California Aqueduct as a corridor between undeveloped areas, the Project is not impacting the aqueduct. As such, the Project will not interfere substantially with a wildlife corridor. However, there is vegetation on the site that could support nesting birds, which are protected under the Migratory Bird Treaty Act. Therefore, the following mitigation measure is required.

Mitigation Measure BIO-5- Nesting Bird Pre-Construction Survey. *All Project activities on-site shall be conducted outside of nesting season {January 15 to August 31} to the maximum extent feasible. During the nesting bird season, a qualified biologist shall conduct pre-project nesting bird surveys, implement nest buffers, and conduct monitoring at all active nests within the work area and surrounding 300-foot buffer. Nesting bird surveys shall be conducted by a qualified biologist within 300 feet of all work areas, no more than 3 days prior to commencement of project activities. If active nests containing eggs or young are found, a qualified biologist shall establish an appropriate nest buffer. Nest buffers are species-specific and range from 15 to 100 feet for passerines and 50 to 300 feet for raptors, depending on the planned activity's level of disturbance, site conditions, and the observed bird behavior. Established buffers shall remain until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests shall be monitored until the biologist has determined the young have fledged or the project is finished. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.*

Threshold 4.4 (e) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		✓		

Impact Analysis

Refer to Joshua tree preservation discussed under Threshold 4.4 (a) above.

Threshold 4.4 (f) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

Impact Analysis

Habitat Conservation Plans (HCPs) are planning documents required as part of an application for an incidental take permit for a protected species. They describe the anticipated effects of the proposed taking; how those impacts will be minimized or mitigated; and how the HCP is to be funded. Natural Community Conservation identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. According to the *California Natural Community Conservation Plans Map* maintained by the California Department of Fish and Wildlife, there are no such plans that encompass the Project site.¹⁶

4.5 Cultural Resources

Threshold 4.5 (a)	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5?				✓

The definition of a “historical resource” (i.e., any object, building, structure, site, area, place, record, or manuscript) pursuant to CEQA Guidelines §15064.5 is summarized below:

- ☐ A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- ☐ A resource included in a local register of historical resources.

¹⁶California Natural Community Conservation Plans Map, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>, accessed on June 1, 2021.

- The resource meets the criteria for listing on the California Register of Historical Resources including the following: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; Is associated with the lives of persons important in our past; Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

Impact Analysis

Most of the historic resources in Hesperia consist of historic transportation routes, or roads and railways of various widths and lengths. Several important routes include:

- The Mojave Trail/Road
- The Mormon Trail
- The National Old Trails
- The remnants of historic buildings and/or ranch complexes, such as foundations. These historic resources consist of buildings or linear features more than 45 years of age.

Exhibit 5 of the *Technical Background Report in Support of the Cultural Resource Element: City of Hesperia General Plan Update*, consists of cultural resource sensitivity maps that define areas in Hesperia that might hold more cultural resource sites than other areas. "Sensitivity" has been divided into low, medium and high designations and the gradation was developed based on recorded site information. Areas deemed "Low" generally exhibit 0 to 1 recorded sites per 160 acres exhibited by modern development. "Medium" areas of sensitivity generally exhibit 2 to 9 sites per 160 acres and are focused along important historic road alignments. Areas of "High" sensitivity generally exhibit 10 or more sites per 160 acres and are located near permanent water sources. However, one of the highly sensitive areas is focused on the downtown core, near the AT&SF railway to allow for the consideration of various historic structures or structures more than 45 years old. The Project site location is identified as "Low Sensitivity."¹⁷ There are no visible structures of any kind on the Project site.

Conclusions

Based on the *Technical Background Report in Support of the Cultural Resource Element: City of Hesperia General Plan Update*, March 19, 2010, and existing site conditions, it does not appear that surface historical structures will be impacted. (Historic archaeological resources are addressed under Threshold 4.5 (b) below.

¹⁷ *Technical Background Report in Support of the Cultural Resource Element: City of Hesperia General Plan Update*, March 19, 2010, Exhibit 5e

Threshold 4.5 (b)	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?		✓		

Impact Analysis

Archaeological Setting

In addition, the sensitivity zones identified under Threshold 4.5 (b) above, sensitivity zones were also developed utilizing knowledge about landforms and water resources. Water is required to sustain life, and certain kinds of resources, such as habitats must be located within reasonable walking distance to a water source. Therefore, areas near the Mojave River and Silverwood Lake area are assigned a high sensitivity zone. Areas that exhibit exposed veins of quartz or quartzite, such as found in the higher elevations northeast of Silverwood Lake, are assigned High sensitivity due to the need for raw materials used to create stone tools.

As discussed under Threshold 4.5 (a) above, the Project site is identified as “Low Sensitivity” for archaeological resources. Although the site is classified as “Low Sensitivity” for archaeological resources, it is always possible that ground-disturbing activities during construction will uncover previously unknown, buried archaeological resources. Therefore, the following mitigation measure is recommended:

Mitigation Measure

CR-1: Discovery of Unknown Archaeological Resources. Prior to the issuance of a grading permit, the following notes shall be placed on the grading plan:

“Discovery of Unknown Archaeological Resources: If archaeological resources are encountered during implementation of the Project, ground-disturbing activities will be temporarily redirected from the vicinity of the find. The Project Archaeologist will be allowed to temporarily divert or redirect grading or excavation activities in the vicinity to make an evaluation of the find. If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, the Project Proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary to document the size and content

of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural deposit). At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City Planning Department and the South-Central Coastal Information Center.”

Threshold 4.5 (c) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Disturb any human remains, including those interred outside of formal cemeteries?			✓	

Impact Analysis

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. If human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq.

4.6 Energy

Threshold 4.6 (a) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	

Impact Analysis

The following analysis focuses on the consumption of electricity and natural gas. Although motor vehicle fuel is an energy resource, its consumption is primarily pursuant to federal, and state regulatory fuel efficiency standards applied to vehicle manufacturers and is not something the Project itself regulates.

Construction

The Project would require the use of electric power tools. The anticipated construction schedule assumes the Project would be built-out in approximately 22 months. The consumption of electricity would be temporary in nature and would not represent a significant demand on available supplies. The use of natural gas is not anticipated to be used during construction.

Operations

Occupancy of the single-family residences would result in the consumption of natural gas and electricity. Energy demands are estimated at 3.16814 kBTU/year of natural gas and 892, 040 kWh/year of electricity¹⁸. Natural gas would be supplied to the Project by Southwest Gas Corporation and electricity would be supplied by SCE. The Project proposes single-family homes reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other single-family land use projects of similar scale and configuration. The Project will also comply with the applicable Title 24 standards.

In addition, the Project will be required to provide rooftop solar panels, or sources of on-site renewable energy, per the latest 2019 California Energy Code requirements. The Energy Code requires all new residential construction to achieve net-zero emissions associated with electricity usage using on-site renewable sources. This analysis has conservatively assumed 80% of electricity usage will be captured via on-site renewable sources (i.e., solar panels), as part of the project design.

Conclusion

As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Threshold 4.6(b). Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			✓	

¹⁸ Appendix A, CalEEMod Output Sheets.

Impact Analysis

The regulations directly applicable to the Project are *Building Energy Efficiency Standards*, Title 24, Part 6, and *CALGreen* Title 24, Part 11. These regulations include but are not limited to the use of energy efficient heating and cooling systems, water conserving plumbing and water-efficient irrigation systems. The Project is required to demonstrate compliance with these regulations as part of the building permit and inspection process.

4.7 Geology and Soils

Threshold 4.7(a). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓

Impact Analysis

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. (A trace is a line on the earth's surface defining a fault.) Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally fifty feet).¹⁹ According to The California Geological Survey's Earthquake Hazards Zone Application (EQ Zapp), the Project site is not located within an Alquist-Priolo Earthquake Fault zone.²⁰

Threshold 4.7(a1). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Strong seismic ground shaking?			✓	

Impact Analysis

¹⁹ <https://www.conservation.ca.gov/cgs/alquist-priolo>.

²⁰ <https://maps.conservation.ca.gov/geologichazards/#dataviewer>, accessed July 15, 2021.

The Project site is in a seismically active area of Southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other similar properties in the Southern California area. As a mandatory condition of Project approval, the Project would be required to construct the proposed structures in accordance with the seismic design criteria mandated by the California Building Code which provides minimum standards to safeguard life or property by stipulating building and foundation requirement to withstand earthquakes.

Threshold 4.7(a2). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Seismic-related ground failure, including liquefaction?			✓	

Impact Analysis

According to The California Geological Survey's Earthquake Hazards Zone Application (EQ Zapp), the Project site is not located in a liquefaction zone.²¹ Notwithstanding, the Project would be required to comply with Development Code §17.04. 060.A, *Soils Report Requirement*, which requires corrective action which is likely to prevent structural damage to each structure proposed to be constructed in the area where soils problems exist.

Threshold 4.7(a3). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Landslides?				✓

Impact Analysis

The site is relatively flat and is not adjacent to any slopes or hillsides that could be potentially susceptible to landslides.

Threshold 4.7(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in substantial soil erosion or the loss of topsoil?			✓	

Impact Analysis

²¹ <https://maps.conservation.ca.gov/geologic Hazards/#dataviewer>, accessed June 15, 2021.

The Project will not result in substantial soil erosion or the loss of topsoil, because the site will be paved and landscaped after it is developed. To control soil erosion during construction, the Project proponent is required to comply with Municipal Code Chapter 8.30-*Surface and Groundwater Protection: NPDES Permit Implementation*, which requires the Project and prepare a Storm Water Pollution Prevention Plan to manage soil erosion during construction activities. In addition, a Water Quality Management Plan is required which addresses post-construction soil erosion. Preparation and implementation of these plans is a mandatory requirement. Therefore, impacts are less than significant, and no mitigation measures are required. (Also see analysis under Issue 4.9, *Hydrology and Water Quality*).

Threshold 4.7(c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Be located on a geologic unit or soil that is unstable, or that would become unstable because of the Project, and potentially result in on-site or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			✓	

Impact Analysis

Landslide/Lateral Spreading

Lateral spread or flow are terms referring to landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement, like water. All the land within the Project site is relatively flat and according to the *County of San Bernardino Hazard Maps*, is not located in areas prone to landslides and thus there are no slopes that may contribute to lateral spreading.

Subsidence

Subsidence is the downward movement of the ground caused by the underlying soil conditions. Certain soils, such as clay soils are particularly vulnerable since they shrink and swell depending on their moisture content. Subsidence is an issue if buildings or structures sink which causes damage to the building or structure. Subsidence is usually remedied by excavating the soil the depth of the underlying bedrock and then recompacting the soil so that it can support buildings and structures.

Liquefaction or Collapse

Liquefaction may occur during seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause soils to liquefy and temporarily behave as a dense fluid. Collapse occurs in saturated soils in which the space between individual particles is filled with

water. This water exerts a pressure on the soil particles that influences how tightly the particles themselves are pressed together. The soils lose their strength beneath buildings and other structures.

Based on the California Geological Survey, the site is not mapped within a zone of potentially liquefiable soils. Based on groundwater data (<http://www.water.ca.gov/waterdatalibrary/>), it is estimated that groundwater is at a depth greater than 50 feet below existing grade. The site is also not included within the *San Bernardino County Geologic Hazards Maps* as being located within an area with a liquefaction hazard. Liquefaction is not considered to be a hazard at the subject site due to the great depth to groundwater (greater than 50 feet) and the current geologic hazard mapping. As such, impacts would be less than significant, and no impacts related to subsidence, liquefaction and collapse will occur through compliance with the California Building Standards Code also known as California Code of Regulations Title 24.

Threshold 4.7(d) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Be located on expansive soil, as defined in the Uniform Building Code, creating substantial risks to life or property?			✓	

Impact Analysis

Expansive soils generally consist of clay that tend to expand (increase in volume) as it absorbs water, and it will shrink (lessen in volume) as water is drawn away. According to the Natural Resources Conservation Service, United States Department of Agriculture, *Web Soil Survey*, the Project site primarily consists of soils classified as “Hesperia fine sandy loam.”²² The Hesperia series consists of deep, well drained soils that formed in alluvium derived primarily from granite and related rocks. The Hesperia series is not a clay soil and is generally not susceptible to expansion. Notwithstanding, the Project would be required to comply with Development Code §17.04. 060.A, *Soils Report Requirement*, which requires corrective action which is likely to prevent structural damage to each structure proposed to be constructed in the area where soils problems exist.

²² Natural Resources Conservation Service, United States Department of Agriculture. *Web Soil Survey*. Available online at the following link: <http://websoilsurvey.sc.egov.usda.gov/>. Accessed June 1, 2021.

Threshold 4.7(e) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

The Project does not propose the use of septic tanks or alternative wastewater disposal systems. The Project would install domestic sewer infrastructure and connect to the City of Hesperia's sewer conveyance and treatment system.

Threshold 4.7(f) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

Impact Analysis

Paleontological resources are the preserved fossilized remains of plants and animals. According to the General Plan, the site has a low potential sensitivity for paleontological resources.²³ However, the Project the site is in an area geologically mapped to be underlain by alluvium. Because alluvium has the potential to contain paleontological resources, and the site has not been surveyed for paleontological resources, the following mitigation measure is recommended:

Mitigation Measure

GEO-1: Discovery of Unknown Paleontological Resources. Prior to the issuance of a grading permit, the following notes shall be placed on the grading plan:

"Discovery of Unknown Paleontological Resources: If paleontological resources are encountered during ground disturbance, work in the immediate area of the find shall be redirected and a qualified paleontologist shall be retained to assess the find for scientific significance. If determined to be significant, the fossil shall be collected from the field. The paleontologist may also make recommendations regarding additional mitigation measures, such as paleontological monitoring. Scientifically significant resources shall be prepared to the point of identification,

²³ Biological Resources Assessment, City of Hesperia General Plan, Exhibit 8-Paleontological Resources Sensitivity Map.

identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository.

Unique Geologic Feature

The Project site is relatively flat. The site soils generally consist of Hesperia fine sandy loam, which is a common soil type in Hesperia. As such, the Project does not contain a geologic feature that is unique or exclusive locally or regionally.

4.8 Greenhouse Gas Emissions

The following documents were used in the preparation of this analysis:

- *City of Hesperia Climate Action Plan (CAP)*, June of 2010.
- *San Bernardino County Regional Greenhouse Gas Reduction Plan*, March 2021.
- Mojave Desert Air Quality Management District, *California Environmental Quality Act (CEQA) And Federal Conformity Guidelines*, February 2020.

Threshold 4.8 (a-b) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Impact Analysis

Mojave Desert Air Quality Management District Thresholds of Significance

The Mojave Desert Air Quality Management District (MDAQMD) has established GHG significance thresholds on a daily and annual basis. A summary of the projected annual operational greenhouse gas emissions, including amortized construction-related emissions associated with the development of the Project is provided in Table 4.8-1. *Project Daily Greenhouse Gas Emissions*.

Table 4.8-1. Project Daily Greenhouse Gas Emissions

Source	GHG Emissions MT/yr			
	N2O	CO2	CH4	CO2e
Mobile Sources	0.054	994.89	0.058	1,012.48
Area	0.000	1.35	0.001	1.39
Energy	0.004	327.26	0.016	329.08
Solid Waste	0.000	26.63	1.57	65.98
Water/Wastewater	0.005	28.23	0.24	35.98
30-year Amortized Construction GHG				17.32
TOTAL				1,462.23
MDAQMD Threshold				100,000
Exceed Threshold?				NO

Source: CalEEMod Emission Outputs, Appendix A.

As shown on Table 4.8-1 *Project Daily Greenhouse Gas Emissions*, the Project's greenhouse gas emissions on an annual basis would not exceed the MDAQMD's significance thresholds. Thus, Project-related emissions would not have a significant direct or indirect impact on greenhouse gas emissions that could impact climate change and no mitigation or further analysis is required.

City of Hesperia Climate Action Plan

The City of Hesperia adopted the *City of Hesperia Climate Action Plan* (CAP) in June of 2010. The Hesperia CAP outlines a course of action for the City government and the community of Hesperia to reduce per capita GHG emissions 29% below 2010 levels by 2020 and to adapt to the effects of climate change. The Hesperia CAP includes actions such as reducing emissions from new development through CEQA, increasing bicycle use through a safe and well-connected system of bicycle paths and end of trip facilities, reducing energy use from the transport and treatment of water, and improving recycling and source reduction programs to make continued progress in minimizing waste.

Projects that are consistent with the CAP could result in a less than significant impact regarding climate change. This is because the emissions from these projects are generally accounted for in the CAP and would be consistent with the CAP's reduction target. To be consistent with the CAP, Projects must implement the applicable CAP implementation strategies described below.

CAP-1.1 Projects developed within a CAP compliant Development Plan or Specific Plan that meet all applicable design criteria and mitigation measures will be deemed consistent with the CAP.

The Project features the following design measures to reduce GHG emissions impacts:

- ☐ No Hearths in residences
- ☐ Install High Efficiency Lighting
- ☐ Energy Efficient Appliances (installed by builder – dishwasher, refrigerator)
- ☐ Install low flow Bathroom Faucet
- ☐ Install low flow Kitchen Faucet
- ☐ Install low flow Toilet
- ☐ Install low flow Shower
- ☐ Use water-efficient irrigation system

CAP-1.5 Projects that require a discretionary approval shall reduce operational greenhouse gas emissions by at least 12 percent, without accounting for regulations discussed in the CAP. The project inventory should include all potential sources, including but not limited to those identified in this CAP.

Based on the implementation of the above-described design features and mandatory compliance with the 2019 Title 24, *Building Energy Efficiency Standards* reduced by at least 13.2% consistent with the CAP reduction target²⁴.

San Bernardino County Regional Greenhouse Gas Reduction Plan

The San Bernardino Council of Governments (SBCOG) adopted the *San Bernardino County Regional Greenhouse Gas Reduction Plan* in March 2021.²⁵ The Reduction Plan summarizes the actions that the 23 jurisdictions in San Bernardino County selected to reduce jurisdictional GHG emissions, as well as state-mandated actions. The Reduction Plan is not mandatory for the partnership jurisdictions. Instead, it provides information that can be used by partnership jurisdictions, if they choose so, to develop individual climate action plans (CAPs). As noted above, in 2010, the City of Hesperia adopted a CAP. The City participated in the Reduction Plan as a study to inform their decision makers to update or revise their existing 2010 CAP. As part of this effort, the City of Hesperia has selected a goal to reduce its community GHG emissions to a level that is 40% below its 2020 level of GHG emissions by 2030.

The City will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective through a combination of state (~70%) and local (~30%) efforts. The Pavley vehicle standards, the state's low carbon fuel standard, the RPS, and other state measures will reduce GHG emissions in Hesperia's on-road, off-road, and building energy sectors in 2030. An additional reduction of 110,304 MTCO₂e will be achieved primarily through the following local measures, in order of reductions achieved: GHG Performance Standard for Existing Development (PS-1); Water Efficiency Renovations for Existing Buildings (Water-2); and Waste Diversion and

²⁴ CalEEMod Emission Outputs, Appendix A.

²⁵ San Bernardino County Regional Greenhouse Gas Reduction Plan ,available at: https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf, accessed on July 6, 2021.

Reduction (Waste-2). Hesperia's Plan has the greatest impacts on GHG emissions in the building energy, on-road transportation, and waste sectors²⁶.

City of Hesperia Municipal Code

The City Municipal Code includes several ordinances that reduce GHG emissions directly or indirectly. Municipal Code Title 10-*Vehicles and Traffic*, Chapter 10.24 -*Trip Reduction and Travel Demand Management*, provides alternative transportation methods and vehicle trip reduction requirements. City Development Code, Article XXI, *Landscape Regulations*, presents general regulations applicable to landscaping water use, which in turns reduces GHG emissions.

California Energy Code

Prior to issuance of a building permit, the Project Proponent is required to submit plans showing that the Project will be constructed in compliance with the most recently adopted edition of the applicable California Energy Code, (Part 6 of Title 24 of the California Code of Regulations) and the California Green Building Standards Code, 2019 Edition (Part 11 of Title 24 of the California Code of Regulations).

Applicable measures to a single-family residential include, but are not limited to:

- *Energy Efficiency*: The Project is required to provide electric vehicle (EV) charging outlets; install energy efficient appliances and HVAC systems, and overall residential buildings shall meet or exceed the minimum standard design required by the 2019 California Energy Code.
- *Waste Diversion* -The Project's waste hauler would be required to comply with all applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to the landfills that serve the Project are reduced in accordance with existing regulations. In addition, The Project is required to submit and implement a construction waste management plan in order to reduce the amount of construction waste transported to landfills.
- *Water Conservation*-Utilize water conservation techniques to conserve water resources, such as the use of low-flow irrigation and plumbing systems.
- *Water-Efficient Landscaping Practices*-Promote low per capita water use using low water consumptive plant materials/desert plants (xeriscape).

Based on the analysis above, the Project will not conflict with regional or State plans to reduce greenhouse gas emissions.

²⁶ Ibid, p. 3-85.

4.9 - Hazards And Hazardous Materials

Threshold 5.9(a) (b)	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	

Impact Analysis

Existing Conditions

The Project site consists of vacant land with no improvements. The vegetation community present on site supports a moderately disturbed desert scrub habitat encompassing mainly native plants and some non-native grasses. Based on aerial photography, the site has been in this condition since at least 1985²⁷. There appear to be no previous land uses, including agricultural production, that could result in the release of surface or subsurface hazardous materials during the construction phase of the Project.

Construction Activities

Construction contractors are required to comply with all applicable federal, state, and local laws and regulations regarding hazardous materials, including but not limited requirements imposed by the Environmental Protection Agency, California Department of Toxic Substances Control, Mojave Desert Air Quality Management District, and the Lahontan Regional Water Quality Control Board. As such, impacts due to construction activities would not cause a significant hazard to the public or the environment through the release of hazardous materials to the environment.

Operational Activities

The Project site would be developed with residential land uses which is a land use not typically associated with the transport, use, or disposal of hazardous materials. Although residential land uses may utilize household products that contain toxic substances, such as cleansers, paints, adhesives, and solvents, these products are usually in low concentration and small in amount and

²⁷ Google Earth Pro accessed July 31, 2021.

would not pose a significant risk to humans or the environment during transport to/from or use at the Project site.

Threshold 4.9 (c) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	

Impact Analysis

The Project site is not located within 0.25 miles of a school. The nearest school is Mesquite Trails Elementary School located approximately 0.50 west at 13884 Mesquite Street. In any event, as discussed in the responses to Thresholds 4.9 (b) and 4.9 (c) above, all hazardous or potentially hazardous materials would comply with all applicable federal, State, and local agencies and regulations with respect to hazardous materials. Therefore, regardless of the proximity of planned or proposed schools, the Project will not impact schools.

Threshold 4.9 (d) Would the Project	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?				✓

Impact Analysis

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State and local agencies to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites pursuant to Government Code Section 65962.5. Below are the data resources that provide information regarding the facilities or sites identified as meeting the Cortese List requirements.

- *List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database.*

- ☐ *List of Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database.*
- ☐ *List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit.*
- ☐ *List of "active" CDO and CAO from Water Board.*
- ☐ *List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.*

Based on a review of the Cortese List maintained by the California Environmental Protection Agency the Project site is not identified on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.²⁸

Threshold 4.9 (e) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?			✓	

Impact Analysis

The Project site is located within the boundaries of the *Comprehensive Land Use Plan, Southern California Logistics Airport, Final Report, September 2008*.²⁹ According to Exhibit 3B, *Compatibility Review Areas*, the site is not located in an area that requires a review for safety hazards. According to Exhibit 2J, *Long Range Noise Contours*, the site is not located within an area that is impacted by excessive noise.

Threshold 4.9 (f) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	

²⁸ California Environmental Protection Agency, Cortese List Data Resources, <https://calepa.ca.gov/sitecleanup/corteselist/>, accessed July 8, 2021.

²⁹ <https://cms.sbcounty.gov/lus/Planning/AirportLandUse.aspx>, accessed on April 25, 2021.

Impact Analysis

Access to the Project site is currently available from Mesquite Street. At the completion of the Project, Mesquite Street will be further improved along the Project frontage which will improve emergency to the area. In addition, the Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During construction, the Project would be required to maintain adequate emergency access for emergency vehicles from Mesquite Street.

Threshold 4.9 (g) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

Impact Analysis

According to the *California Fire Hazard Severity Zone Viewer* maintained by Cal Fire, the Project site is not located within a high wildfire hazard area³⁰. Also refer to analysis under Section 4.20, *Wildfire*.

4.10 Hydrology and Water Quality

Threshold 4.10 (a) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			✓	

Impact Analysis

Surface Water Impacts

Construction

³⁰ <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>, accessed on August 5, 2021.

Construction of the Project does not include extensive grading and ground disturbing activities, but would require excavation and grading for access roads, buildings, and other features. Disturbance of soil during construction could result in soil erosion and lowered water quality through increased turbidity and sediment deposition into local ephemeral streams. In addition, hazardous materials that could contaminate water include diesel fuel, gasoline, lubrication oil, cement slurry, hydraulic fluid, anti-freeze, transmission fluid, lubricating grease, and other fluids as a result of construction equipment spills or leaks. As such, short-term water quality impacts have the potential to occur during construction activities in the absence of any protective or avoidance measures.

The City of Hesperia is subject to requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System Permit, General Permit No. CAS000004 (MS4 Permit) issued by the State Water Resources Control Board. The MS4 Permit requires the City to implement a Construction Site Stormwater Runoff Control Program.

Compliance with the permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) will identify construction Best Management Practices (BMPs) that will be implemented to prevent soil erosion and the discharge of sediment into the local storm drains during the Project's construction phase. Typical BMPs measures include, but are not limited to, preserving natural vegetation, stabilizing exposed soils; use of sandbags, and installation of temporary silt fencing. In addition, trucks and construction vehicles would be serviced from offsite facilities. The use, storage, transport, and disposal of hazardous materials used in construction of the homes would be carried out in accordance with federal, state, and county regulations.

Operational Impacts

Storm water pollutants commonly associated with residential land uses include sediments, nutrients, trash and debris, bacteria and viruses, oil and grease, and pesticides. City of Hesperia Municipal Code Chapter 8.30-*Surface and Groundwater Protection*, requires the preparation of a Water Quality Management Plan (WQMP) for managing the quality of storm water or urban runoff that flows from a developed site after construction is completed. The Project will comply with the City of Hesperia MS4 General Permit for the Mojave River Watershed. The Project proposes to use roads within the Project site to carry runoff to a proposed water quality basin located at the northeast portion of the site. The basin is designed for stormwater treatment through infiltration provided at the bottom of the basin, where the required volume will infiltrate through the site soils and into the groundwater, before discharging to the existing storm drain system.

Groundwater Impacts

Groundwater quality impacts could occur during construction if contaminated or hazardous materials used during construction were to be released and allowed to migrate to the

groundwater table. With adherence to the SWPPP, the potential for such impacts to groundwater quality is low.

Waste Discharge Requirements are issued by the Lahontan Regional Board under the provisions of the California Water Code, Division 7 "Water Quality," Article 4 "*Waste Discharge Requirements*."³¹ These requirements regulate the discharge of wastes which are not made to surface waters, but which may impact the region's water quality by affecting underlying groundwater basins. Discharge requirements are issued for Publicly Owned Treatment Works' wastewater reclamation operations, discharges of wastes from industries, subsurface waste discharges such as septic systems, sanitary landfills, dairies, and a variety of other activities which can affect water quality. The Project will connect to the sewer collection lines which are maintained and operated by the Hesperia Water District and transported to the Victor Valley Wastewater Reclamation Authority's (VWWRA) regional treatment facility.

Conclusion

With mandatory compliance to existing State and federal water quality regulations, including the proposed SWPPP and WQMP, which are intended to ensure that water quality standards and waste discharge standards not be violated during construction or operations.

Threshold 4.10 (b) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	

Impact Analysis

Ground Water Supply Discussion

The Project would be served with potable water by the Hesperia Water District. The District's water supply is obtained from groundwater located in the Alto Sub-Basin of the Mojave River Watershed and groundwater aquifer. The City's municipal water system extracts water from the underground aquifers through groundwater wells located throughout the City.³² The Mojave Basin Area was the subject of a court ordered adjudication in 1993 due to the rapid growth within the area, increased withdrawals, and lowered groundwater levels. The court's Judgment

³¹ California Water Boards, *Waste Discharge Requirements Program*, July 3, 2020. Available at:

https://www.waterboards.ca.gov/water_issues/programs/waste_discharge_requirements/

³² Hesperia Water District, *Final Draft 2015 Urban Water Management Plan*, Chapter 6- System Supplies, June 7, 2016

appointed Mojave Water Agency (MWA) as Watermaster of the Mojave Basin Area. The court ordered adjudication of the Mojave Basin Area allocates a variable free production allowance (FPA) to each purveyor that supplies more than 10 AFY, including Hesperia.³³

If Hesperia, or another purveyor, pumps more than its allotted FPA in any year, they are required to purchase replacement water equal to the amount of production in excess of the FPA. Replacement obligations are satisfied by paying MWA and then purchasing unused FPA within the subarea.

Given the City's total reliance on groundwater, the reliability of the City's water supply is thus entirely dependent on the reliability of the groundwater in the Mojave River Basin managed by the Mojave Water Agency. Because almost all of the water used within the Mojave Water Agency's service area is supplied by pumped groundwater, to supplement the local groundwater supplies, the Mojave Water Agency recharges the groundwater basins with State Water Project imported water, natural surface water flows, wastewater imports from outside the Mojave Water Agency's service area, agricultural depletion from storage, and return flow from pumped groundwater not consumptively used. The Mojave Water Agency's sources are only used to recharge the groundwater basins and are not supplied directly to any retailers, except for two power plants, the High Desert Power Project and the LUZ Solar Plant.

Groundwater Recharge Discussion

Development of the Project would increase impervious surface coverage on the Project site which would in turn reduce the amount of direct infiltration of runoff into the ground. The Project proposes to use roads within the Project site to carry runoff to a proposed water quality basin, designed for both infiltration and detention. As such, the Project will not interfere substantially with groundwater recharge.

In addition, according to a review of historical groundwater data (California Department of Water Resources and California State Water Resources Control Board groundwater well data [<http://wdl.water.ca.gov> and <http://geotracker.waterboards.ca.gov>]), depth to groundwater is greater than 50 feet below ground surface (bgs) in the general Project site area. As such, the Project will not impact groundwater.

Sustainable Groundwater Management Discussion

California depends on groundwater for a major portion of its annual water supply, particularly during times of drought. This reliance on groundwater has resulted in overdraft and unsustainable groundwater usage in many of California's basins.³⁴ The Sustainable Groundwater Management Act (SGMA) was enacted in order to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge.

³³ Ibid.

³⁴ https://www.waterboards.ca.gov/water_issues/programs/gmp/, accessed on July 23, 2021.

The City of Hesperia is located within the Upper Mojave River Valley portion of the Mojave River Basin. The Basin is an adjudicated basin (i.e. water rights are determined by court order).³⁵ Adjudicated basins are exempt from the SGMA because such basins already operate under a court-ordered management plan to ensure the long-term sustainability of a basin. No component of the Project would obstruct with or prevent implementation of the management plan for the Mojave River Basin. As such, the Project would not conflict with any sustainable groundwater management plan. Impacts would be less than significant

Conclusion

Based on the analysis above, the Project is not forecast to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Threshold 4.10 (c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
(i) Result in substantial erosion or siltation on- or off-site?			✓	
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			✓	
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
(iv) Impede or redirect flood flows?			✓	

Impact Analysis

General Plan Policy SF-2.2 states:

“The City will require that new discretionary development proposals include, as a condition of approval, hydrological studies prepared by a State-certified engineer with expertise in this area,

³⁵ <https://gis.water.ca.gov/app/bp-dashboard/final/>, accessed on July 23, 2021.

that assess the impact that the new development will have on the flooding potential of existing development down-gradient. The studies shall provide mitigation measures to reduce this impact to an acceptable level. Single-family residences on existing lots shall be exempt".

The following design standards are applicable to the Project:

- ☐ Demonstrate that offsite flows are safely conveyed through or around Project Site.³⁶
- ☐ For sites larger than 1 acre, storage shall be provided consistent with San Bernardino County Flood Control District Manual requirements based on a 100-year 24- hour storm event.³⁷
- ☐ When a basin is used to mitigate downstream impacts due to increased flows generated by a development, the basin capacity and outlet size shall be such that the post-development peak flow rate generated by the site shall be less than or equal to 90% of the pre-development flow rate.³⁸

The Project proposes to use a basin for water quality and flood routing to manage the Project runoff. Post development runoff will be conveyed by the internal street system and then routed through the proposed basin located in the northeast corner of the site. The basin is designed with a sufficient size to handle water quality through infiltration, and flood mitigation through detention consistent with the above stated requirements.

Threshold 4.10 (d). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓

Impact Analysis

According to the Federal Emergency Management Agency (FEMA), the Project site is not located within a flood hazard zone.³⁹ According to the California Department of Conservation, California

³⁶ City of Hesperia, *Developer Workshop*, September 2018.

³⁷ Ibid.

³⁸ *Detention Basin Design Criteria for San Bernardino County*, <http://www.sbcounty.gov/Uploads/lus/PW/DETENTIONBASINDESIGN.pdf>, accessed August 18, 2021.

³⁹ <https://www.fema.gov/flood-maps>, accessed on April 25, 2021.

Official Tsunami Inundation Maps⁴⁰, the site is not located within a tsunami inundation zone. In addition, the Project would not be at risk from seiche because there is no water body in the area of the Project site capable of producing a seiche.

Threshold 4.10 (e) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

Impact Analysis

As discussed under Threshold 4.10 (a) and 4.10 (c), with implementation of the proposed drainage system improvements and features, the Project will not conflict with or obstruct implementation of the *Lahontan Basin Plan*. In addition, as discussed under Threshold 4.10 (b), the Project site is not subject to a Sustainable Groundwater Water Management program and will not substantially impede sustainable groundwater management of the basin.

Level of Significance: Less than significant.

4.11 Land Use and Planning

Threshold 4.11 (a)	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide a community?				✓

Impact Analysis

An example of a Project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. The Project site is bordered on the east by the California Aqueduct, on the south by Mesquite Street, and on the west by a power line easement and Tamarisk Avenue. Given the location and surrounding

⁴⁰ California Department of Conservation, *California Official Tsunami Inundation Maps*, <https://www.conservation.ca.gov/cgs/tsunami/maps#:~:text=Coordinated%20by%20Cal%20OES%2C%20California,considered%20tsunamis%20for%20each%20area,> accessed April 25, 2021.

land uses, the Project is a logical continuation of the development pattern in the area and will not divide an established community.

Threshold 4.11 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?		✓		

Impact Analysis

Table 4.11.1 *Consistency with Applicable Plan, Policy, or Regulation for Purposes of Avoiding or Mitigating an Environmental Effect*, identifies the applicable plans, policies, or regulations adopted for the purpose of *avoiding or mitigating an environmental effect* that have been reviewed and what section of the Initial Study document contains the analysis.

Table 4.11.1 Consistency with Applicable Plan, Policy, or Regulation for Purposes of Avoiding or Mitigating an Environmental Effect.

Initial Study Section	Applicable Plan, Policy, or Regulation
4.1 Aesthetics	California Department of Transportation, <i>State Scenic Highway Program</i> .
4.2 Agriculture and Forestry Resources	California Department of Conservation, <i>Farmland Mapping and Monitoring Program</i> .
4.3 Air Quality	Mojave Desert Air Quality Management District (MDAQMD) <i>Air Quality Management Plan</i> . MDAQMD, <i>California Environmental Quality Act (CEQA) and Federal Conformity Guidelines</i> , February 2020.
4.4 Biological Resources	Federal Endangered Species Act. California Endangered Species Act.
4.5 Cultural Resources	City of Hesperia, <i>General Plan Update, 2010</i> .

Initial Study Section	Applicable Plan, Policy, or Regulation
4.6 Energy	California Building Energy Efficiency Standards, Title 24, Part 6. California Green Standards Building Code, Title 24, Part 114.6.
4.7 Geology and Soils	City of Hesperia, <i>General Plan Update, 2010</i> . City of Hesperia, <i>Municipal Code</i> .
4.8 Greenhouse Gas Emissions	City of Hesperia <i>Climate Action Plan</i> , June 2010. County of San Bernardino, <i>San Bernardino County Regional Greenhouse Gas Reduction Plan</i> , March 2021.
4.9 Hazards and Hazardous Materials	California Government Code Section 65962.5. <i>Hazardous Waste and Substances Sites (Cortese) List</i> . Southern California Logistics Airport, <i>Comprehensive Land Use Plan, Final Report</i> , September 2008.
4.10 Hydrology and Water Quality	California Water Code, Division 7 "Water Quality," Article 4 "Waste Discharge Requirements." California Water Boards, Region 6-Lahontan Region, <i>Basin Plan</i> . California Water Boards, <i>Sustainable Groundwater Management Act</i> .
4.11 Land Use and Planning (see Conclusion below)	City of Hesperia, <i>General Plan Update, 2010</i> .
4.12 Mineral Resources	City of Hesperia, <i>General Plan Update, 2010</i> .
4.13 Noise	City of Hesperia, Development Code §16-20.125, <i>Noise</i> . Southern California Logistics Airport, <i>Comprehensive Land Use Plan, Final Report</i> , September 2008.

Initial Study Section	Applicable Plan, Policy, or Regulation
4.14 Population and Housing	City of Hesperia, <i>General Plan Update, 2010</i> .
4.15 Public Services	City of Hesperia, <i>General Plan Update, 2010</i> .
4.16 Recreation	Hesperia General Plan. <i>Open Space Element</i> .
4.17 Transportation	CEQA Guidelines Section 15064.3, subdivision (b). General Plan Exhibit OS-10, <i>Non-Motorized Transportation Plan</i> .
4.18 Tribal Cultural Resources	Public Resources Code section 21074.
4.19 Utilities and Service Systems	Regional Water Quality Control Board, Lahontan Region, <i>Victor Valley Wastewater Reclamation Authority Order No. R6V-2020-Proposed Victor Valley Regional Wastewater Treatment Plant NPDES No. Ca0102822</i> . Hesperia Water District, <i>Final Draft 2015 Urban Water Management Plan</i> , Chapter 6- <i>System Supplies</i> , June 7, 2016.
4.20 Wildfire	Cal Fire, <i>California Fire Hazard Severity Zone Viewer</i> .

Conclusion

As demonstrated throughout this Initial Study document, the Project would not conflict with any applicable land use plan, policy, or regulation due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, with compliance with mandatory regulatory requirements or mitigation measures.

4.12 Mineral Resources

Threshold 4.12 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

Mineral resources in the City have been identified by the Department of Conservation Division of Mines and Geology as potentially containing concrete aggregate resources consistent with most of the Barstow and Victorville areas. These resources are not considered to be significant due to the vast availability of similar deposits in the region. Additional mineral resources have not been identified within the City.⁴¹

The Project site that has been designated with a Mineral Land Classification of MRZ-3A, which is an area containing known mineral occurrences of undetermined mineral resource significance. This classification was based on a report by the California Department of Conservation, Division of Mines and Geology, entitled *Mineral Land Classification of Concrete Aggregate Resources in the Barstow - Victorville Area, San Bernardino County, California*. A review of the California Department of Conservation interactive web mapping indicates there is no active mines on the Project site⁴². In addition, 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.⁴³

Based on the analysis above, implementation of the Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California.

⁴¹ Hesperia General Plan, *Conservation Element*, p. CN-20.

⁴² <https://maps.conservation.ca.gov/mineralresources/>, accessed on June 17, 2021.

⁴³ California, State of. Department of Conservation. California Oil, Gas, and Geothermal Resources Well Finder. <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-117.41448/34.56284/14>, accessed on June 17, 2021.

Threshold 4.12 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

The Project site is not being used for mineral resource recovery. The Project site is designated as Single-Family Residence (R-1). As such, the Project is not delineated on the General Plan, a specific plan, or other land use plan as a locally important mineral resource recovery site

4.13 Noise

Threshold 4.13 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project more than standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	

Impact Analysis

Existing Ambient Noise Levels

As dictated by CEQA, the focus of the noise analysis is focused on whether the Project causes a substantial temporary or permanent *increase* in ambient noise levels in the immediate vicinity of the Project site.

Short-term Construction Noise Impact Analysis

The most significant source of short-term noise impact is related to noise generated during construction activities on the Project site. Construction of the Project is expected to require the use of earthmovers, bulldozers, water trucks, and pickup trucks. As shown on Table 4.13.1, *Typical Construction Equipment Noise levels*, below, noise levels generated by heavy construction equipment can reach 90 when measured at 50 feet.

Table 4.13.1. Typical Construction Equipment Noise Levels

Type of Equipment	Range of Sound Levels Measured (dBA at 50 feet)
Dozers	85 to 90
Graders	79 to 89
Trucks	81 to 87
<i>Source: "Noise Control for Buildings and Manufacturing Plants", Bolt, Beranek & Newman, 1987.</i>	

Construction activities are expected to occur within approximately 150 feet from one (1) single-family residence located adjacent to the northern boundary of the Project site. For every doubling of distance, the sound level reduces by 6 dBA. Thus, the highest noise levels at the adjacent residence are forecast to range from 73 dBA to 78 dBA. As such, noise levels at the nearest sensitive receptor are expected to temporarily exceed the City's exterior standard of 65 dBA during on-site construction.

Although project construction noise has the potential to be louder than the ambient noise in the project vicinity, this noise would cease once project construction is completed. Development Code §16.20.125, *Noise*, allows temporary demolition and construction noise in excess of normally defined thresholds between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, except federal holidays. Because construction noise is exempt during specific hours, a project fully compliant with the City's construction noise standards would not generate a significant construction-related noise impact.

Operational Noise Analysis

In residential areas, stationary noise sources include air conditioners and swimming pool /spa mechanical equipment. The noise level associated with these sources varies with the type of noise source and the distance from the noise source. In residential areas, stationary noise sources include air conditioners and swimming pool /spa mechanical equipment. The noise level associated with these sources varies with the type of noise source and the distance from the noise source. Most residential central air conditioners range from 50 dBA (the sound of rainfall) to 80 dBA (the sound of running a garbage disposal) measured at 1 – foot from the compressor motor. Variable speed air conditioners will operate as low as 25 dBA when on low speed. Residential pool pumps operating at highspeed noise levels range from 65 dBA to 80 dBA measured at 1 – foot from the pump. At 25 -feet a noise level at 80 dBA measured at 1-foot would attenuate to 52 dBA without the use of barriers.

Noise standards for operational noise are shown in Table 4.31.2, *Noise Standards*, below.

Table 4.13.2. Noise Standards

Affected Land Use (Receiving Noise)	Maximum Noise Level	Time Period
A-1, A-2, R-1, R-3 and RR Zone Districts	55 dB(A)	10:00 p.m. - 7:00 a.m.
A-1, A-2, R-1, R-3 and RR Zone Districts	60 dB(A)*	7:00 a.m. - 10:00 p.m.
C-1, C-2, C-3, C-4, C-R, AP, and P-I Zone Districts	65 dB(A)*	Anytime
I-1 and I-2 Zone Districts	70 dB(A)*	Anytime
<p><i>Notes:</i></p> <p>* Due to wind noise, the maximum permissible noise level may be adjusted so that it is no greater than five dB(A) above the ambient noise level.</p> <p>No person shall operate or cause to be operated any source of sound at any location or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level, when measured on any other property, either incorporated or unincorporated, to exceed:</p> <ul style="list-style-type: none"> □ The noise standard for that receiving land use (as specified in subsection (B)(1) of this section) for a cumulative period of more than thirty (30) minutes in any hour; or □ The noise standard plus five dB(A) for a cumulative period of more than fifteen (15) minutes in any hour; or □ The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour; or □ The noise standard plus fifteen (15) dB(A) for a cumulative period of more than one minute in any hour; or □ The noise standard plus twenty (20) dB(A) for any period. <p>If the measured ambient level exceeds any of the first four noise limit categories above, the allowable noise exposure standard shall be increased to reflect the ambient noise level. If the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.</p>		

Source: Development Code §16-20.125, *Noise*.

Typical residential central air conditioners and pool equipment are installed close to and either on a side or rear of the structure. The location of the equipment near the structure and with solid fencing separating properties acts as a shield or barrier to noise propagation through the structure or fence to surrounding properties.

A noise barrier such a fence or wall when it is tall enough to block the line of sight will provide approximately 5 dB of noise reduction, each additional foot above the line of sight will provide an additional 1.5 dB of noise reduction.⁴⁴ A typical 6-foot fence would therefore decrease the

⁴⁴ FHWA Noise Barrier Design,
https://www.fhwa.dot.gov/Environment/noise/noise_barriers/design_construction/keepdown.cfm

noise level from a typical central air conditioning unit by 9 to 10 dBA and decrease the noise level of a pool pump by 11 to 12 dBA. Proper placement and barriers found in typical residential construction will reduce the noise level of air conditioning and pool equipment to less than significant impacts.

Traffic Noise

The primary increase in noise will be the result of adding vehicle traffic generated by the Project to Mesquite Street and Maple Avenue. Roadway vehicle noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The proposed Project does not propose any uses that would require a substantial number of truck trips and the proposed Project would not alter the speed limit on Mesquite Street.

According to the General Plan, future buildout daily trips in the vicinity of the Project site are projected to be 9,600 on Mesquite Street and 16,500 on Maple Avenue⁴⁵. The Project is forecast generate 1,057 daily vehicle trips to the existing daily trips along the segment³⁵. According to Caltrans, the human ear can begin to detect sound level increases of 3 decibels (dB) in typical noisy environments³⁶. A doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dBA increase in sound, would generally be barely detectable.

Although the Project will add 1,057 future daily vehicle trips on Mesquite Street and Maple Avenue, the increase is 11% and 6% respectively, which does not result in a doubling (100%) of the daily vehicle trips in the immediate vicinity. Therefore, the proposed Project traffic would not result in a substantial permanent increase in ambient roadway noise levels and noise impacts created by the Project would be less than significant and mitigation is not required.

Conclusion

Based on the analysis above, the Project will not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of City standards.

⁴⁵ General Plan, Transportation Technical Report, Table 4-2, *Future Daily Traffic Volumes, Current General Plan*.

³⁵ Institute of Traffic Engineers, *Trip Generation Manual*, 10th Edition.

³⁶ Caltrans, Traffic Noise Analysis Protocol, April 2020, p.7-1.

Threshold 4.13 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Generation of excessive ground borne vibration or groundborne noise levels?			✓	

Impact Analysis

Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. The Project does not involve the use of heavy trucks, so vehicles from the Project will not generate excessive ground borne vibration.

According to the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018³⁷, while ground vibrations from construction activities do not often reach the levels that can damage structures, construction vibration may result in building damage or prolonged annoyance from activities such as blasting, piledriving, vibratory compaction, demolition, and drilling or excavation near sensitive structures. The Project does not require these types of construction activities.

Threshold 4.13 (c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The nearest airport from the site is the Southern California Logistics Airport located approximately 12 miles to the northwest. According to the *Southern California Logistics Airport Comprehensive Land Use Plan*, Figure 2H, *Existing Noise Contours*, and Figure 2I, *Long Range Noise Contours*, the Project site is not located in an area impacted by aircraft noise. Therefore, the Project would not exacerbate an existing condition that exposes people residing or working in the project area to excessive noise levels.

³⁷ <https://www.transit.dot.gov/research-innovation/transit-noise-and-vibration-impact-assessment-manual-report-0123>.

4.14 Population and Housing

Threshold 4.14 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?			✓	

Impact Analysis

The Project site has a General Plan Land Use and Zoning designation of Single-Family Residence (R-1) which allows a maximum density of 4.5 dwellings unit per acre (du/ac). As proposed, the Project has a density of 3.8 du/ac and is therefore consistent with the General Plan. According to the 2020 population estimates provided by the California Department of Finance, there are 3.45 persons per households in Hesperia³⁸. Based on 112 dwelling units, the Project could increase the overall population of the City by 386 persons (assuming all new residents will come from outside the city limits). The Project site is in a developing residential area of the City near existing like kind residential development to the east. Development of the Project is a logical extension of existing nearby development. In addition, the Project site is served by existing water and sewer facilities, gas and electric utilities, and roadways. No additional infrastructure will be needed to serve the Project other than connection to infrastructure adjacent to the site.

Threshold 4.14 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

³⁸ E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark, <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>, accessed on July 24, 2021.

Impact Analysis

The Project site consists of undeveloped vacant land. Therefore, implementation of the Project would not displace a substantial number of existing housing, nor would it necessitate the construction of replacement housing elsewhere.

4.15 Public Services

Threshold 4.15 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?			✓	
2) Police protection?			✓	
3) Schools?			✓	
4) Parks?			✓	
5) Other public facilities?			✓	

Fire Protection: The San Bernardino County Fire Department provides fire protection services to the Project area. The nearest fire station is Oak Hills Station #305 located approximately three (3) miles to the west of the Project site at 8331 Caliente Road. Development of the Project would impact fire protection services by placing an additional demand on existing County Fire Department resources should its resources not be augmented. To offset the increased demand for fire protection services, the Project would be conditioned by the City to provide a minimum of fire safety and support fire suppression activities, including compliance with State and local fire codes, fire sprinklers, a fire hydrant system, paved access, and secondary access.

In addition, the City collects a Development Impact Fee to assist the City in providing fire protection facilities. Payment of the Development Impact Fee would be applied to fire facilities and/or equipment, to offset the incremental increase in the demand for fire protection services that would be created by the Project. Therefore, the Project would not result in the need to construct new or physically altered fire facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection.

Police Protection: The San Bernardino County Sheriff’s Department provides community policing to the Project area via the Victor Valley Sheriff Station located at 11613 Bartlett Street in Victorville. Because the Project site is in a developed area, it is routinely patrolled by the Sheriff’s Department. The City collects a Development Impact Fee to assist the City in providing for capital improvement costs for police protection facilities. Payment of the Development Impact Fee would be applied to police facilities and/or equipment, to offset the incremental increase in the demand for police protection services that would be created by the Project. Therefore, the Project would not result in the need to construct new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection.

Schools: Hesperia is served by the Hesperia Unified School District, which provides elementary, middle, and high school services throughout the City. The Project is forecast to generate the following number of students as shown in Table 4.15.1, *Student Generation*.

Table 4.15.1. Student Generation Factors

School Level	Student Generation Factor	Number of Students
Elementary School	0.3471	39
Middle School	0.1015	11
High School	0.1896	21
Total	---	71

Source: Hesperia Unified School District, *School Facilities Needs Assessment*, March 2021, Table 4.

The District is authorized by State law (Government Code § 65995-6) to levy a new construction fee per square foot of industrial construction for the purpose or funding the reconstruction or construction of new school facilities. Pursuant to Section 65995(3) (h) of the California Government Code, the payment of statutory fees is “*deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities.*” Therefore, the payment of school impact fees for residential development would offset the potential impacts of increased student enrollment related to the implementation of the Project.

Parks: The nearest public park to the Project site is Maple Park which is located approximately ½ mile to the south. The City of Hesperia requires dedication of land, payment of fees in-lieu of parkland dedication, or a combination thereof at a rate of five (5) acres of parkland per 1,000 residents for proposed residential subdivisions.⁴⁶ Based on 112 dwelling units, the Project could increase the overall population of the City by 386 persons (assuming all new residents will come from outside the city limits). 386 residents would result in the need of 1.92 acres of parkland. Payment of the in-lieu fee would ensure that the Project will not result in a significant impact with respect to parkland

⁴⁶ Hesperia General Plan. *Open Space Element*, p. OS-43.

Other Public Facilities: As noted above, development of the Project could result in a direct increase in the population of 386 persons. The current population of the City is 96,053⁴⁷ (assuming all new residents of the Project came from outside the City). As such, the Project would result in a 0.40% increase in population. It is not anticipated the Project would increase the demand for public services, including public health services and library services to the degree that the construction of new or expanded public facilities would be required based on this small increase in population.

In addition, the Project would be required to pay the City's Development Impact Fee to assist the City in providing public services facilities. These funds may be applied to the acquisition and/or construction of public services and/or equipment.

4.16 Recreation

Threshold 4.16 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The nearest public park to the Project site is Maple Park which is located approximately ½ mile to the south on Maple Avenue. The Project could result in the increased use of existing parks and recreation facilities. Substantial deterioration of existing facilities could occur if the level of usage intensifies significantly, and the maintenance of affected facilities does not keep pace with intensified use and additional park facilities are not provided to meet existing and the increased demand.

As noted under Threshold 4.15 (a) above, development of the Project could result in an increase in population of 386 persons (0.40% increase). This small amount of population increase is not anticipated to increase the use of existing neighborhood and regional parks or other recreational facilities to the degree that substantial physical deterioration of recreational facilities would occur or be accelerated.

⁴⁷ California Department of Finance, *E-5 City/County Population and Housing Estimates*, 1/1/2021.

Threshold 4.16 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

Impact Analysis

The Project does not propose the construction or expansion of recreational facilities.

4.17 Transportation

Threshold 4.17(a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			✓	

Impact Analysis

Senate Bill 743

In December 2018, the California Natural Resources Agency certified and adopted the California Environmental Quality Act (CEQA) Guidelines update, including a new Guidelines section implementing SB 743 (State CEQA Guidelines § 15064.3). In implementing Public Resources Code Section 21099, State CEQA Guideline Section 15064.3 provides that VMT is generally “the most appropriate measure of transportation impacts”, and that except for roadway capacity projects, a project effect’s on traffic delays “shall not constitute a significant environmental impact.” (14 California Code of Regulations [CCR] § 15064.3(a)). VMT has been identified as the most appropriate metric to evaluate a project’s transportation impacts, as projects that result in lower than average VMT support goals of reducing greenhouse gas (GHG) emissions, while projects that result in higher than average levels of vehicle travel contribute to an increasing rate of GHG emissions. Accordingly, as of July 1, 2020, under the statute and the Guidelines, localities are required to rely on VMT instead of traffic delay (LOS) as the primary metric for evaluating transportation impacts in CEQA documents.

Impacts related to transportation were determined by evaluating the proposed project's consistency with plans, ordinances, or policies applicable to the circulation system, including transit, roadway, bicycle and pedestrian facilities in the context of facilitating other modes of transportation such as transit, bicycle, and pedestrian travel. Please note that a LOS analysis is still required to ensure consistency with the General Plan, however, because LOS is not a CEQA impact, it is addressed separately as part of the Tentative Tract Map application process. (See Appendix E, *Traffic Impact Analysis*, for details).

Transit Facilities

Public transportation services within the City of Hesperia are provided by the Victor Valley Transit Authority (VVTa). There are no transit routes adjacent to the Project site. In addition, the Project is not proposing any improvements that would conflict with any future transit service in the area.

Roadway Facilities

As discussed in more detail under Threshold 4.17 (b) below, effective July 1, 2020, changes to the California Environmental Quality Act (CEQA) require Vehicle Miles Traveled (VMT) as the new metric for evaluating environmental impacts under CEQA as opposed to motorist delay and level of service (LOS). For development projects, VMT is simply the product of the daily trips generated by a new development and the distance those trips travel to their destinations. For CEQA purposes, roadway facilities are viewed in the context of how they reduce the amount of vehicle miles traveled and promote the use of other non-motorized modes of travel such as transit, bicycle, and pedestrian.

The Project proposes to improve the north side of Mesquite Street adjacent to the Project site with pavement, curb, gutter, sidewalk, and a landscaped parkway within a 40-foot, half-width right-of-way. The east side of Tamarisk Avenue adjacent to the Project site will be improved pavement, curb, gutter, sidewalk, and a landscaped parkway within a 30-foot, half-width right-of-way.

The above-described improvements will promote a reduction in VMT by constructing sidewalks to facilitate pedestrians and by improving roadway to allow access for transit service.

Bicycle and Pedestrian Facilities

According to General Plan Exhibit OS-10, *Non-Motorized Transportation Plan*, a Class II bikeway is required on Mesquite Street. Class II bikeways are bike lanes established along streets and are defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel. The proposed improvements on Mesquite Street will facilitate a Class II bikeway if the City requires one.

Conclusion

Based on the preceding analysis, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Threshold 4.17(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			✓	

Impact Analysis

The City of Hesperia has adopted the *City of Hesperia Traffic Impact Analysis Guidelines for Vehicles Miles Traveled (VMT) and Level of Service Assessment (LOS), July 2020* (Guidelines) which establish uniform analysis methodology and thresholds of significance for determining VMT impacts under the California Environmental Quality Act (CEQA). The City's Guidelines indicate that residential projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary, and if the project would not significantly alter the existing built environment in such a way as to increase the rate of length of vehicle trips.

To identify if the project is in a low VMT-generating area, the San Bernardino County Transit Authority (SBCTA) screening tool is used to compare the appropriate baseline project TAZ VMT to the City's adopted threshold of significance of 32.7 VMT/Service Population. The results of the VMT screening analysis are summarized in Table 4.17.1.

Table 4.17.1 San Bernardino County Transportation Authority VMT Screening Tool Results⁴⁸

Data Metrics	Screening Tool Results
Assessor Parcel Number (APN)	304613176
Traffic Analysis Zone (TAZ)	53920201
VMT Metric	Project Area VMT Per Service Population
TAZ VMT	23.1
City of Hesperia Threshold	32.7
% Difference	29.3% Below Threshold
Potentially Significant Impact? (Yes/No)	No

⁴⁸, gosbcta.com/VMT screening, accessed March, 2022.

Based on the results of SBCTA VMT Screening Tool, the proposed project's TAZ VMT is calculated to be 23.1 PA VMT per service population. Since the project's TAZ VMT is less than the City of Hesperia Threshold of Significance of 32.7 VMT per service population, the proposed project satisfies the Low VMT Area Screening procedure. Impacts are less than significant.

Threshold 4.17(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	

Impact Analysis

The proposed roadway improvement will be designed in accordance with the City of Hesperia's Street design standards. In addition, the Project is in an area developed with residential uses. As such, the Project would not be incompatible with existing development in the surrounding area to the extent that it would create a transportation hazard because of an incompatible use.

Threshold 4.17(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in inadequate emergency access?		✓		

Impact Analysis

The Project would improve Mesquite Street and Tamarisk Avenue adjacent to the Project site per City standards. Two access points from Tamarisk Avenue and one (1) access point from Mesquite Street are proposed. All the street improvements would be public streets designed to City standards. Emergency access would be from Mesquite Street and Tamarisk Avenue connecting to the citywide circulation system. During the preliminary review of the Project, the Project's transportation design was reviewed by the City's Engineering Department, Fire Department, and Sheriff's Department to ensure that adequate access to and from the site would be provided for emergency vehicles.

4.18 Tribal Cultural Resources

§21074 of the Public Resources Code describes Tribal Cultural Resources as follows:

(a) “Tribal cultural resources” are either of the following:

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

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

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

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

(b) 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.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Threshold 4.18 (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:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				✓

Impact Analysis

A historical resource or archaeological resource may also be a tribal cultural resource if it conforms with the criteria described in Public Resources §21084 (a) above. As discussed in Section 4.5 *Cultural Resources*, based on a pedestrian field survey, no historic or archaeological resources were encountered on the Project site. However, grading, utility trenching, and the construction of the water quality basin have the potential to reveal buried deposits at greater depths that may be historical. Therefore, Mitigation Measures CR-1 and CR-2 under Section 4.5, *Cultural Resources* shall apply.

Threshold 5.18 (b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		✓		

The provisions in the Public Resources Code related to tribal cultural resources created a process for consultation with California Native American Tribes during the CEQA process. Tribal Governments can request consultation with a lead agency and give input into potential impacts to tribal cultural resources before the agency decides what kind of environmental assessment is appropriate for a proposed project. The City of Adelanto implemented the consultation process by sending out consultation invitation letters to tribes previously requesting notification. The San Manuel Band of Mission Indians (SMBMI) responded and indicated the proposed Project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. However, due to the nature and location of the proposed project and given the Cultural Resources Management Department's present state of knowledge, SMBMI does not have any concerns with the Project's implementation, as planned, at this time. As a result, SMBMI requested that Mitigation Measures TCR-1 through TCR-5 be made a part of the project/permit/plan conditions.

Mitigation Measures

Mitigation Measure TCR-1. Inadvertent Discovery. If 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 Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact

and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, to provide Tribal input with regards to significance and treatment.

Mitigation Measure TCR-2. Monitoring and Treatment Plan. If significant pre-contact and/or historic-era 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 YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

Mitigation Measure TCR-3. Human Remains. 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.

Mitigation Measure TCR-4. Pre-Contact Historic Cultural Resources. The YSMN shall be contacted, as detailed in Mitigation Measure CR-1 and CR-2, of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the find, to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should SMBMI elect to place a monitor on-site.

Mitigation Measure TCR-5. Documentation. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

4.19 Utilities and Service Systems

Threshold 4.19 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?		✓		

Impact Analysis

The Project does not require that the existing utility infrastructure be relocated as the Project will connect to the existing infrastructure facilities adjacent to the Project site. However, the installation and construction of the sewer, water, storm drainage facilities described below will result in earth moving that may impact Biological Resources, Cultural Resources, Geology and Soils (Paleontological Resources), and Tribal Cultural Resources.

Water Service

The Project will connect to the existing waterline (s) located in the immediate vicinity of the Project site.

Sewer Service

The Project will connect to the existing sewer line (s) located in the immediate vicinity of the Project site.

Storm Drainage Improvements

Post development runoff will be conveyed by the internal street system and then routed through the proposed basin located in the northern portion of the site (Lot A). The basin is designed with a sufficient size to handle water quality through infiltration, and flood mitigation through retention.

Electric Power Facilities

The Project will connect to the existing Southern California Edison electrical distribution facilities available in the immediate vicinity of the Project site.

Natural Gas Facilities

The Project will connect to the existing Southwest Gas Corporation natural gas distribution facilities available in the immediate vicinity of the Project site.

Telecommunication Facilities

Telecommunication facilities include a fixed, mobile, or transportable structure, including, all installed electrical and electronic wiring, cabling, and equipment, all supporting structures, such as utility, ground network, and electrical supporting structures, and a transmission pathway and associated equipment in order to provide cable TV, internet, telephone, and wireless telephone services to the Project site. Services that are not provided via satellite will connect to existing facilities maintained by the various service providers.

Conclusion

Construction or installation of utilities and service systems may impact Biological Resources, Cultural Resources, Paleontological Resources, and Tribal Cultural Resources. Mitigation Measures BIO-1 through BIO-8, CR-1, GEO-1, and TCR-1 through TCR-5 are required.

Threshold 4.19 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple years?			✓	

Impact Analysis

The Project would be served with potable water by the Hesperia Water District. The District's 2015 Urban Water Management Plan indicates the gallons per capita water use at 123 gallons per day per person (GPCD)⁴⁹. The Project is estimated to increase the population by approximately 386 persons which would create an additional water demand of 53.18-acre feet per year (AFY).

The District's water supply is obtained from groundwater located in the Alto Sub-Basin of the Mojave River Watershed and groundwater aquifer. The City's municipal water system extracts water from the underground aquifers through groundwater wells located throughout the City.⁵⁰

⁴⁹Hesperia Water District, Final Draft 2015 Urban Water Management Plan, p.22.

⁵⁰ Hesperia Water District, *Final Draft 2015 Urban Water Management Plan*, Chapter 6- System Supplies, June 7, 2016

The Mojave Basin Area was the subject of a court ordered adjudication in 1993 due to the rapid growth within the area, increased withdrawals, and lowered groundwater levels. The court's Judgment appointed Mojave Water Agency (MWA) as Watermaster of the Mojave Basin Area. The court ordered adjudication of the Mojave Basin Area allocates a variable free production allowance (FPA) to each purveyor that supplies more than 10 AFY, including Hesperia.⁵¹

Because almost all the water used within the Mojave Water Agency's service area is supplied by pumped groundwater, to supplement the local groundwater supplies, the Mojave Water Agency recharges the groundwater basins with State Water Project imported water, natural surface water flows, wastewater imports from outside the Mojave Water Agency's service area, agricultural depletion from storage, and return flow from pumped groundwater not consumptively used. The Mojave Water Agency's sources are only used to recharge the groundwater basins and are not supplied directly to any retailers, except for two power plants, the High Desert Power Project and the LUZ Solar Plant.

Threshold 4.19 (c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

Municipal wastewater is generated in the District's service area from a combination of residential, commercial, and industrial sources. Based on historical data, wastewater demand is estimated at 231 gallons per day per dwelling unit (gpd/DU). gpd/DU. Based on 112 dwelling units, the Project is estimated to generate 25,872 gpd. Wastewater flows are piped out of the Hesperia Water District's service area to a regional wastewater treatment plant (WWTP) operated by Victor Valley Wastewater Reclamation Authority (VWVRA). The treatment plant has a design capacity to treat 18 million gallons per day (MGD) of wastewater.⁵² The treatment plant currently treats about 10.7 million gallons of wastewater per day.⁵³ Therefore, there is adequate capacity to serve the Project's projected demand in addition to the VWVRA's existing commitments.

⁵¹ Ibid. City of Hesperia, 2015, *Final Urban Water Management Plan*, Table 4-2, *Retail Demands for Potable and Raw Water*.

⁵² Regional Water Quality Control Board, Lahontan Region, *Victor Valley Wastewater Reclamation Authority Order No. R6V-2020-Proposed Victor Valley Regional Wastewater Treatment Plant NPDES No. Ca0102822*

⁵³ VWVRA website, https://www.vvwra.com/about_us/welcome/default.htm, accessed August 24, 2021.

Threshold 4.19 (d). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Generate solid waste more than State or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	

Impact Analysis

Construction Related Impacts

The California Green Building Standards Code (“*CAL Green*”) requires all newly constructed buildings to prepare a Waste Management Plan and divert construction waste through recycling and source reduction methods. The City of Hesperia’s Building and Safety Department reviews and approves all new construction projects required to submit a Waste Management Plan. Mandatory compliance with CAL Green solid waste requirements

Operational Related Impacts

The Project is estimated to generate 131 tons of solid waste per year⁵⁴. The amount of estimated solid waste generated by the Project is derived from the California Emissions Estimator Model. The model also quantifies the amount of solid waste generated by a project based on the annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses.

Sanitation services are administered by Advance Disposal, located at 17105 Mesa Street, Hesperia. Advance Disposal also operates a Materials Recovery Facility (MRF) which has a capacity of 600 tons per day. The Company’s long-term plans are to expand the capacity of the facility to meet the need of the City and its Sphere of influence, which is the company’s ultimate service area.

Although, solid waste may ultimately be disposed of at various landfills, the closest landfill to the Project site is the Victorville Sanitary Landfill located at 18600 Stoddard Wells Road, approximately 13 miles to the northeast. According the CalRecycle website, the Victorville Sanitary Landfill has a daily throughput of 3,000 tons per day and a remaining capacity of 93,400,000 cubic yards. The expected closure is October 1, 2047.⁵⁵ As such, there is adequate landfill capacity to serve the Project.

⁵⁴ Appendix A-CalEEMod Outputs.

⁵⁵ <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652>, accessed on April 26, 2021.

Threshold 4.19 (e). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

Impact Analysis

Advance Disposal currently provides solid waste collection services to the City. Advance Disposal is required to provide these services in compliance with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.20 Wildfire

Threshold 4.20 (e). Wildfire.	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Is the project located in or near state responsibility areas or lands classified as very high fire hazard severity zones?				✓

Impact Analysis

A wildfire is a nonstructural fire that occurs in vegetative fuels, excluding prescribed fire. Wildfires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. According to the *California Fire Hazard Severity Zone Viewer* maintained by Cal Fire, the Project site is not located within a high wildfire hazard area⁵⁶⁴⁵. Project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. As such, Thresholds 4.20 (a) through 4.20 (d) below require no response.

- ☐ Substantially impair an adopted emergency response plan or emergency evacuation plan.
- ☐ 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.

⁵⁶<https://egis.fire.ca.gov/FHSZ/>, accessed on July 25, 2021.

- 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.
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes.

4.21 Mandatory Findings of Significance

Threshold 4.21(a) Does the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have the potential to 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, 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?		✓		

Impact Analysis

As indicated in this Initial Study, biological resources, cultural resources, and tribal cultural resources may be adversely impacted by Project development. The mitigation measures found on Table XX, XX on page X are required as indicated below to reduce impacts to less than significant levels.

Threshold 4.21 (b) Does the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?		✓		

The cumulative impacts analysis provided here is consistent with Section 15130(a) of the CEQA Guidelines in which the analysis of cumulative effects of a project is based on two

determinations: Is the combined impact of this project and other projects significant? If so, is the project's incremental effect cumulatively considerable, causing the combined impact of the projects evaluated to become significant? The cumulative impact must be analyzed only if the combined impact is significant, and the project's incremental effect is found to be cumulatively considerable (CEQA Guidelines 15130(a)(2) and (3)).

The analysis of potential environmental impacts in Section 4.0, *Environmental Analysis*, of this Initial Study concluded that the Project would have *no impact* or a *less than significant impact* for all environmental topics, except for Biological Resources, Cultural Resources, Geology and Soils (Paleontological Resources), Tribal Cultural Resources, and Utilities and Service Systems (installation of facilities that involves disturbance of previously undisturbed land). For these resources, Mitigation Measures are required to reduce impacts to less than significant levels as discussed below.

Biological Resources

As discussed in Section 4.4, *Biological Resources*, of this Initial Study, future development of the site will impact the Western Joshua tree. Therefore, Mitigation Measure BIO-1, *Western Joshua Tree Mitigation* is required.

Wildlife will also be impacted by development activities and those species with limited mobility (i.e., small mammals and reptiles) will experience increases in mortality during the construction phase. More mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will likely experience minimal impacts. However, the Burrowing Owl and Desert Tortoise are known to potentially be located within the region area and due to their transient nature, have the potential to inhabit the site in the future. Therefore, Mitigation Measures BIO-2 through BIO-5 are required to ensure any impacts remain **less than significant**.

Overall, the loss of about 25-acre of disturbed desert vegetation is not expected to have a significant cumulative impact on the overall biological resources in the region given the presence of similar habitat throughout the surrounding desert region. Based on the preceding analysis, the Project's impacts would not be cumulatively considerable.

Cultural Resources

As discussed in Section 4.5, *Cultural Resources*, of this Initial Study, the records search and field survey did not identify any cultural resources, including historic and prehistoric sites or historic-period buildings within the project site boundaries. Research results, combined with surface conditions have failed to indicate sensitivity for buried cultural resources. No additional cultural resources work, or monitoring is necessary during proposed activities associated with the development of the earthmoving activities. If previously undocumented cultural resources are identified during earthmoving activities, a qualified archaeologist should be contacted to assess the nature and significance of the find, diverting construction excavation, if necessary, as

required by Mitigation Measure CR-1. Based on the preceding analysis, the Project's **impacts would not be cumulatively considerable**.

Geology and Soils (Paleontological Resources)

As discussed in Section 4.7, *Geology and Soils*, of this Initial Study, the property is situated in the Mojave Desert geomorphic province. The Mojave Desert province is a wedge-shaped area that is enclosed on the southwest by the San Andreas fault zone, the Transverse Ranges province and the Colorado Desert province, on the north and northeast by the Garlock fault zone, the Tehachapi Mountains and the Basin and Range province, and on the east by the Nevada and Arizona state lines, and the Colorado River. The area is dominated by broad alluviated basins that are mostly aggrading surfaces that are receiving non-marine continental deposits from the adjacent upland areas. More specific to the subject property, the site is in an area geologically mapped to be underlain by alluvium. Alluvium has the potential to contain paleontological resources. Therefore, Mitigation Measure GEO-1 is required. Based on the preceding analysis, the Project's impacts **would not be cumulatively considerable**.

Tribal Cultural Resources

As discussed in Section 4.18, *Tribal Cultural Resources*, of this Initial Study, construction and operation of the Project would include activities limited to the confines of the Project site. The tribal consultation conducted with the San Manuel Band of Mission Indians, has determined that the Project is unlikely to adversely affect tribal cultural resources with implementation of Mitigation Measures TCR-1 through TCR-5. Based on the preceding analysis, the Project's **impacts would not be cumulatively considerable**.

Utilities and Service Systems

As discussed in Section 4.19, *Utilities and Service Systems*, of this Initial Study, the installation and construction of the sewer, water, storm drainage facilities described below will result in earth moving that may impact Biological Resources, Cultural Resources, Geology and Soils (Paleontological Resources), and Tribal Cultural Resources. Potential impacts to these resources are mitigated by Mitigation Measures BIO-1 through BIO-5, CR-1, GEO-1, and TCR-1 through TCR-5. Based on the preceding analysis, the Project's impacts would not be cumulatively considerable.

Threshold 4.21 (c) Does the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

As indicated by this Initial Study, the Project will not result in potentially significant environmental impacts that directly affect human beings (i.e., air quality, agriculture and forestry resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, recreation, transportation, and utilities and service systems.