CITY OF HIGHLAND

27215 Base Line, Highland, CA 92346
Telephone (909) 864-6861 FAX: (909) 862-3180

INITIAL STUDY

1.	Case No:	Tentative Tract Map No. 17604 (TTM 015-001); Conditional Use Permit 15-006
	Project title:	Heatherglen Planned Development
2.	Lead agency:	City of Highland, 27215 Base Line, Highland, CA 92346
3.	Contact person:	Kim Stater, Assistant Community Development Director Tel: (909) 864-6861, Ext. 204
4.	Project location:	East of Merris Street/Club View Drive, west of Alta Vista, south of Greenspot Road and north of Abbey Way and Plunge Creek. The site is 59.03 (gross) acres consisting of seven Assessor Parcel Numbers: 1210-281-01, 1210-281-02, 1210-281-03, 1210-281-04, 1210-211-18, 1210-211-21, 1210-211-23.
5.	Project applicant:	Greenspot Partners 1, Inc., 2011 E. Financial Way, Glendora, CA 91741

6. Description of project:

Tentative Tract Map (TTM) 17604 is a low density, single-family residential development Project in the City of Highland (City) on approximately 59 acres that includes 203 numbered residential lots and 13 lettered lots for various open space uses (entry points, public park, irrigated slopes/easements, infiltration basin, open space habitat preservation, and East Valley Water District facilities). These lettered lots (A through M) total 12.44 acres of the Project site. A public park is planned and is located at the southwest corner of Gold Buckle Road and Street "B." The park (Lot C) is ½ acre and will be improved with a small tot-lot containing a low maintenance multi-faceted play structure with a soft fall zone area, benches, and shade structure. The balance of the park will be a passive play area with water efficient landscaping. The park will be maintained by a Homeowners Association (HOA) or assessment district, as will all of the letter lots. The Project will include a community trail (12 feet wide) along the western boundary of the site from Greenspot Road to the southern boundary of the site. The Project will include construction of the Pole Line Trail (12 feet wide) along southern portion of the Project site. Lot L is 6.53 acres and will not be graded and developed but set aside and preserved as open space as designated on the Tract 17604 Comprehensive Site Plan.

A network of local public streets will provide internal circulation and access to Greenspot Road, a four-lane divided major highway along the northern boundary of the site. There will be three access points from Greenspot Road to the Project site. The first access point to Greenspot Road will be via Old Greenspot Road at Club View Drive at the westerly edge of the Project's site. The second is a new street (Gold Buckle Road) generally located in the center of the Project site. The third access point to Greenspot Road will be on the Project site's most easterly edge as Street "P."

Potable water and sewer service would be provided by East Valley Water District (EVWD). EVWD has an existing water main and a sewer pipeline in Greenspot Road. Service to the new residences will require a new connection to these lines and will be extended into the Project site.

Stormwater and non-stormwater runoff from the majority of the site (western) will be conveyed within the site (storm drains within the network of streets) to an infiltration basin located in the southern portion of the Project site. Stormwater and non-stormwater runoff from a small area from the eastern portion of the site will be conveyed through a swale in Lot D to the open space habitat preservation area in Lot L. No off-site stormwater facilities are required or proposed.

Development of the tract will include grove removal, grubbing, grading, development of internal roadways, and off-site improvements. Grading of the site is estimated to require 107,121 cubic yards of cut and 126,140 cubic yards of fill. A net import of 19,019 cubic yards of fill will be required from an off-site location. Construction is anticipated to take approximately 4 years with the following sequential phases: 1) site preparation (clearing and grubbing) approximately 1.5 months; 2) grading approximately 3.5 months; 3) building construction approximately 3 years; 4) paving and architectural coatings approximately 2.5 months.

7. Present Land Use: Undeveloped, eucalyptus groves, jojoba field, and natural sage scrub habitat
8. General Plan designation: PD/LDR (Planned Development/ Low Density Residential)
9. Zoning: PD-R1 (Single-Family Residential)
10. Is the proposed action a "project" as defined by CEQA? (See Section 2.6 of State CEQA Guidelines. If more than one project is present in the same area, cumulative impact should be considered) Yes ☑ No ☐
11. If "yes" on 10, does the project fall into any of the Emergency Projects listed in Section 15269 of the State CEQA Guidelines? Yes ☐No ☑
12. If "no" on 10, does the project fall under any of the Ministerial Acts listed in Section 15268(b) of the State CEQA Guidelines? Yes ☐No ☑
13. If "no" on 12, does the project fall under any of the Statutory Exemptions listed in Article 18 of the State CEQA Guidelines? Yes ☐No ☑
14. If "no" on 13, does the project qualify for one of the Categorical Exemptions listed in Article 19 of the State CEQA Guidelines? (Where there is a reasonable probability that the activity will have a significant effect due to special circumstances, a categorical exemption does not apply). Yes ☐No ☑
15. Surrounding land uses and setting (briefly describe the project's surroundings):

    North: Greenspot Road, single-family detached residential
    South: Open space, Upper Santa Ana River Wash Habitat Conservation Plan (HCP) area
    East: Plunge Creek storm drain channel, open space, Upper Santa Ana River Wash HCP area
    West: Vacant/ disturbed land, single-family detached residential

16. Surrounding General Plan and Zoning:

    North: Single-Family Residential / PD and R-1 | East Highlands Ranch Planned Unit Development
    South: Open Space / Open Space
    East: Open Space / Open Space
    West: Planned Development (PD), Neighborhood Commercial (NC) and East Highland Village (EHV)

17. Is the proposed project consistent with (if answered "yes" or "n/a", no explanation is required)

City of Highland General Plan	Yes ☑ No ☐ N/A ☐
Applicable Specific Plan	Yes ☐ No ☐ N/A ☑
City of Highland Zoning Code	Yes ☑ No ☐ N/A ☐
South Coast Air Quality Management Plan	Yes ☑ No ☐ N/A ☐
San Bernardino International Airport Master Plan	Yes ☐ No ☐ N/A ☑
Other: Redlands Airport Special Compatibility Zone	Yes ☑ No ☐ N/A ☐

18. Are any of the following studies required?

Soils Report	Yes ☑ No ☐
Slope Study	Yes ☐ No ☑
Geological Report	Yes ☑ No ☐
Traffic Study	Yes ☑ No ☐
Air Quality Study	Yes ☑ No ☐
Hydrology	Yes ☑ No ☐
Sewer Study	Yes ☐ No ☑
Biological Study	Yes ☑ No ☐
Noise Study	Yes ☑ No ☐
Hazardous Materials Study	Yes ☐ No ☑
Housing Analysis	Yes ☐ No ☑
Archaeological Report	Yes ☑ No ☐
Groundwater Analysis	Yes ☐ No ☑
Water Quality Report	Yes ☑ No ☐
Other	Yes ☐ No ☑

19. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement). Only required at the time of development.

Public Agencies:
East Valley Water District, State Water Resources Control Board, San Bernardino County Flood Control District, US Fish and Wildlife Service, California Department of Fish and Wildlife, Redlands Municipal Airport

Other service providers:
Cal Disposal Co. Inc., Burrtec Waste Disposal, Southern California Edison, Southern California Gas.

INFORMATION SOURCES CITED: The documents below are incorporated herein by reference and are available for review at Highland City Hall, located at 27215 Base Line, California or online at the website address indicated below.

1. Air Quality and Greenhouse Gas Study. Entech Consulting Group. March 2017. (Appendix A)

2. California Important Farmland Finder, California Department of Conservation, https://maps.conservation.ca.gov/DLRP/CIFF/, 2016.

3. CalRecycle, Estimated Solid Waste Generation Rates, https://www2.calrecycle.ca.gov/wastecharacterization/general/rates

4. City of Highland General Plan and Environmental Impact Report, Adopted by the City Council March 14, 2006.

5. City of Highland General Plan Land Use Amendment & Zoning Amendment GPA 017-002 and ZC 017-002 (Greenspot Road/Pole Line Road) Initial Study Negative Declaration, Adopted by the City Council April 17, 2018.

6. City of Highland Municipal Code

7. Draft Environmental Impact Statement/ Supplemental Environmental Impact Report Proposed Habitat Conservation Plan and Section 10 Permit for the Upper Santa Ana River Wash Plan, US Fish and Wildlife Service, Pacific Southwest Region, Carlsbad Office and San Bernardino Valley Water Conservation District, December 2019, https://www.sbvwcd.org/our-projects/wash-plan.html

8. East Valley Water District, "Will Serve" Letter, January 29, 2019. Appendix F)

9. Energy Analysis Technical Memorandum. Entech Consulting Group. May 2019. (Appendix C)

10. Engineering Geology Investigation Proposed Heatherglen Property. Gary S. Rasmussen & Associates, Inc. January 5, 2006. (Appendix D)

11. Flood Insurance Rate Map Number 06071C 8707J, dated September 2, 2016.

12. Noise Study Heatherglen Residential Project. Entech Consulting Group. April 2017. (Appendix E)

13. Phase 1 Cultural Resources Assessment for the Heatherglen/Tract 17604 Project. L&L Environmental, Inc. December 11, 2017. (Appendix B)

14. Preliminary Water Quality Management Plan for Tract 17606, Albert A. Webb Associates. November 5, 2014.

15. Regional Transportation Plan/Sustainable Communities Strategy

(RTP/SCS) 2016-2040, Southern California Area of Governments (SCAG), April 7, 2016. http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx

16. "San Bernardino County Important Farm Land 2010" Sheet 2 of 2. Farmland Mapping and Monitoring Program. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanBernardino_so_15_16_WA.pdf

17. San Bernardino Valley Regional Water Management Plan, 2015. Water Systems Consulting, Inc., https://www.sbvmwd.com/reports/-folder-1081

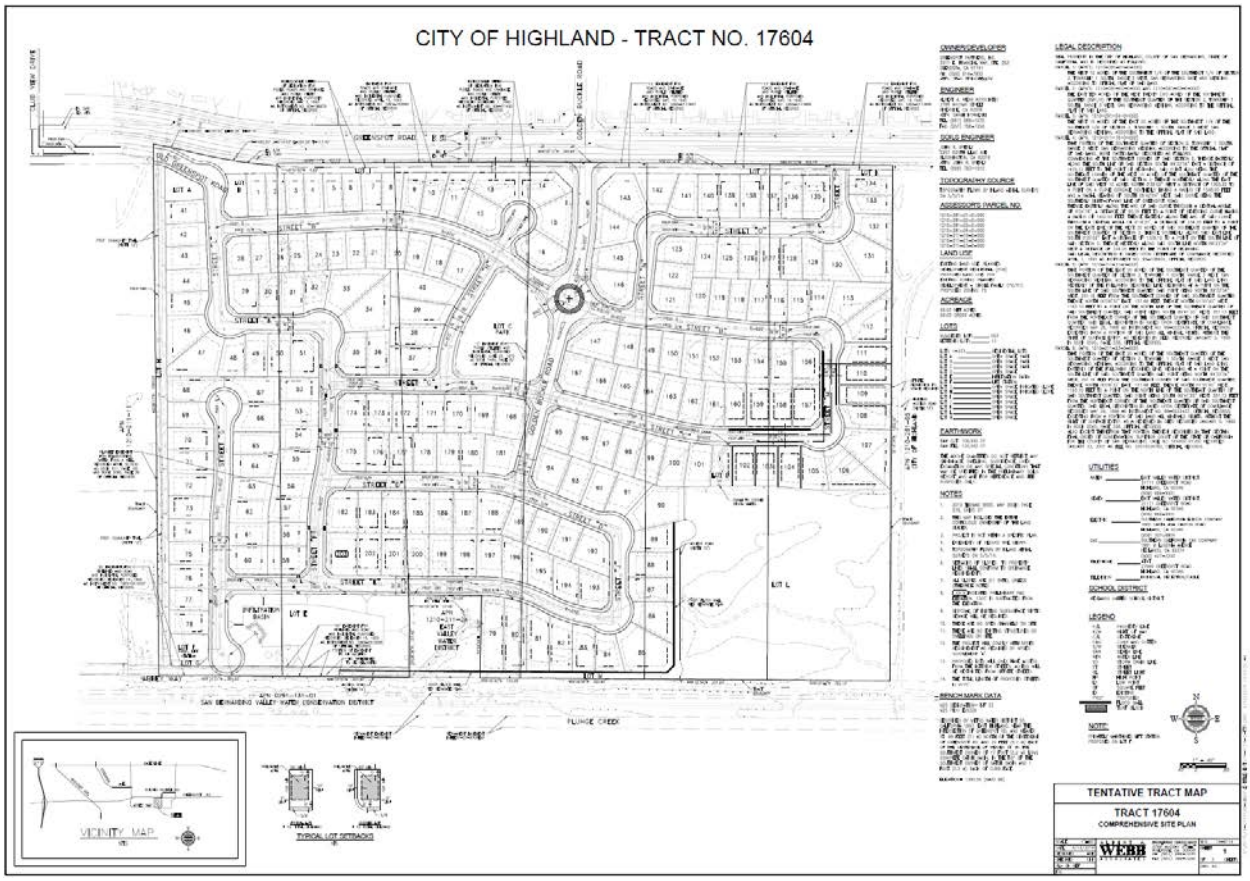
18. Sewer System Management Plan (SSMP), 2014. East Valley Water District, https://www.eastvalley.org/294/Sewer-System-Management-Plan-SSMP

Attachment 1
Location Map

Attachment 2
Project Site

Figure 2	***Project Site Map*** Heatherglen Planned Development City Of Highland San Bernandino County, CA	Assessor Parcel Numbers: 1210-281-01, 1210-281-02, 1210-281-03, 1210-281-04, 1210-211-18, 1210-211-21, 1210-211-23.	RVA

Attachment 3
Tentative Tract Map/Comprehensive Site Plan



1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

EVALUATION OF ENVIRONMENTAL IMPACTS

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

Explanation:

1a Less Than Significant Impact: The San Bernardino mountains are a prominent scenic vista for the City and are visible to the north from the Project site. North of the Project site is Greenspot Road and residential development. West of the Project site is vacant/disturbed land and the East Highland Village residential development. East of the

Project site is Plunge Creek and open space. South of the Project site is open space. The San Bernardino mountains to the north consists of background views for most of the surrounding community. The Project would construct 203 new residential homes on approximately 59 acres. From Greenspot Road, the existing homes to the north are at a higher elevation than the Project's homes would be to the south. Similar to the existing residential homes to the north, the Project's new homes would have a maximum structure height (highest ridge cap/non-architectural projection) of 30 feet for the 2-story homes and a maximum height of 20 feet for the 1-story homes. The Project would not substantially impact views of the San Bernardino mountains from Greenspot Road.

From Greenspot Road, the views to the open space south of the Project site would be partially obscured with the new residential development, but not at a considerable level due to the southward sloping topography of the open space land and its vegetation. Additionally, other portions of Greenspot Road to the west and east of the Project site would still allow for views of the open space from Greenspot Road. The Project's residential development would not have a substantial adverse effect on a scenic vista.

1b Less Than Significant Impact: The Project site is not located along a designated state scenic highway and the nearest officially designated State Scenic Highway is Route 38, more than ten miles to the east of the Project site. Therefore, the Project does not have the potential to damage trees, rock outcroppings, or historic buildings within state scenic highways. No mitigation measures are required.

1c Less Than Significant Impact: The visual character of the Project site includes an undeveloped area with eucalyptus trees, a jojoba grove and natural but disturbed scrub vegetation. The Project site is located in a mostly urbanized area (west, north, and northeast) with open space to the south. Thus, this subdivision will require a Design Review Application approval for homes designed to comply with development standards set forth in the Heatherglen Planned Development guidelines and the R-1 zoning designation (See Highland Municipal Code Section 16.16.030). As outlined in the Heatherglen Planned Development document for this project (Section 4.4, *Heatherglen PD Land Use and Development Standards*) the intention of the Architectural Design Guidelines is to provide guidance to design an interesting, livable community with variation of housing types, architectural relief and function, and aesthetics. Appropriate detail shall be included on all sides of the residences, paying particular attention to roof pitch, eave details, material and finishes, color, lighting, banding, and trims. It is encouraged when and where appropriate to utilize new materials to convey forms and features of the historic styles of the following four (4) architectural motifs/styles proposed for the Project: American Craftsman Style, Spanish Revival Style, Cape Cod Style, and Tuscan Style. Community landscaping (i.e. letter lots and park are) will contribute to the overall aesthetics of the Heatherglen PD and where appropriate, be functional for a vibrant and active community. Plant palettes shall be planned to encourage water-wise material but emphasize the need for color and diversity of form and shape. Landscape palettes for individual lots shall pay particular attention to the architectural style of the home, avoiding conflicting architectural styles with landscaping. The size and scale of the proposed development would be consistent with surrounding properties to the north. Therefore, no significant impacts to the existing visual character or quality of public views of the Project's surroundings would occur as a result of the proposed Project. The proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. No mitigation measures are required.

1d Less Than Significant Impact: The proposed Project, once developed with 203 single-family homes, will not be a substantial source of light and glare. Night lighting standards are established in the City's General Plan and development code. These standards require that the Project control light and glare from new lighting so that it is directed to remain within the Project site, except for street lights adjacent to Greenspot Road. As outlined in the Heatherglen Planned Development document for this project (Section 4.4, *Heatherglen PD Land Use and Development Standards, Subsection H, Lighting Standards*), exterior lighting fixtures shall be shielded so that illumination is fully confined within the Heatherglen PD boundaries, street light standards and fixtures shall not exceed 25 feet (25') in height, exterior-mounted security lighting fixtures shall not project above fascia or roofline of any residential building or accessory structure, and rear lights of a residence abutting open space/habitat areas shall be shielded to minimize glare spilling onto any open spaces/habitat areas. All required lighting will be in compliance with City standards and any light increase would be similar to that in the neighboring residential developments. Impacts would be less than significant. No mitigation measures are required.

	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
2. AGRICULTURE AND FORESTRY RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? ?	☐	☐	☐	☑
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☑

Explanation:

2a No Impact: The Project Site is not mapped as Prime, Unique, or Farmland of Statewide Importance. Therefore, Project implementation would not convert Prime, Unique, or Farmland of Statewide Importance. No impacts would occur. No mitigation measures are required.

2b No Impact: The proposed Project Site is zoned for Planned Development, Single-Family Residential (PD/R-1) and is consistent with the City's General Plan. The proposed Project is not under a Williamson Act contract. No impacts would occur.

2c-e No Impact: There are no mapped areas of Farmland surrounding the Project site and there are no off-site improvements required by the proposed development that would result in indirect conversion of Farmland. The Project site does not include forest land or timberland and there are no off-site improvements required that would result in the indirect conversion of forest land or timberland. Implementation of the proposed Project would not result in any other conversion of Farmland to non-agricultural production on the Site, as the property is vacant. No impacts would occur.

Mitigation Measures: None required.

3. AIR QUALITY	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☑	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☑	☐	☐
d) Result in other emissions (such as those leading to odors affecting a substantial number of people?	☐	☐	☑	☐

Explanation:

3a No Impact: An Air Quality and Greenhouse Gas Study (AQ/GHG Study) was prepared for the proposed Project and is included in Appendix A. The Air Quality Management Plan (AQMP) details goals, policies, and programs for improving air quality in multiple air basins in California, including the South Coast Air Basin (SCAB) in which the Project is located. In preparation of the AQMP, South Coast Air Quality Management District (SCAQMD) and Southern California Association of Governments (SCAG) use land use designations contained in General Plan documents to forecast, inventory, and allocate regional emissions from land use and development-related sources. For purposes of analyzing consistency with the AQMP, if a proposed Project would have a development density and vehicle trip generation that is substantially greater than what was anticipated in the General Plan, then the proposed project would conflict with the AQMP. On the other hand, if a project's density is consistent with the General Plan, its emissions would be consistent with the assumptions in the AQMP, and the Project would not conflict with SCAQMD's attainment plans. SCAQMD's CEQA Handbook suggests an evaluation of the following two criteria to determine whether a Project involving a legislative land use action would be consistent with or in conflict with the AQMP: 1) The Project would not generate population and employment growth that would be inconsistent with SCAG's growth forecasts, and 2) The Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

A summary of SCAB's current attainment status for criteria air pollutants under federal and state standards is shown below in Table 1 (page 26, Table 3 of the Air Quality and Greenhouse Gas Study). The purpose of these designations is to identify the areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. Unclassified is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing and nearing attainment.

Table 1 South Coast Air Basin Attainment Status

	Attainment Status	
Pollutant	**Federal Standards**	**State Standards**
Ozone (1-hour)	Non-attainment/Extreme	Non-attainment
Ozone (8-hour)	Non-attainment/Extreme	Non-attainment
PM_{10}	Attainment/Maintenance	Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
Carbon Monoxide	Attainment/Maintenance	Attainment
Nitrogen Dioxide	Attainment/Maintenance	Attainment
Sulfur Dioxide	Attainment	Attainment
Sulfates	N/A	Attainment
Lead	Non-attainment	Non-attainment
Hydrogen Sulfide	N/A	Attainment
Visibility Reducing Particles	N/A	Attainment

Vinyl	N/A	Attainment

At the time the Air Quality and Greenhouse Gas Study was prepared (March 2017) the Project site was designated under the City of Highland's 2006 General Plan as AG/EQ, which allows 2 residential units per acre, and would allow a maximum of 118 single-family dwelling units. The proposed Project would develop up to 203 single-family dwelling units, an increase of 85 single-family units that would be developed beyond the land use designation in the 2006 General Plan, which is the document that SCAQMD utilized in developing the AQMP.

However, in June 2018, the City approved a City initiated General Plan Amendment (GPA) and Zone Change (ZC) to update the City's General Plan land use designations and zoning. The GPA/ZC redesignated approximately 192 acres of land from Agricultural/Equestrian (AG/EQ) and Public/Quasi Public (P/Q) to Open Space consistent with the 2008 Upper Santa Ana Wash Land Management Plan and HCP, and also redesignated approximately 125 acres of land, which included the Project site, from AG/EQ to Planned Development – Residential Overlay-Low Density Detached Residential (PD/LDR). This GPA and ZC was to allow LDR consistent with what was envisioned under the General Plan and designate Open Space consistent with the Upper Santa Ana Wash Land Management Plan and HCP. This GPA/ZC, in general, allowed for a transfer of the density that was lost from conversion to Open Space to the newly designated PD/LDR use areas.

As outlined in the City of Highland General Plan Land Use Amendment & Zoning Amendment GPA 017-002 and ZC 017-002 (Greenspot Road/Pole Line Road) Initial Study Negative Declaration, the maximum number of dwelling units allowed under the previous land use categories (based on total acreage of each category) is 543. The number of dwelling units allowed under the redesignated land use categories of OS (no dwelling units allowed) and PD/R1 (2.1-6.0 dwelling units/acre) is 262-748. Future development in the redesignated areas would not be allowed to exceed the 543 maximum dwelling units allowed under the previous General Plan and EIR without a separate CEQA analysis. Therefore, the potential future development following the GPA and ZC is consistent with the population projections set forth by SCAG for the City based on the General Plan land use categories. The GPA and ZC does not indirectly result in development of more residential units and does not exceed the established population or growth projections for the City. As a result of the GPA/ZC, the proposed Project would not result in residential development beyond the land use designation in the 2006 General Plan and therefore the AQMP.

In addition, the 2016 SCAG Regional Transportation Growth Projections anticipate a 1.5 percent growth rate within the City of Highland through the year 2020. The U.S. Census FactFinder estimated that in 2015 the City of Highland had 16,554 housing units and a very low homeowner vacancy rate of 0.7 percent, which indicates that additional homeowner housing is needed to meet the needs of the City's residents, and to provide a "healthy" housing market. The 203 single-family residences that would be developed by the proposed Project would equate to a 1.3 increase in total residential units within the City, which is below the SCAG anticipated 1.5 percent annual increase in housing and would assist in providing units to fill the City's homeowner housing needs. Thus, the Project would comply with Consistency Criterion No. 1 of the SCAQMD's CEQA Handbook.

In regard to Consistency Criterion No. 2, which evaluates the potential of the proposed Project to increase the frequency or severity of existing air quality violations, the AQ/GHG Study y indicates that the Project would not result in impacts related to an increase in air quality violation, and no significant adverse impacts are anticipated. Therefore, the proposed Project is consistent with Consistency Criterion No.2, and impacts related to conflict with or obstruction with an applicable air quality plan would be less than significant.

Overall, implementation of the proposed Project would not conflict with or obstruct the AQMP and there would be no impacts.

3b Less Than Significant Impact: Construction activities could generate substantial amounts of dust (including particulate matter less than ten and 2.5 micrometers in diameter, PM_{10} and $PM_{2.5}$, respectively) primarily from "fugitive" sources (i.e., emissions released through means other than through a stack or tailpipe) and other criteria air pollutants primarily from the operation of heavy equipment construction machinery (primarily diesel operated) and construction worker automobile trips (primarily gasoline operated).

Fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the prevailing weather. Sources of fugitive dust during construction could include vehicle movement over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces.

Construction activities would also result in the emission of other criteria pollutants from equipment exhaust, construction-related vehicular activity and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of reactive organic gases (ROG) and oxides of nitrogen (NOx) from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project construction.

Mobile source emissions, primarily NOx, would result from the use of construction equipment such as graders, backhoes, and cranes. During the finishing phase, paving operations and the application of architectural coatings (i.e., paints) and other building materials would release ROG. The assessment of construction air quality impacts considers each of these potential sources.

All development projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated under the proposed project would include Rule 401, Rule 403, Rule 402, Rule 445, Rule 481, Rule 1108, Rule 1113, Rule 1143, Rule 1186, Rule 1303, and Rule 1401.

It is mandatory for all construction projects in the SCAB to comply with SCAQMD Rule 403 for fugitive dust that include, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the construction site, and maintaining effective cover over exposed areas. SCAQMD Rule 403 regulates construction, which periodically may cause fugitive dust emissions into the atmosphere.

SCAQMD Rule 402 identifies standards to reduce quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property.

SCAQMD Rule 445 prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

SCAQMD Rule 481 applies to all spray painting and spray coating operations and equipment and states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

- The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.
- Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.
- An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule.

SCAQMD Rule 1108 governs the volatile organic compounds (VOC) content of asphalt, Rules 1113 and 1143 that govern the VOC content in architectural coating, paint, thinners, and solvents, was accounted for in the construction emissions modeling. Furthermore, the use of low VOC coatings was included to reduce the ROG emissions that would be generated from the application of architectural coating.

SCAQMD Rule 1186 limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1303 governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for PM10 among other pollutants.

SCAQMD Rule 1401 specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units, which emit toxic air contaminants.

Construction scheduling was based on CalEEMod defaults and typical construction scheduling, and CalEEMod default equipment was used. As shown in Table 2, the proposed Project would not result in a significant impact to air quality during construction activities. The calculated emission results from CalEEMod demonstrate that the

construction of this Project would not exceed the SCAQMD thresholds, and that construction related impacts on regional air quality would be less than significant.

Table 2 Peak-Day Unmitigated Construction Emissions (lbs/day)

Construction Season	**ROG**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer	30.8	68.0	39.9	0.06	21.1	12.6
Winter	30.8	68.0	39.8	0.06	21.1	12.6
SCAQMD Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Significance?	No	No	No	No	No	No

However, to reduce potential impacts related to Local Significance Thresholds (LSTs, as described below), mitigation measures (AQ-1) would be implemented during construction, which would reduce emissions further below thresholds, as shown in Table 3.

Table 3 Peak-Day Mitigated Construction Emissions (lbs/day)

Construction Season	**ROG**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer	30.6	5.4	34.1	0.06	2.8	1.5
Winter	30.6	5.4	34.0	0.06	2.8	1.6
SCAQMD Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Significance?	No	No	No	No	No	No

Implementation of the proposed Project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, in addition to operational mobile emissions. Development of the proposed Project would result in 2,047 weekday daily trips.

Operations emissions associated with the proposed Project were modeled using CalEEMod. Model defaults were adjusted to reflect project-specific data, including the size and type of the proposed land use and project specific trip rates. The highest modeled operations emissions are presented in Table 4. Using the highest modeled operations emissions in the CalEEMod produces conservative results where the actual operations emissions is likely to be lower. Significance is determined based on the total project contribution to regional criteria pollutant emissions.

Table 4 Operational Emissions (lbs/day)

Source	**ROG**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	14.2	3.9	67.8	0.2	8.4	8.4
Energy	0.2	1.9	0.8	0.01	0.2	0.2
Mobile	4.5	22.2	60.7	0.2	15.1	4.2
Total Emissions	**18.9**	**28.0**	**129.3**	**0.4**	**23.67**	**12.8**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Significance?	No	No	No	No	No	No

As shown in Table 4, the operational emissions of criteria pollutants that would be generated by the Project would be below the SCAQMD's applicable thresholds. Therefore, the Project's operational emissions would not substantially contribute to emissions concentrations that exceed the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

The CEQA Guidelines require that projects be evaluated with respect to their contribution to the cumulative baseline conditions for criteria pollutants. The SCAB is considered the cumulative study area for air quality. Because the SCAB is currently classified as a state nonattainment area for ozone, PM_{10}, and $PM_{2.5}$, cumulative development consisting of the proposed Project along with other reasonably foreseeable future projects in the Basin could violate an air quality standard or contribute to an existing or projected air quality violation. However, based on SCAQMD's cumulative air quality impact methodology, SCAQMD recommends that if an individual project results in air emissions of criteria pollutants (ROG, CO, NO_X, SO_X, PM_{10}, or $PM_{2.5}$) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

As shown in Tables 3 and 4, the project's construction emissions would not exceed SCAQMD's daily thresholds. Thus, because the proposed project's construction-period impact would be less than significant, the proposed project would not result in a significant cumulative impact, when considered with other past, present and reasonably foreseeable projects. Operational emissions associated with the proposed project, as shown in Table 4 would not exceed the SCAQMD's thresholds of significance for any criteria pollutants. Per SCAQMD's cumulative air quality impact methodology and because the proposed project's operational daily emissions impacts would be less than significant, the proposed Project would not result in a cumulatively considerable net increase in any nonattainment pollutants, and impacts would be less than significant.

3c Less Than Significant Impact with Mitigation Incorporated: Sensitive receptors are populations that are more susceptible to the effects of air pollution than are the population at large. The SCAQMD identifies the following as sensitive receptors: residences, long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, churches, schools, playgrounds, childcare centers, and athletic facilities.

In an urbanized environment, air pollutant concentrations are usually most prominent along busy streets and at busy intersections, where automotive exhausts can build up while vehicles stop and idle or slow down to approach and proceed through or make turning movements. The primary source of potential air toxics associated with construction of the proposed Project includes diesel particulates from trucks use and idling on the Project site.

Construction activities would be short-term and sensitive receptors would be exposed to air pollutants from construction emissions for short-term limited time during construction activities. Health risk is evaluated assuming a constant exposure to emissions of a 70-year lifetime, 24 hours a day, seven days a week. As the exposure to receptors would be short- term and limited during development activities, impacts from construction activities would be less than significant.

Once operational the proposed Project would result in new single-family residential land uses that may utilize solvents, cleaners, and generate motor vehicle emissions, which are not anticipated to emit Toxic Air Contaminants (TAC) emissions in appreciable quantities.

Carbon monoxide (CO) concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours and certain meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses such as residential areas, schools, and hospitals. Because of reduced speeds and vehicle queuing, "hot spots" typically occur at high traffic volume intersections.

As described in response 3b above, the proposed Project would result in 2,047 vehicle trips per day. Of these trips 161 would occur in the a.m. peak hour and 215 would occur in the p.m. peak hour. The Traffic Impact Analysis (TIA) prepared for the proposed Project details that the proposed Project would not result in more than 44,000 vehicles per hour at an intersection, which is the volume of peak hour traffic required to generate or contribute to a CO hotspot. In addition, the project would not result in an impact to a Congestion Management Plan location. Therefore, CO hotspots would not result from the proposed Project.

The daily on-site construction emissions generated by the proposed Project were evaluated against SCAQMD's LSTs for a 5-acre site to determine whether the emissions would cause or contribute to adverse localized air quality impacts. The nearest sensitive receptor is approximately 100 feet to the Project site under construction; thus, the mass rate look-up table receptor distance of 82 feet is used to evaluate the potential localized air quality impacts associated with the peak day construction emissions from the project.

Table 5 identifies the daily unmitigated, localized on-site emissions that are estimated to occur during the project construction. As shown, the daily unmitigated emissions would exceed the applicable SCAQMD LST thresholds for PM_{10} and $PM_{2.5}$.

Table 5 Unmitigated Localized Daily Construction Emissions (lbs/day)

Construction Season	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Summer	52.3	23.5	20.9	12.6
Winter	52.3	23.5	20.9	12.6
SCAQMD Significance Threshold	**270**	**1,746**	**14**	**8**
Exceed Significance?	No	No	Yes	Yes

Therefore, Mitigation Measure 1 & 2 (AQ-1 & AQ-2) would be implemented to provide additional requirements beyond Rule 403, which requires watering active sites at three times daily and implementation of Tier IV diesel engine standards. Mitigation Measure AQ-1 requires active areas to be watered three times per day to keep soil moist enough so visible dust plumes (PM_{10}) are eliminated, covering disturbed areas, and requirements for vehicles to travel at a maximum of 25 mph on the Project site during construction activities. Mitigation Measure AQ-2 requires use of Tier IV diesel engine standards for construction operations, which reduces diesel emissions, a source of $PM_{2.5}$. With implementation of Mitigation Measures AQ-1 and AQ-2, PM_{10} and $PM_{2.5}$

construction emissions would be reduced below the LST thresholds, as shown in Table 6.

Table 6 Mitigated Localized Daily Construction Emissions (lbs/day)

Construction Season	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Summer	2.0	20.9	2.8	1.6
Winter	2.0	20.9	2.8	1.6
SCAQMD Significance Threshold	**270**	**1,746**	**14**	**8**
Exceed Significance?	No	No	No	No

Mitigation Measure AQ-1
The construction plans and specifications shall state that in addition to standard Rule 403 requirements, the following measures shall be incorporated into project construction activities:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project site are watered at least three times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds within the Project site areas are reduced to 15 miles per hour or less.

Mitigation Measure AQ-2
Implementation of Tier IV Diesel Engine Standards shall be required for construction activities.

With implementation of Mitigation Measures AQ-1 and AQ-2, construction emissions would be reduced below the LST thresholds and are less than significant.

3d Less Than Significant Impact: The SCAQMD Air Quality Handbook identifies the following uses as having a potential odor issues: wastewater treatment plants, food processing plants, agricultural uses, chemical plants, composting, refineries, landfills, dairies, and fiberglass moldings. The proposed Project would develop single-family residential uses that do not involve the types of uses that would emit emissions including those leading to objectionable odors affecting a substantial number of people.

In addition, odors generated that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

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

During construction of the proposed project, emissions from construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be temporary and localized to the construction site; and therefore, they are not expected to affect a

substantial number of people. Thus, impacts relating to both operational and construction activity odors would be less than significant.

Mitigation Measures: Required

4. BIOLOGICAL RESOURCES Would the project:	**Potentially Significant Impact**	**Less Than Significant 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 Game or U.S. Fish and Wildlife Service?	☑	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☑	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☑	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☑	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☑	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☑	☐	☐	☐

Explanation:

4a Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for the Project.

4b Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

4c Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

4d Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

4e Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

4f Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

5. CULTURAL RESOURCES **Would the project:**	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☑	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☑	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☑	☐	☐

Explanation:

5a Less Than Significant with Mitigation Incorporated: A Phase I Cultural Resources Assessment was conducted for the proposed Project and is included in Appendix B for reference. A records search at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton indicated that five resources have been mapped within or partially within the Project site. In addition, the records search showed that 100 percent of the Project site has been previously inventoried via two reports. Including the two reports that address the Project site, a total of 16 studies have been completed within one mile. These studies have addressed approximately 30 percent of the land within the search radius and have recorded 39 cultural resources. Various structures have been located within the southwestern portion of the Project site over time and in association with a historic age citrus and poultry ranching complex. This complex includes several structures and active fields or groves that were present by at least 1938 and the structures were removed by 2009.

After two visits to the site in July and October 2017, two of the five historical resources could not be located and are considered destroyed, no known artifacts or features for these two resources would be impacted by the Project, and no further work is recommended prior to Project implementation. The other three historical resources currently lack the artifact content or features once recorded at each site and all three sites have been subject to soil disturbances associated with erosion. These three resources do not appear to retain sufficient integrity to be considered eligible for inclusion in the California Register of Historical Resources (CRHR) and no evidence was detected to indicate that any of these resources have the potential to yield additional information important to history (Criterion 4). Therefore, it is recommended as not eligible for inclusion in the CRHR and not significant pursuant to CEQA. In addition, these sites are

recommended by the Phase I Cultural Resources Assessment as not eligible as cultural resources under Section 16.32.060 of the City of Highland Municipal Code. Therefore, implementation of the proposed Project would not result in a substantial adverse change to documented historic age resources and no further work or mitigation is recommended for these sites. However, the Project site is considered to have a high sensitivity for historic age resources based on the intensive historic era use of the Project site and surrounding lands. Mitigation is required to reduce the potential adverse impacts to historic age resources that may be encountered during ground-disturbing construction activities. With implementation of Mitigation Measure (MM) CR-1 and MM CR-2, potential impacts would be less than significant.

5b Less Than Significant with Mitigation Incorporated: Based on the results of a records search, pedestrian survey, site visits, and the research, recording, and evaluation efforts, no known archaeological resources pursuant to CEQA are located in the Project site. However, archaeological monitoring is recommended during Project implementation because the Project site appears to have a high sensitivity for historic age resources and moderate to low sensitivity for prehistoric resources. With implementation of Mitigation Measure (MM) CR-1 and MM CR-2 impacts would be less than significant.

5c Less Than Significant with Mitigation Incorporated: No human remains are known to exist within the Project site. However, should any human remains be uncovered during construction activities, implementation of the following MM CR-3 would reduce this potential impact to below a level of significance. Therefore, no significant impacts related to human remains will be result from the proposed Project.

Mitigation Measures:

Mitigation Measure CR-1
The Project site has a high sensitivity for historic age resources and a moderate to low sensitivity for prehistoric resources. This is based on the intensive historic era use of the Project site and surrounding lands. To address this sensitivity, an archaeological monitor with at least 3 years of regional experience in archaeology shall be present for all ground-disturbing activities that occur within the proposed Project site (which includes, but is not limited to, tree/shrub removal and planting, clearing/ grubbing, grading, excavation, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation [benches, signage, boulders, walls seat walls, fountains, etc.], and archaeological work.) A sufficient number of archaeological monitors shall be present each workday to ensure that simultaneously occurring ground-disturbing activities receive thorough levels of monitoring coverage. A monitoring and treatment plan that is reflective of the Project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist and submitted to the Lead Agency for dissemination to the San Manuel Band of Mission Indians (SMBMI) Cultural Resources Department. Once the City and SMBMI review and agree to the plan, it shall be adopted by the Lead Agency – the plans must be adopted prior to issuance of a grading permits for the Project. Any and all findings will be subject to the protocol detailed within the monitoring and treatment plan.

Mitigation Measure CR-2
Per CR-1, an archaeologist will be present for any and all ground-disturbing activity. If a pre-contact or post-contact cultural resource is discovered during project implementation, ground-disturbing activities shall be suspended 60 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the San

Manuel Band of Mission Indians (SMBMI) Cultural Resources Department, the Archaeological Monitor/applicant, and the Lead Agency shall confer regarding treatment of the discovered resource, as detailed within the monitoring and treatment plan. A research design shall be developed and will include a plan to evaluate the resource for significance under CEQA criteria. The research design shall also acknowledge that, regardless of significance under CEQA, all pre-contact discoveries, as well as post-contact resources associated with the citrus industry shall be subject, if feasible, to avoidance and preservation in place as treatment.

Should any resources not be a candidate for avoidance or preservation in place, and full data recovery is necessary, the research design shall include a comprehensive discussion of resource processing, analysis, curation, and reporting protocols and obligations. All analysis shall be conducted in conference with the SMBMI Cultural Resources Department. All removed material shall be temporarily curated on site and a fully executed reburial agreement shall be developed with the SMBMI Cultural Resources Department. This agreement shall include measures and provisions to protect the future reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, deed riders, etc.). Reburial shall not occur until all ground-disturbing activities associated with the Project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency, CHRIS, and the SMBMI Cultural Resources Department.

Should it occur that avoidance, preservation in place, or on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with the SMBMI Cultural Resources Department to identify an American Association of Museums (AAM)-accredited facility within San Bernardino County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and the SMBMI Cultural Resources Department for their review and comment. After approval from the City and SMBMI, the final reports are to be submitted to the local CHRIS Information Center, the Lead Agency, and the SMBMI Cultural Resources Department.

Mitigation Measure CR-3

The Lead Agency and the applicant/developer shall immediately contact the County Coroner and the San Manuel Band of Mission Indians (SMBMI) Cultural Resources Department in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the Native American Heritage Commission (NAHC) within 24 hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its

inspection and make recommendations within 48 hours of receiving notification from either the Developer or the NAHC, as required by California Public Resources Code § 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.

It is understood by the City and SMBMI that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

6. ENERGY – Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☑	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☑	☐

Explanation:

6a-b Less than Significant Impact: An Energy Analysis was prepared for the proposed Project and is included in Appendix C. Construction activities are expected to last for approximately four years. Construction activities would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic. Construction equipment fuel consumption was based on equipment lists generated using California Emissions Estimator Model (CalEEMod) default values and input from the Project applicant. The fuel consumption of off-road equipment calculated in the analysis was based on the fuel consumption rates in the OFFROAD 2011 statewide data sets as well as the horsepower, usage hours, and load factors from CalEEMod as part of the proposed Project's air quality analysis. Construction equipment would result in the consumption of an estimated 272,397 gallons of diesel fuel over the entire construction period. Worker, vendor, and haul trips would result in approximately 15,935 Vehicle Miles Traveled (VMT) over the entire construction period. A countywide average fuel consumption of 20.48 miles per gallon (mpg) was used to determine fuel consumption from worker and vendor trips because these trips would occur in a variety of different vehicle types and classes. The construction worker and vendor trips would result in the consumption of an estimated 344,421 gallons of gasoline/fuel during the construction

phase.

Although the Project would result in the consumption of an estimated 272,397 gallons of diesel and 344,421 gallons of gasoline during construction, the Project is designed to balance the grading on site. This would substantially reduce the amount of potential haul trips associated with the import and export of soil for construction of the proposed Project, which in turn would reduce the amount of fuel required by the Project. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with local, state and federal regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during the Project's construction. Considering these reductions in transportation fuel use, the proposed Project would not result in the wasteful and inefficient use of energy resources during construction and impacts would be less than significant.

During operations the proposed Project would consume natural gas for space heating, water heating, and cooking associated with the proposed residential land use. The natural gas consumption was estimated using CalEEMod default values to consume approximately 7,536,660 thousand British thermal units of natural gas per year.

During operations the proposed Project would use electricity for lighting, appliances, and other uses. Annual electricity demand was estimated using CalEEMod default values to be 1,901,510 kilowatt-hours (kWh) of electricity.

The proposed Project would result in a long-term increase in demand for electricity and natural gas. However, the Project would be designed according to the most recent Title 24 standards of the California Code of Regulations. Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. The most recent amendments, referred to as the 2016 standards, became effective January 1, 2017. The proposed Project would meet current Title 24 requirements. These measures would reduce inefficient, wasteful and unnecessary use of electricity or natural gas during operation of the Project and impacts would be less than significant.

Water used for both indoor and outdoor requires electricity for water treatment, conveyance, and distribution. The Project's water demand was calculated based on default values in CalEEMod for the project's specific land uses. The proposed Project is estimated to use approximately 13.22 million gallons of indoor water per year as well as 8.33 million gallons of outdoor water per year. This would result in a total of approximately 299,085 kWh per year of electricity for indoor and outdoor water treatment, conveyance, and distribution. As required within the California Code of Regulations Title 24, Part 11, Chapter 4, all water fixtures would be required to be compliant with the California Green Building Standards Code, which would reduce the amount of water used by the Project. Energy demand related to wastewater treatment is accounted for in the energy consumption associated with the Project's water demand above. The proposed Project is not expected to result in wasteful or inefficient use of electricity for water or wastewater treatment or conveyance and impacts would be less than significant.

During operation of the proposed Project, vehicle trips would be generated. The proposed Project's specific land uses were modeled in CalEEMod using default vehicle trip generation rates with vehicle trips generated at approximately 6,830,784 Vehicle Miles Traveled (VMT). Based on a countywide average fuel consumption of 20.43 mpg, the Project would result in consumption of an estimated 334,351 gallons of fuel for transportation. Various federal and state regulations including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program would serve to reduce the Project's transportation fuel consumption progressively into the future. Therefore, the Project would be designed to avoid the wasteful and inefficient use of transportation fuel during operations and impacts would be less than significant.

Mitigation Measures: Not Required

7. GEOLOGY AND SOILS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☑	☐	☐
ii) Strong seismic ground shaking?	☐	☑	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☑	☐	☐
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☑	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2001), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☑	☐	☐

Explanation:

7a) i Less Than Significant Impact with Mitigation Incorporated: The City of Highland General Plan identifies in Figure 6-2, Potential Geological Hazards that the San Andres Fault System is located out of the Project site to the north. An Engineering Geology Investigation was conducted for the Project site in 2006 in which information from that is used herein and can be found in Appendix D. The site does not lie within or immediately adjacent to an Earthquake Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. The closest Alquist-Priolo Earthquake Fault Zone is located approximately 3/4-mile northeast of the site associated with the San Andreas Fault. Due to the proximity of the site to the San Andreas Fault, strong ground motion associated with a large earthquake along this fault may occur at the site. As outlined in the Engineering Geology Investigation, a northwest trending groundwater barrier traversing the northwest portion of the site was mapped in 1963 and referred to as Fault "K." Northwest trending tonal lineaments were observed traversing the site on the aerial photographs reviewed as part of the Engineering Geology Investigation. However, no evidence for active faulting was observed associated with Fault "K" on or in the vicinity of the site, on the aerial photographs reviewed, or in the field. Due to the potential of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault "K" in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. In addition, all structures constructed at the Project site would be required to follow California Building Code (CBC) and to be designed and constructed to resist the effects of strong ground motion. Less than significant impacts would occur with implementation of Mitigation Measure GEO-1.

7a) ii Less Than Significant Impact with Mitigation Incorporated: The site is located in a seismically active area of Southern California and will likely be subjected to very strong seismically related ground shaking over the anticipated life span of the Project. Structures within the site would be required to be designed and constructed to resist the effects of strong ground motion in accordance with the most recent California Building Code. As outlined above, due to the potential of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault "K" in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. Less than significant impacts would occur with implementation of Mitigation Measure GEO-1.

7a) iii Less Than Significant Impact with Mitigation Incorporated: Figure 6.3 of the City of Highland General Plan shows that the Proposed site is located within the High Liquefaction Susceptibility Area, which includes the southern portion. No evidence for spring activity or perched ground-water conditions was observed on or in the immediate vicinity of the site during the geologic field reconnaissance or on the aerial photographs reviewed.

However, the sediments on the site are considered to have a high potential for liquefaction from a geologic standpoint based on 1) high groundwater, 2) sandy sedimentary deposits, 3) recent age of material, and 4) close proximity to an active fault. Damage from earthquake-induced ground failure associated with liquefaction could be high in buildings constructed on improperly engineered fills or saturated alluvial

sediments that have not received adequate compaction or treatment in accordance with current building code requirements. Structures within the site are required to be designed and constructed to in accordance with the most recent California Building Code requirements and standard industry practices and all recommendations for site preparation (including compaction and treatment) made by the Geotechnical Engineer shall be implemented as outlined in Mitigation Measure GEO-2. Less than significant impacts would occur.

7a) iv No Impact: According to Figure 6.3 of the City of the Highland General Plan, a portion of the proposed site is susceptible to landslide. Per the Engineering Geology Investigation, no evidence for landsliding was observed on or in the immediate vicinity of the site, in the field or on the aerial photographs reviewed. The proposed site is relatively flat and gently sloping with no substantial hills, slopes nor drop offs. Due to the lack of significant topography, landsliding is not expected on the site. No mitigation measures are required.

7b Less Than Significant Impact: This Project's future development of the property may result in minor soil erosion or loss of topsoil during construction activities from wind and water erosion. The City will condition the Project to submit grading plans and a Storm Water Pollution and Prevention Plan (SWPPP), as well as, be in conformity with the Water Quality Management Plan (WQMP) for post-construction drainage. Less than significant impacts would occur, and no mitigation measures are required.

7c Less Than Significant Impact With Mitigation Incorporated: As outlined in 6a) i and ii above, due to the potential of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault "K" in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. In addition, all structures constructed at the Project site would be required to follow California Building Code (CBC) and to be designed and constructed to resist the effects of strong ground motion. Less than significant impacts would occur with implementation of Mitigation Measure GEO-1. As outlined in 6a) iii above, due to the site's potential for liquefaction implementation of Mitigation Measure GEO-2 is required to reduce potential impacts to less than significant.

7d No Impact: The Project site is not located on known or mapped expansive soil. Structures within the site are required to be designed and constructed to in accordance with the most recent California Building Code requirements and standard industry practices. No mitigation measures are required.

7e No Impact: The proposed Project will connect to the local water and sewer delivery system, therefore no impacts. No mitigation measures are required.

7f Less Than Significant with Mitigation Incorporated: No paleontological resources or unique geologic features were identified within the Project Site. While no paleontological resources have currently been identified within the Project Site, there is still potential for the presence of paleontological resources to be uncovered during grading activities. With the monitoring of ground-disturbing activities from implementation of MM CR -1 and CR-2, impacts would be less than significant.

Mitigation Measures:

Mitigation Measure GEO-1

Due to the potential hazard of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault "K" in the event of a large, nearby earthquake, subsidence, differential compaction, or seismic settlement, the foundations and slabs of the proposed residences shall be reinforced to resist tensional ground cracking.

Mitigation Measure GEO-2

Due to the potential for liquefaction at the site the additional parameters of soil density, grain size distribution and exact depth to groundwater, a geotechnical engineer shall ascertain the final susceptibility of the site to liquefaction. A depth to groundwater of 10 feet from the ground surface shall be used for calculating the liquefaction potential of the site. The Geotechnical/Soils evaluation shall be submitted to the City with building plans for review and approval and all site preparation recommendations shall be implemented by the grading contractor. The final grading plan for the site shall be reviewed and approved by an engineering geologist prior to grading of the site and grading of the site should be evaluated by the engineering geologist by in-grading inspections.

8. GREENHOUSE GAS EMISSIONS – Would the project:	**Potentially 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?	☐	☐	☑	☐

Explanation:

8a-b Less than Significant Impact: An Air Quality and Greenhouse Gas Study was prepared for the proposed Project and is included in Appendix A. Construction activities would be temporary but could contribute to global climate change impacts. Construction activities would result in the emission of greenhouse gases (GHGs) from equipment exhaust, construction-related vehicular activity and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers.

In 2008, the SCAQMD formed a working group to identify greenhouse gas emissions thresholds for land use projects that could be used by local lead agencies in the South Coast Air Basin. The working group developed tiered threshold options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold, that could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting

its own threshold.

The current interim SCAQMD thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - Residential and Commercial land use: 3,000 MTCO2e per year
  - Industrial land use: 10,000 MTCO2e per year
  - Based on land use type: residential: 3,500 MTCO2e per year; commercial: 1,400 MTCO2e per year; or mixed use: 3,000 MTCO2e per year
- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans
  - Option 4: 2035 target: 3.0MTCO2e/SP/year for projects and 4.1 MTCO2e/SL/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The Tier 3 screening threshold uses the Executive Order S-3-05 year 2050 goal as its basis. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO2 concentrations at 450 ppm, thus stabilizing global climate.

Total estimated construction related GHG emissions for the proposed Project are shown in Table 7 below (page 48, Table 11 of the Air Quality and Greenhouse Gas Study). As shown, the total estimated unmitigated and mitigated GHG emissions during construction would equal approximately 460 MTCO2e. This would equal approximately 15.3 MTCO2e per year after amortization over 30 years per SCAQMD methodology.

Table 7 Estimated Total Construction-Related GHG Emissions

Emission Source	**Estimated CO2e Emissions**
Total Construction Emissions	460
Annual Construction (Amortized over 30 years)	15.3
Notes: CO2e = carbon dioxide equivalent; MT =metric tons; MT/yr = metric tons per year.	

Area and indirect sources of GHG emissions associated with the proposed Project would primarily result from electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed within the Project site would be generated off site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source. In addition, the

Project would generate GHG emissions from motor vehicle trips.

As shown in Table 8 below (page 49, Table 12 of the Air Quality and Greenhouse Gas Study), the proposed Project's annual GHG emission generation would be approximately 4,326.3 MTCO2e per year, which would exceed SCAQMD's Tier 3 threshold of 3,500 MTCO2e per year for residential land uses. Vehicular emissions related to operations would consists of 70.4 percent of these emissions; and energy consumption from heating, cooling, lighting, and appliance usage would generate 23.4 percent of these emissions.

Table 8 Estimated Construction and Operations-Related GHG Emissions

Emission Source	**Estimated Emissions CO2e (MT/yr)**
Construction Annual Mitigated Construction (Amortized over 30 years)	15.3
Project Operations	
Area Sources	45.19
Energy Consumption	1,012.6
Mobile Sources	3,046.0
Solid Waste	119.8
Water Consumption	102.7
Total (Construction and Operational Emissions)	**4,326.3**
Threshold	**3,500**
Exceed Threshold?	**Yes**
Notes: CO2e= carbon dioxide equivalent; MT/yr = metric tons per year; %=percent.	

Although the Project would exceed SCAQMD's Tier 3 threshold of 3,500 MTCO2e per year for residential land uses, because the proposed Project would be consistent with the Regional Greenhouse Gas Reduction Plan and would meet the Tier 2 threshold, as outlined in more detail below, it would be less than significant. The proposed Project would meet the Tier 2 threshold of being consistent with the applicable greenhouse gas reduction plan. Although most of the "local measures" in the SANBAG Regional Greenhouse Gas Reduction Plan apply to city-wide actions that are not related to specific development projects, such as the proposed Project, the following project design features of the proposed Project are consistent with the Regional Greenhouse Gas Reduction Plan and include: incorporation of passive solar design techniques including building orientation, energy-saving materials, roof overhangs, and window and door placement; participate in incentive programs for incorporation of solar and photovoltaic panels (active solar); provision of secure space for bicycle storage; use of native and drought-tolerant landscaping (xeriscaping) and drip irrigation to conserve water resources.

The City of Highland has selected a goal to reduce its community GHG emissions to a level that is 22 percent below its projected emissions in 2020. The City will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective per AB 32 through a combination of state and local efforts. The City would exceed the goal with only state/county level actions but has committed to several additional local measures. The Pavley vehicle standards, the state's low carbon fuel

standards, the Renewable Portfolio Standard (RPS), and other state measures will reduce GHG emissions in Highlands's on-road, solid waste, and building energy sectors in 2020. An additional reduction will be achieved by local measures related to water efficiency, solar energy, SmartBus technologies and wastewater treatment, as well as a performance standard for new development that seeks to achieve a 29 percent reduction below projected BAU emissions for new projects.

In addition, the Project includes design features that are consistent with the Regional Greenhouse Gas Reduction Plan, and the City of Highland would require the Project to meet the performance standard of 29 percent reduction below projected Business as Usual (BAU) emissions for new projects. The Regional Greenhouse Gas Reduction Plan anticipates these measures to include energy-efficient appliances and alternative energy sources, water conservation, landscaping, and site design, which are included in the proposed Project, as described above. Implementation of the performance standards for new development is ensured during the City's approval and development permitting process. Thus, the proposed Project would be consistent with the Regional Greenhouse Gas Reduction Plan and would meet the Tier 2 threshold. Therefore, impacts related to the generation of GHGs would be less than significant.

The City of Highland is a participant in the SANBAG Regional Greenhouse Gas Reduction Plan. The specific goals and actions included in the SANBAG Regional Greenhouse Gas Reduction Plan that are applicable to the proposed Project include those pertaining to energy and water use reduction, promotion of green building measures, waste reduction, and reduction in vehicle miles traveled. The proposed Project would be required to include all mandatory green building measures for new developments under the CALGreen Code, as required by the City's Municipal Code Chapter 15.38, which requires that the new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials. In addition, the code requires that all landscaping comply with water efficient landscaping requirements. Furthermore, implementation of CALGreen compliant building and appliance standards would result in water, energy, and construction waste reductions for the proposed Project.

The Project includes design features that are consistent with the Regional Greenhouse Gas Reduction Plan, and the City of Highland would require the Project to meet the performance standard of 29 percent reduction below projected BAU emissions for new projects. Thus, the proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for reducing the emissions of greenhouse gases, and impacts would be less than significant.

Mitigation Measures: Not Required

9. HAZARDS AND HAZARDOUS MATERIALS – Would the project:	**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?	☐	☐	☑	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☑	☐	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☑	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☑	☐

Explanation:

9a Less Than Significant: While grading and construction activities of the proposed Project may involve the limited transport, storage, use or disposal of hazardous materials, such as demolition and removal of material on site, and in the fueling/servicing of construction equipment on site, these activities would be short-term or one-time in nature and would be subject to Federal, State, and local health and safety requirements. Long-term use of the project consists of residential use and would not involve the routine transport, use, and disposal of hazardous materials. Therefore, impacts would be less than significant. No mitigation measures are required.

9b Less Than Significant: No significant quantities of hazardous materials are known to be located on the site. Future development on the site of single-family homes is not an activity or use typically associated hazardous materials and therefore none are expected to be released. No mitigation measures are required.

9c No Impact: The proposed project would permit future development of single-family residences beyond a quarter mile of a school. Therefore, the proposed Project would

not emit hazardous emissions or handle hazardous or acutely hazardous materials in the proximity of a school. Any hazardous materials on site would be those typically associated with residential developments including household cleaners, lawn care chemicals, and automotive care products. None of these hazardous materials would pose a hazard to a school. No mitigation measures are required.

9d No Impact: The Site is not known to have been listed as a Site with Hazardous Materials. No mitigation measures are required.

9e Less Than Significant Impact with Mitigation Incorporated: The southern portion of the proposed Project site is located approximately 1.5 miles away from the western extent of the Redlands Municipal Airport runway (the closest to the Project site) and approximately 2.8 miles from the eastern extent of the San Bernardino International runway. There are no private airports near the project site. Per the General Plan Figure 6-7, *San Bernardino International Airport Influence Area (AIA)/Redlands Municipal Airport Compatibility Map*, the Project site is located just outside of the San Bernardino International Airport Influence Area and outside of the Redlands Municipal Airport Influence Area while the southern portion of the Project site is located within the Redlands Municipal Airport Area of Special Compatibility Concern. The San Bernardino International Airport does not have an adopted Airport Land Use Compatibility Plan (ALUCP).

Policy 2.2.4 of the Redlands Municipal ALUCP sates:
Areas of Special Compatibility Concern – The purpose of this designation is to take note of the locations which: (1) are routinely overflown by aircraft approaching and/or departing the Redlands Municipal Airport, but at some distance from the airport; and (2) have existing and planned land uses which are compatible with airport activity.
(a) Notation of areas of special compatibility concern is limited to serve as a reminder that airport impacts should be carefully considered in any decision to change the current land use designation.
(b) These areas are not part of the Redlands Municipal Airport influence area and are not subject to the review policies contained in this Compatibility Plan, except with respect to the notification requirements indicated in Paragraph 1.8.4. Also, establishment of a buyer awareness program is encouraged if any of these areas are to be converted to residential uses.
(c) The only portion of the Redlands Municipal Airport environs designated in this manner is the southern edge of the City of Highland.

The Redlands ALUCP, Section 1.8 *Relationship to Other Local Agencies*, Paragraph 1.8.4 indicates:
Actions Requiring Notification by City of Highland – The City of Highland shall notify the City of Redlands regarding any of the following types of actions which have the potential to affect or be affected by Redlands Municipal Airport operations:

a. *Any proposal for construction or alteration of an object which would be located within 20,000 feet of the Redlands Municipal Airport runway and which would require notice to the Federal Aviation Administration in accordance with Federal Aviation Regulations Park 77, Paragraph 77.13.*
b. *Any proposal for construction of a public-use or special-use heliport or airport which would be located within 20,000 feet of the Redlands Municipal Airport runway and which would require a permit from the California Department of Transportation.*

The notification requirements in Paragraph 1.8.4 above are for any proposal for construction located within 20,000 feet (approximately 3.8 miles) of the runway. The proposed Project involves construction of single-family residences within 20,000 feet of the runway; therefore, with notification from the City of Highland to the City of Redlands regarding this Project, the Project is in compliance with the Redlands Municipal ALUCP. It is the City's policy to have notices & disclosures included on the map and provided to all potential homebuyers. Less than significant impacts would occur with implementation of Mitigation Measure HAZ-1.

9f Less Than Significant Impact: The primary access to the Project site is from Greenspot Rd. and is within Fire Severity Zone II. Internally the roadways connected to the site are looped together and a total of three ingress/egress points can be taken out of the neighborhood. Development of the site would not involve street closures during construction nor operations and would not impair implementation or interfere with an adopted emergency response plan within the City. No mitigation measures are required.

9g Less Than Significant Impact: The proposed Project is located within the limits of Fire Severity Zone II and adjacent to existing undeveloped land and natural vegetation. When a residential development plan is submitted, design and construction methods will be required to be in compliance with all current building and fire codes and regulations designed for safe development in Fire Severity Zones. With development in compliance with these building and fire code standards, no persons or structures will be placed at significant risk of loss, injury or death involving wildland fires. Therefore, no mitigation measures are required.

Mitigation Measures:

Mitigation Measure HAZ-1

The City will condition the Project to provide notices & disclosures on the map that the southern portion of the site is located in the Redlands Municipal Airport *Area of Special Compatibility Concern,* and notice shall be given to all potential home buyers that the property is in *Area of Special Compatibility Concern* that is routinely overflown by aircraft approaching and/or departing the Redlands Municipal Airport.

10. HYDROLOGY AND WATER QUALITY -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☑	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☑	☐

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner, which would;				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☑	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	☐	☐	☑	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☑	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☑	☐	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☑	☐

Explanation:

10a Less Than Significant Impact: This Project would not violate water or waste discharge requirements. Development on the Project site will be required to comply with Storm Water Regulations for new developments. Construction related impacts are regulated by a Storm Water Pollution Prevention Plan (SWPPP), while long-term impacts generated by development are regulated through the project-specific Water Quality Management Plan (WQMP) for City compliance. Compliance with existing regulations and standard conditions reduce the opportunity for violations. No mitigation measures are required.

10b Less Than Significant Impact: Water service would be provided to the Project by East Valley Water District (EVWD), which provides water to an approximately 30 square mile area in San Bernardino County. The EVWD derives its water sources from local groundwater and surface sources and supplements these sources with imported water from the San Bernardino Valley Municipal Water District (SBVMWD). The 2015 San Bernardino Valley Regional Urban Water Management Plan (RUWMP) for the San Bernardino Valley area, is represented by the SBVMWD service area, and nine participating retail water purveyors: City of Colton, East Valley Water District, City of Loma Linda, City of Redlands, City of Rialto, Riverside Highland Water Company, City of San Bernardino Municipal Water Department, West Valley Water District, and Yucaipa Valley Water District. The Urban Water Management Planning Act of 1983 requires urban water suppliers servicing 3,000 or more connections or supplying more than 3,000 acre-feet (AF) of water annually, to prepare an UWMP. For wholesale water agencies (like SBVMWD), without retail connections, the requirement is triggered by the annual delivery of 3,000 AF or more. The RUWMP is intended to function as a planning tool to guide broad-perspective decision making by the management of water suppliers. SBVMWD and the retail water purveyors wish to deliver a sufficient, reliable, and high-quality water supply for their customers, even during dry periods. Based on conservative water supply and demand assumptions over the next 25 years, in combination with conservation of non-essential demand during certain dry years, the RUWMP successfully achieves this goal. (2015 RUWMP)

The groundwater basins utilized by the RUWMP agencies includes the San Bernardino Basin Area (SBBA), which encompasses several basins, including the Bunker Hill and Lytle Creek Basins. The basins of the RUWMP area are among the most rigorously managed in the State. Planning and management efforts evaluating needs and supplies have been established for most of the basins within the watershed throughout the next 20 to 40 years. Groundwater extractions and conditions are monitored and tracked by the Western-San Bernardino Watermaster and Basin Technical Advisory Committee. (2015 RUWMP) As outlined in 3a above, the proposed Project would not result in residential development beyond the land use designation in the 2006 General Plan and therefore would not exceed planned or anticipated growth in the region. With implementation of the 2015 RUWMP by EVWD, the proposed Project would not substantially decrease groundwater supplies or impede sustainable groundwater management of the SBBA. Also, San Bernardino Valley Water Conservation District recharges groundwater in spreading basins located to the east of the Project site; none are located on site. The Project site does not currently serve as a significant location for groundwater recharge. Development of the Project site will increase the extent of impervious surfaces however, it will not substantially interfere with groundwater recharge. Therefore, significant impacts would not occur from the implementation of the Project. No mitigation measures are required.

10c Less Than Significant Impact: There are no streams or rivers located within the Project site. Refer to Section 4b above for a discussion of streambeds regulated by the California Department of Fish and Wildlife and lack of occurrence of these on site. Although, the site will be graded and improved the proposed Project would not significantly alter drainage patterns currently developed on or off the Site. As outlined in the WQMP, stormwater is generally conveyed through storm drain pipes into a proposed water quality infiltration basin located in the southwest portion of the Project site. No mitigation measures are required.

10c i-iii) Less Than Significant Impact: As outlined in the WQMP, stormwater is generally conveyed through storm drain pipes into a proposed water quality infiltration basin located in the southwest portion of the Project site. With the Implementation of the Water Quality Management Plan (WQMP), the proposed development will not increase off-site runoff or result in substantial erosion or siltation on or off site or substantially increase the rate or amount of surface runoff in a manner which would cause flooding on site or off site. In addition, the area to the south of the Project site is not developed and is designated as open space. Stormwater runoff from the site generally sheet flows in a north to south direction. The area to the south is in the historic floodplain of the Santa Ana River and its tributaries, including Plunge Creek. There are no planned stormwater channels or underground storm drains for the area south of the Project site and therefore the project would not exceed the capacity of existing or planned stormwater drainage systems. With implementation of the WQMP, the Project would not provide substantial additional sources of polluted runoff. No mitigation measures are required.

10d Less than Significant with Mitigation Incorporated: The Project site is within the 100-year flood hazard area and the site is located in Zone AE of the Flood Insurance Rate Map (FIRM) Panel 8706H OF 9400, dated August 28, 2008. Zone AE Areas are determined to be within the 1 percent annual chance floodplains. Design and development of the Project is required to take into consideration the area to assure no development occurs within the flood zone that impedes flood flows nor locate a home within this area. As

outlined in the WQMP, a flood control channel runs in a southerly direction just east of the site and has an adequate levee to prevent storm flows from entering the Project site. However, the Project also includes a proposed floodwall that runs along a portion of the western boundary adjacent to lots 106-113, 131, 132 and the Plunge Creek Channel, and along a portion of the southern boundary, along lots 79-85, the East Valley Water District property (APN 1210-211-24 that is not a part of TTM 17604), and lot E with the proposed infiltration basin. The proposed flood wall would vary in height, but based on the design included in the WQMP, would typically be 9 feet tall above the existing ground level and the height would be at a minimum of 3 inches above the 100-year water surface elevation. The Project's developer is currently in the process of processing a CLOMR (Conditional Letter of Map Revision) with FEMA (Federal Emergency Management Agency). A CLOMR is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The letter does not revise an effective NFIP map, it indicates whether the project, if built as proposed, would be recognized by FEMA. Building permits cannot be issued based on a CLOMR, because a CLOMR does not change the National Flood Insurance Program (NFIP) map. Once a project is completed, the community must request a revision to the Flood Insurance Rate Map (FIRM) to reflect the project.[1] Potential impacts from flooding are less than significant with implementation of Mitigation Measure HYDRO-1.

The Project Site is located within the Seven Oaks Dam inundation area. The Seven Oaks Dam is a single purpose flood control project located just outside the Highland's northeastern boundary. The Dam is a major feature of the Santa Ana River Mainstem Project designed to protect Orange, Riverside, and San Bernardino County from flood. The Dam was designed to resist an earthquake measuring 9.0 on the Richter scale with any point able to sustain a displacement of four feet without causing any overall structural damage; therefore, impacts from flooding as a result of failure of the dam is remote and considered less than significant.

Seiche are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. No such water storage facilities are planned on site or nearby. As a result, the proposed development would not be adversely impacted by the reservoirs. No tsunamis are anticipated due to the distance from ocean waves. Therefore, the proposed Project is not anticipated to release pollutants due to inundation from tsunami or seiche. With compliance with the WQMP and Mitigation Measure HYDRO-1 potential impacts from flooding and release of pollutants is reduced to less than significant levels.

10e Less Than Significant Impact: As outlined in 10a and 10b above, the proposed Project is not anticipated to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No mitigation measures are required.

Mitigation Measures:

Mitigation Measure HYDRO-1

The City will condition the Project to provide notices & disclosures to all potential home buyers that the property is within the 100-year flood hazard area, in Zone AE of the Flood Insurance

[1] https://www.fema.gov/conditional-letter-map-revision

Rate Map (FIRM), and the purchase of flood insurance is required. Mandatory flood insurance purchase requirements and floodplain management standards apply until the National Insurance Program (NFIP) map for the project area is revised and it is no longer in the 100-year flood hazard area.

11. LAND USE AND PLANNING - Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	☑
b) Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☑	☐

Explanation:

11a No Impact: The proposed Project would result in the conversion of vacant land to residential uses. There are no existing residences or established community at the Project site. This Project would include the development of residential units and associated infrastructure consistent with the City's Development Code and General Plan. The proposed Project will not physically divide an established community. No mitigation measures are required.

11b Less Than Significant Impact: This Project would result in the conversion of vacant land to residential uses. The General Plan Land Use Designation for the site is Planned Development/ Low Density Residential (PD/LDR) which limits uses to single-family detached residential, and mobile homes with a maximum intensity of six dwelling units per 1.0 acre. The existing zoning for the site is PD/R-1 Single-Family Residential which allows for small lot single-family detached and mobile homes parks and subdivisions at a maximum allowable density of six dwelling units per gross acre and further establishes minimum parcel sizes of 7,200, 10,000, 15,000, and 20,000 square feet. The proposed development proposes 203 single-family residences on approximately 59 acres, with a density of one dwelling unit per 3.4 acres that is within the allowable intensity. Therefore, the proposed development is consistent with the existing General Plan Land Use Designation and zoning for the site. No mitigation measures are required.

Mitigation Measures: Not required.

12. MINERAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☑	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☑	☐

Explanation:

12a,b Less Than Significant Impact: The proposed Project is located within a Mineral Resource Zone 2 (MRZ 2). Category 2 indicates that significant deposits are likely to be present. More than half of the City is underlain by MRZ-2 rated mineral resources. The General Plan provides for areas south of the Project site within the Santa Ana River Wash as Open Space which allows for mining of sand and gravel in MRZ 1. Development of the Project site would not result in a less than significant loss of land with potential sand and gravel resources. There are no other known mineral resource or important mineral resource recovery site within the Project site. No mitigation measures are required.

Mitigation Measures: Not Required

13. NOISE Would the project result in:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☑	☐	☐

13a Less Than Significant Impact: Construction, although short-term, can be a significant source of noise. Construction activity noise levels fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction of the proposed Project would require the use of heavy construction equipment for activities such as excavation, grading, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power

tools, generators, and other sources of noise. During each stage of construction, a different mix of equipment operating noise levels would occur and would vary based on the amount of equipment in operation and the location of the activity.

The Federal Highway Administration (FHWA) has compiled data for outdoor noise levels for typical construction activities. Table 9 provides average (Leq) noise levels produced by various types of construction equipment at a distance of 50 feet between the equipment and noise receptor. These noise levels would diminish with distance from a construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA Leq measured at 50 feet from the noise source to the receptor would reduce to 78 dBA Leq at 100 feet from the source to the receptor.

Table 9 Construction Equipment Noise Levels

Construction Equipment	**Noise Level at 50 Feet (dBA, Leq)**
Air Compressor	78
Backhoe	78
Chain Saw	84
Compactor	83
Concrete Mixer	79
Concrete Pump	81
Dozer	82
Generator	81
Grader	85
Dump Truck	76
Paver	77
Pneumatic Tools	85
Jackhammer	89
Roller	80
Front End Loader	79
Scraper	84
Tractor	84
Truck	75
Source: FHWA Construction Noise Handbook.	

The construction activities would expose the nearby existing uses to increased noise levels. The highest construction noise would occur during the excavation and grading activities. As shown in Table 9, use of grading equipment generates noise levels of approximately 85 dBA at a distance of 50 feet; at a distance of 100 feet the noise would attenuate to approximately 79 dBA.

A Noise Study was completed for the Project (Appendix E) and as described above, the closest sensitive receptors to the Project site and used in the analysis would be the adjacent single-family residences approximately 100 feet to the north and west. The loudest construction related exterior noise would be approximately 79 dBA Leq at this receptor (100 feet from the site) when the loudest equipment is used.

However, per the City's Municipal Code, because the Project site is not adjacent to residential uses, construction noise is exempt as long as construction activities do not commence prior to 7:00 a.m. and end no later than 7:00 p.m. Monday through Saturday with no construction activities performed during city or federal observed holidays. The proposed Project would not involve the need for construction during these hours, and the construction activities related to the Project would be consistent with the City's Municipal Code. Thus, the proposed Project would be in compliance with the City's construction related noise standards, and impacts would be less than significant.

With respect to operational noise levels, the City has established exterior noise standards that are correlated with land use classifications. As described above, the exterior noise standards are 60 dBA CNEL during the daytime and 55 dBA during the nighttime for residential land uses.

Ambient noise levels within and surrounding the Project area are influenced primarily by traffic on local roadways. With respect to vehicle traffic generated by the Project, approximately 2,047 daily trips are anticipated. The increase in traffic resulting from implementation of the Project would increase the ambient noise levels at land uses fronting roadways. To evaluate the future traffic noise environment in the Project area, the future traffic noise levels were estimated based on future traffic volumes provided in the Project's traffic study using the FHWA's TNM 2.5 model. As described in the Noise Study, Section 3.1, Noise Criteria, a significant impact related to a substantial increase in noise would occur if the Project results in an increase of 5 dBA, which would be readily noticeable.

As shown in Table 10, existing noise levels at sensitive receptors in the Project area range from 48.9 dBA to 68.3 dBA. Traffic resulting from the proposed Project would increase noise levels to a maximum of 0.5 dBA. Because the project-related increase in noise is less than the 5 dBA threshold, noise impacts would be less than significant.

Table 10 Increase in Noise Levels from Operational Traffic

Receptor	Existing CNEL	Existing with Project CNEL	Increase
R1	48.9	49.3	0.4
R2	52.7	53.2	0.5
R3	59.1	59.6	0.5
R4	61.6	62.1	0.5
R5	56.4	56.9	0.5
R6	63	63.5	0.5
R7	61.8	62.3	0.5
R8	64	64.5	0.5
R9	56.4	56.9	0.5
R10	67.9	68.1	0.2
R11	62.3	62.4	0.1
R12	68.3	68.4	0.1

Once the proposed residences are operational, noise levels generated at the Project site would occur from new stationary equipment such as heating, ventilation, and air conditioning (HVAC) units that would be installed for the building. Although the operation of this equipment would generate noise, the design of these on-site HVAC units and exhaust fans would be required to comply with the noise limit regulations of the City's Noise Element that does not allow exterior noise to exceed 55 dBA CNEL between 10:00 p.m. and 7:00 a.m., and 60 dBA CNEL between 7:00 a.m. and 10:00 p.m. Meeting these exterior standards would also meet the City's interior noise standards with implementation of standard construction, which would be required by the City. Therefore, impacts related to generation of noise in excess of standards would not occur from operation of the proposed Project.

The Project site is located adjacent to and north of the Upper Santa Ana River Wash Habitat Conservation Plan (Wash Plan). A Draft Environmental Impact Statement/ Supplemental Environmental Impact Report (DEIS/SEIR) for the Wash Plan was prepared in December 2019.[2] The proposed action/projects covered in the DEIS/SEIR for the Wash Plan include aggregate mining by CEMEX Construction Materials Pacific, LLC (CEMEX) and Robertson's Ready Mix (Robertson's) as well as construction and/or operation and maintenance of facilities for water conservation, wells and water infrastructure, transportation, flood control, trails, habitat enhancement, and agriculture. Potential noise impacts from these proposed actions/projects, including aggregate mining, on nearby sensitive receptors were evaluated. Per the Wash Plan DEIS/SEIR (Executive Summary page ES-7), "Construction noise and groundborne vibration from aggregate mining would not exceed standards at nearby sensitive receptors. Aggregate mining operations would not generate noise from mobile or stationary sources that would exceed standards and impacts on sensitive receptors are less than significant."

13b Less Than Significant Impact: As described above in 13a, construction activities for the Project would include excavation and grading activities, which has the potential to generate groundborne vibration. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Site ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can be perceived in the audible range and be felt in buildings very close to a construction site.

The construction that would occur by the project would involve the temporary use of construction equipment, which can result in the generation of groundborne vibration levels. The various Peak Particle Velocity (PPV) vibration velocities for several types of construction equipment that can generate perceptible vibration levels are identified in Table 11. As shown, vibration velocities could range from approximately 0.003 to 0.089 inch-per-second PPV at 25 feet from the source activity, depending on the type of construction equipment in use. For the purpose of this analysis, the vibration level for a large bulldozer provided in Table 11 was used to evaluate vibration source levels at the nearest sensitive receptor from construction activity. In comparison to the Caltrans vibration criteria, vibration impacts from construction activities would not exceed the criteria.

[2] https://www.sbvwcd.org/our-projects/wash-plan.html

Table 11 Vibration Source Levels for Construction Equipment at 25 Feet

Equipment	PPV (in/sec) at 25 Feet	PPV (in/sec) at 50 Feet	PPV (in/sec) at 100 Feet
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Jackhammer	0.035	0.012	0.004
Small Bulldozer	0.003	0.001	<0.000
SOURCE: FTA, 2006			

As described above in 13a, the closest sensitive uses to the Project site are the residences, which are modern structures that are located 100 feet away. At this distance, the maximum vibration of 0.011 in/sec PPV is estimated to occur during construction. Table 11 shows that the vibration levels generated would be below levels that could create structural damage to modern buildings (0.5 in/sec PPV), and below the strongly perceptible level for human response (0.9 in/sec PPV). Thus, vibration at 100 feet away from construction activity would be less than significant, and construction of the Project would not generate excessive generation of ground-borne vibration.

The proposed residential uses do not involve activities or operation of stationary or mobile equipment that would result in high vibration levels, which are more typical for large industrial projects that employ heavy machinery. During project operations, the primary source of vibration would likely be delivery/garbage truck circulation within and adjacent to the Project area. However, the FTA's Transit Noise and Vibration Impact Assessment states that it is unusual for vibration from vehicular sources (including buses and trucks) to be perceptible, even in locations close to major roads. As such, no sources of "excessive" groundborne vibration or noise levels are anticipated during project operations. Less than significant impacts would occur. No mitigation measures are required.

13c Less Than Significant Impact with Mitigation: There are no private airports or airstrips in the vicinity of this Project site. The southern portion of the proposed Project is located approximately 1.5 miles away from the western extent of the Redlands Municipal Airport runway (the closest to the Project site) and approximately 2.8 miles from eastern extent of the San Bernardino International Airport runway. Per the City of Highland General Plan Figure 6-7, *San Bernardino International Airport Influence Area (AIA)/Redlands Municipal Airport Compatibility Map*, the Project site is located just outside of the San Bernardino International Airport Influence Area and outside of the Redlands Municipal Airport Influence Area while the southern portion of the Project site is located within the Redlands Municipal Airport Area of Special Compatibility Concern. The San Bernardino International Airport does not have an adopted Airport Land Use Compatibility Plan (ALUCP) and the Project site is not within 2 miles of the San Bernardino International Airport. As outlined above in Hazards and Hazardous Materials 9e above, the proposed Project involves construction of single-family residences within 20,000 feet of the Redlands Municipal Airport runway; therefore, with notification from the City of Highland to the City of Redlands regarding this Project, the Project is in compliance with the noticing requirements of the Redlands Municipal ALUCP. It is the City's policy to have notices & disclosures included on the map and provided to all

potential homebuyers. Less than significant impacts would occur with implementation of Mitigation Measure HAZ-1.

Mitigation Measures:

Mitigation Measure Haz-1

The City will condition the Project to provide notices & disclosures on the map that the southern portion of the site is located in the Redlands Municipal Airport *Area of Special Compatibility Concern,* and notice shall be given to all potential home buyers that the property is in *Area of Special Compatibility Concern* that is routinely overflown by aircraft approaching and/or departing the Redlands Municipal Airport.

14. POPULATION AND HOUSING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☑	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Explanation:

14a Less Than Significant Impact: The proposed development proposes 203 lots for single-family residences on approximately 59 acres, with a density of one dwelling unit per 3.4 acres that is within the allowable intensity. Therefore, the proposed development is consistent with the existing General Plan Land Use Designation and zoning for the site. Thus, development potential is limited to these parameters and the proposed Project's population projection will be within those planned for within the City's General Plan and is not considered significant. No mitigation measures are required.

14b No Impact: The proposed Project site is currently vacant thus the proposed Project does not have the potential to displace people or existing housing. No impacts to housing would occur. No mitigation measures are required.

Mitigation Measures: Not required

15. PUBLIC SERVICES	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or 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:				
a) Fire protection?	☐	☐	☑	☐
b) Police protection?	☐	☐	☑	☐
c) Schools?	☐	☐	☑	☐
d) Parks?	☐	☐	☑	☐
e) Other public facilities?	☐	☐	☑	☐

Explanation:

15a Less Than Significant Impact: Fire suppression, prevention, and medical services are critical to the protection of people, property, and the natural environment. The CalFire provides fire protection and emergency medical services to the City of Highland through a cooperative agreement. The City has three fire stations: Station 541 located at 26974 Base Line; Station 542 located at 29507 Base Line; and Station 543 located at 7469 Sterling Avenue. The proposed project will be served by CalFire, specifically Station 2 at 29507 Baseline Street, Highland, CA 92346. Project related fire protection demand impacts are mitigated through the mandatory payment of Development Impact Fees (DIF), and construction of the new residences in accordance with current Uniform Building and Fire Code requirements. Based on these findings and requirements, the proposed project is not forecast to cause or contribute to significant new demand for fire protection services. The Project will have less than significant impacts on Fire protection. No mitigation measures are required.

15b Less Than Significant Impact: The protection of City's residents, visitors, businesses, and property from crime depends on the adequate provisions of law enforcement services, supporting facilities, and prevention strategies. The City of Highland contracts with the San Bernardino County Sheriff's Department for its law enforcement and police services. The project will add incrementally to the existing demand for law enforcement services, but the City recently installed a new Department station and does not anticipate the need for new facilities in the immediate future. Also, this incremental demand is offset through the mandatory payment of DIF for law enforcement protection services. Impacts from development of the Project on Police protection is less than significant. No mitigation measures are required.

15c. Less Than Significant Impact: The proposed Project is located within the service boundaries of the Redlands Unified School District. School mitigation fees are required to be paid to the Redlands Unified School District for every unit constructed in the Project. Through payment of the mandatory School Mitigation Fee, implementation of the proposed Project would have a less than significant impact to schools. No mitigation

measures are required.

15d Less Than Significant Impact: The City's Community Center and Park is located to the west on Central Avenue just north of 5th Street. Both of the facilities were constructed within the past 10 years. The YMCA of the East Valley currently provides recreation programs to residents. It is not anticipated that the residents of the Project Site would affect the YMCA services.

A second park, Aurantia Park, is located on Greenspot Road, approximately one-half mile to the east of the Project site. This ten-acre Park has a combination of natural habitat, orange grove, tot lot, and a dog park. The park will serve as an amenity to the proposed future residents of the proposed Project and impacts would be less than significant. No mitigation measures are required.

15e Less Than Significant Impact. The Sam J. Racadio Library and Environmental Learning Center is located to the west on Central Avenue just north of 5th Street. The facility was constructed in 2008 and is the only such facility in the City. The County of San Bernardino currently operates the facility and is part of the County library system. The facility was planned to accommodate the future growth of the City's east end and therefore, the proposed Project would not affect the City's ability to provide library services to its residents. Impacts would be less than significant and no mitigation measures are required.

Mitigation Measures: Not Required

16. RECREATION	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☑	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☑	☐	☐	☐

Explanation:

16a,b Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

17. TRANSPORTATION -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☑	☐	☐	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☑	☐	☐	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
d) Result in inadequate emergency access?	☐	☐	☐	☑

Explanation:

17a Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

17b Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

17c No Impact: The proposed Project would include the development of single-family homes on property adjacent to an existing and improved street system designed in accordance with City standards. Access to the Project site is provided from Greenspot Road, designated a Major Highway in the General Plan Circulation Element (Figure 3-2 Roadway Network), a four-lane 80-foot roadway curb-to-curb (including a 12-foot median). The proposed Project does not include any geometric changes to Greenspot Road. A new signal and crosswalks will be installed at the Project's main entrance at Gold Buckle Road on Greenspot Road for safe ingress and egress from the site. There will be no impact thus no mitigation measures are required.

17d No Impact: The proposed Project site is adjacent to an existing roadway with full emergency ingress and egress off of Greenspot Road, a major highway, that are considered acceptable for emergency access. No mitigation measures are required.

18. TRIBAL CULTURAL RESOURCES -- Would the project result in	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☑	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) 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.	☐	☑	☐	☐

Explanation:

18a-b) Less Than Significant with Mitigation Incorporated: Consultation was initiated by the City of Highland as lead agency with a letter dated February 23, 2016 to the following tribes: San Manuel Band of Mission Indians (SMBMI), Soboba Band of Luiseño Indians, and Gabrieleño Band of Mission Indians – Kizh Nation.

The City received email correspondence from SMBI on March 1, 2016 that indicated the following: “The project is located within the Tribe’s ancestral territory. We do not have any specific information about tribal cultural resources at the project location. We recommend that a records search including a minimum of one-mile radius of information be prepared and that a copy of the results be forwarded to our office. Once we receive the results, we will comment on what we think the next steps ought to be for this project. We do know that the project area was an important prehistoric plant gathering area. If you are unable to provide the records search results prior to the AB 52 response deadline, we will opt for consultation for this project and review the information as soon as it can be provided to us.”

The City provided the Phase I Cultural Resources Assessment, dated December 11, 2017 to SMBMI via email on September 27, 2018. SMBMI responded via email on October 1,

2018 indicating “In reviewing the cultural resources report, SMBMI noted that there are historic resources that exist within the project area that overlap with SMBMI’s historic presence in the area. The San Manuel Reservation was established in 1891, though Serrano men were working in the citrus industry in the area both before and after that date. Highland in particular contained a great deal of Serrano labor, given its proximity to the reservation, and consequently this project area is quite sensitive. Should there be any feasibility in avoiding the resources on the surface of the site, SMBMI would prefer that option. However, if avoidance is not feasible, the next option would be collection of artifacts and reburial in a place that will be protected from future disturbance. Additionally, SMBMI requests an archaeologist be on site during all ground-disturbing activity to ensure any additional resources are treated in the same way. Please see the attached MM language for the Cultural Resources and Tribal Resources sections for the City’s use…”

The Mitigation Measure language that was provided in the attachment from SMBMI were incorporated as mitigation measures CR-1, CR-2, and CR-3 above in Section 5, Cultural Resources. Implementation of mitigation measures CR-1, CR-2, and CR-3 would reduce potential impacts to Tribal Cultural Resources to less than significant levels.

The Soboba Band of Luiseño Indians provided a response letter dated March 22, 2016 indicating “The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project(s) has been assessed through our Cultural Resources Department. At this time the Soboba Band does not have any specific concerns regarding known cultural resources in the specified areas that the project encompasses but does request that the appropriate consultation continue to take place between concerned tribes, project proponents, and local agencies.” “Also, working in and around traditional use areas intensifies the possibility of encountering cultural resources during any future construction/excavation phases that may take place. For this reason, the Soboba Band of Luiseño Indians requests that approved Native American Monitor(s) be present during any future ground-disturbing proceedings, including surveys and archaeological testing, associated with the project. The Soboba Band wishes to defer tot the San Manuel Band of Mission Indians, who are in closer proximity to the Project.”

The Gabrieleño Band of Mission Indians – Kizh Nation provided a response letter dated March 7, 2016 indicating “Due to the project location and the high sensitivity of the area location , we would like to request one of our certified Native American Monitors to be on the site during any and all ground disturbances to protect any cultural resources which may be effected during construction development.” “While the property may be located in an area that has been previously developed, numerous examples can be shared to show that there still is a possibility that unknown, yet significant, cultural resources will be encountered during ground disturbance activities. Please note, if they haven’t been listed with the NAHC [Native American Heritage Commission], it doesn’t mean that they aren’t there. Not everyone reports what they know.”

Mitigation Measures: CR-1, CR-2, and CR-3 above in Section 5, Cultural Resources.

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

Explanation:

19a Less Than Significant Impact: The proposed Project is located directly adjacent to Greenspot Road. There are existing water, wastewater, electric power, natural gas, and telecommunication facilities in the Greenspot Road public right-of-way. The proposed Project will include the construction of connections to these existing utilities along Greenspot Road and will not require or result in the relocation or construction of any other new or expanded facilities which would cause significant environmental effects. As outlined above in Section 10 Hydrology and Water Quality, the site will be graded and improved the proposed Project would not significantly alter drainage patterns currently developed on or off the Site. As outlined in the WQMP, stormwater is generally conveyed through storm drain pipes into a proposed water quality infiltration basin located in the southwest portion of the Project site. No new off-site stormwater drainage facilities are required or required to be upgraded. Potential impacts are less than significant. No mitigation measures are required.

18b-c Less Than Significant Impact: The proposed Project would permit future construction of single-family units. East Valley Water District (EVWD) will provide water and wastewater (sewer) collection services to the Project for domestic, fire protection, and sanitary sewer purposed, as outlined in a Will Serve Letter dated January 29, 2019 (Appendix F). According to EVWD, the wastewater service provider (SBMWD) has adequate capacity to serve the development.

As outlined above in Section 10 Hydrology and Water Quality (10b), water service would

be provided to the Project by East Valley Water District (EVWD), which provides water to an approximately 30 square mile area in San Bernardino County. The EVWD derives its water sources from local groundwater and surface sources and supplements these sources with imported water from the San Bernardino Valley Municipal Water District (SBVMWD). The 2015 San Bernardino Valley Regional Urban Water Management Plan (RUWMP) for the San Bernardino Valley area, is represented by the SBVMWD service area, and nine participating retail water purveyors: City of Colton, East Valley Water District, City of Loma Linda, City of Redlands, City of Rialto, Riverside Highland Water Company, City of San Bernardino Municipal Water Department, West Valley Water District, and Yucaipa Valley Water District. The Urban Water Management Planning Act of 1983 requires urban water suppliers servicing 3,000 or more connections or supplying more than 3,000 acre-feet (AF) of water annually, to prepare an UWMP. For wholesale water agencies (like SBVMWD), without retail connections, the requirement is triggered by the annual delivery of 3,000 AF or more. The RUWMP is intended to function as a planning tool to guide broad-perspective decision making by the management of water suppliers. SBVMWD and the retail water purveyors wish to deliver a sufficient, reliable, and high-quality water supply for their customers, even during dry periods. Based on conservative water supply and demand assumptions over the next 25 years, in combination with conservation of non-essential demand during certain dry years, the RUWMP successfully achieves this goal. (2015 RUWMP)

The sewerage system would have adequate capacity to serve the proposed residential development. EVWD's Sewer System Management Plan (SSMP) outlines the standards for operation and maintenance of the sewer collection system, improvements for reliable service capacity now and in the future, and compliance with the State Water Resources Control Board (SWRCB) adopted *Order No. 2006-0003, Statewide General Waste Discharge Requirements (WERs) for Sanitary Sewer Systems*. EVWD has existing water and sewer lines within the Greenspot Road right-of-way to adequately provide services to the proposed Project. No additional facilities would be required to serve water to or handle the wastewater flows from the proposed development. No mitigation measures are required.

18d Less Than Significant Impact: The proposed Project is served by the San Timoteo Sanitary Landfill in Redlands, California. According to the California Department of Resources Recycling and Recovery (CalRecycle), over 66 percent of the San Timoteo Sanitary Landfill's 20,400,000 cubic yard capacity has been used. The average inflow to the landfill each day is 854 tons, while the maximum permitted inflow is 2,000 tons per day. The San Tomoteo Sanitary Landfill's estimated closure date is 2043. The proposed Project includes 203 new single-family residences. With an estimated waste generation rate of approximately 12.23 pounds of waste per day per household, in accordance with the California Integrated Waste Management Board, the proposed Project is forecast to generate approximately 2,483 pounds (lbs) of waste per day, or approximately 453 tons per year. Thus, the San Timoteo Sanitary Landfill has the capacity to accept waste from the proposed Project.

The proposed Project is subject to Assembly Bill 1327, Chapter 18, Solid Waste Reuse and Recycling Access Act of 1991 (Act). This Act requires that adequate areas be provided for collecting and loading recyclable materials such as paper products, glass, and other recyclables. The Project must conform to the City's requirements to ensure compliance with this Act. Based on these factors, it is anticipated that the proposed Project would have a less than significant impact related to solid waste. No mitigation measures are required.

18e Less Than Significant Impact: The proposed Project is subject to Assembly Bill 1327, Chapter 18, Solid Waste Reuse and Recycling Access Act of 1991 (Act). This Act requires that adequate areas be provided for collecting and loading recyclable materials such as paper products, glass, and other recyclables. The project must conform to the City's requirements to ensure compliance with this Act. Based on these factors, it is anticipated that the proposed Project would have a less than significant impact from solid waste resources. No mitigation measures are required.

Mitigation Measures: Not Required

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

Explanation:

20a Less Than Significant Impact: The primary access to the Project site is from Greenspot Rd. The Project site is located within Fire Severity Zone II (General Plan Safety Element Figure 6-6, Fire Hazards and Safety Overlay Areas). Internally the roadways connected to the site are looped together and a total of three ingress/egress points can be taken out of the development. Development of the site would not involve street closures during construction or operations and would not impair implementation or interfere with an adopted emergency response plan within the City. Potential impacts are less than significant, and no mitigation measures are required.

20b Less Than Significant Impact: Although the Project site is located within the limits of Fire Severity Zone II it includes the development of residential units and associated infrastructure consistent with the City's Development Code and General Plan. The proposed Project is located adjacent to existing residential development to the west, north and northeast. The Project site is not located on steep slopes or immediately

adjacent to the foothills of the San Bernardino Mountains. When a residential development plan is submitted, design and construction methods must be in compliance with all current building and fire codes and regulations designed for safe development in Fire Severity Zones. Due to the Project's location and with development in compliance with these building and fire code standards, the Project would not be expected to significantly exacerbate wildfire risks. Therefore, potential impacts are less than significant, and no mitigation measures are required.

20c Less Than Significant Impact: The primary access to the Project site is from Greenspot Rd. Internally the roadways connected to the site are looped together and a total of three ingress/egress points can be taken out of the development. The proposed Project does not require the installation of infrastructure (roads, power lines, etc.) in undeveloped natural areas that are susceptible to fire. Therefore, the proposed Project would not be expected to exacerbate fire risk and potential impacts are less than significant. No mitigation measures are required.

20d Less Than Significant Impact: The proposed Project is located adjacent to existing residential development to the west, north and northeast. The Project site is not located on steep slopes or immediately adjacent to the foothills of the San Bernardino Mountains. As outlined in 7a iv above, according to Figure 6.3 of the City of the Highland General Plan, a portion of the proposed site is susceptible to landslide. However, per the Engineering Geology Investigation, no evidence for landsliding was observed on or in the immediate vicinity of the site, in the field or on the aerial photographs reviewed. The proposed site is relatively flat and gently sloping with no substantial hills, slopes nor drop offs. Due to the lack of significant topography, landsliding is not expected on the site. As outlined in 10c ii above, with the Implementation of the Water Quality Management Plan (WQMP), the proposed development will not increase off-site runoff or result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would cause flooding on site or off site. Therefore, the proposed Project is not expected to result in downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Potential impacts are less than significant, and no mitigation measures are required.

Mitigation Measures: Not Required

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

Explanation:

21a Potentially Significant Impact: The proposed Project can be implemented without causing significant adverse environmental effects with implementation of mitigation measures outlined in the preceding analysis. The City will require implementation of mitigation measures to ensure that potentially significant impacts do not occur to any of the following resource values or physical conditions that occur within the proposed improvements area: air quality, cultural resources, geology & soils, hazards and hazardous materials, hydrology and water quality, noise, and tribal cultural resources. Therefore, with mitigation, the proposed Project would not eliminate important examples of the major periods of California history or prehistory.

However, the Project may have potential impacts on sensitive biological resources, including the potential to 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 and this topic will be analyzed in the forthcoming EIR.

21b Potentially Significant Impact: This topic will be evaluated in the forthcoming EIR for this Project.

21c Less Than Significant Impact with Mitigation Incorporated: Mitigation measures were identified to ensure the nearest sensitive receptors (i.e. residences) are not exposed to substantial pollutant concentrations during construction activities. Mitigation Measure

AQ-1 requires active areas to be watered three times per day to keep soil moist enough so visible dust plumes (PM_{10}) are eliminated, covering disturbed areas, and requirements for vehicles to travel at a maximum of 25 mph on site the Project site during construction activities. Mitigation Measure AQ-2 requires use of Tier IV diesel engine standards for construction operations, which reduces diesel emissions, a source of $PM_{2.5}$. With implementation of Mitigation Measures AQ-1 and AQ-2, PM_{10} and $PM_{2.5}$ construction emissions would be reduced below significance thresholds.

This report analyzed the proposed Project's potential impacts related to geology issues because of the Project site's proximity to a fault zone. As outlined in the Engineering Geology Investigation prepared for the Project (Appendix D),due to the potential of tensional ground surface fracturing on the site as a result of differential response of geological materials across the suspected traces of Fault "K" in the event of a large nearby earthquake, subsidence, differential compaction, or seismic settlement, Mitigation Measure GEO-1 shall be implemented. In addition, all structures constructed at the Project site would be required to follow California Building Code (CBC) and to be designed and constructed to resist the effects of strong ground motion. Due to the potential for liquefaction at the site the additional parameters of soil density, grain size distribution and exact depth to groundwater shall a geotechnical engineer to ascertain the final susceptibility of the site to liquefaction. A depth to groundwater of 10 feet from the ground surface shall be used for calculating the liquefaction potential of the site. The Geotechnical/Soils evaluation shall be submitted to the City with building plans for review and approval and all site preparation recommendations shall be implemented by the grading contractor. The final grading plan for the site shall be reviewed and approved by an engineering geologist prior to grading of the site and grading of the site should be evaluated by the engineering geologist by in-grading inspections. Less than significant impacts would occur with implementation of Mitigation Measures GEO-1 and GEO-2.

The southern portion of the proposed Project site is located approximately 1.5 miles away from the western extent of the Redlands Municipal Airport runway (the closest to the Project site) and approximately 2.8 miles from the eastern extent of the San Bernardino International Airport runway. It is the City's policy to have notices & disclosures included on the map and provided to all potential homebuyers. Mitigation measure HAZ-1 indicates the City condition will the Project to provide notices & disclosures on the map that the southern portion of the site is located in the Redlands Municipal Airport *Area of Special Compatibility Concern,* and notice shall be given to all potential home buyers that the property is in *Area of Special Compatibility Concern* that is routinely overflown by aircraft approaching and/or departing the Redlands Municipal Airport.

The Project Site is within the 100-year flood hazard area and the site is located in Zone AE of the Flood Insurance Rate Map (FIRM) Panel 8706H OF 9400, dated August 28, 2008. Zone AE Areas are determined to be within the 1 percent annual chance floodplains. Design and development of the Project is required to take into consideration the area to assure no development occurs within the flood zone that impedes flood flows nor locate a home within this area. Mitigation measure HYDRO-1 indicates the City will condition the Project to provide notices & disclosures to all potential home buyers that the property is within the 100-year flood hazard area, in Zone AE of the Flood Insurance Rate Map (FIRM), and the purchase of flood insurance is required. Mandatory flood insurance purchase requirements and floodplain management standards apply until the National Insurance Program (NFIP) map for the Project area is revised and it is no longer

in the 100-year flood hazard area.

Mitigation Measures: AQ-1 & 2, GEO-1 & 2, HAZ-1, and HYDRO-1.

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☑ I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Kim Stater

Kim Stater, Assistant Community Development Director

2-26-20

Date