Initial Study and Mitigated Negative Declaration for the East Highland Ranch Residences at Alta Vista (TTM 20721)

Highland, California

Lead Agency:

City of Highland
27215 Base Line
Highland, CA 92346

Prepared for:

Diversified Pacific Communities
10621 Civic Center Drive
Rancho Cucamonga, CA 91730

Prepared by:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

215 North 5th Street
Redlands, CA 92374

April 2025

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DRAFT MITIGATED NEGATIVE DECLARATION

Lead Agency: City of Highland
27215 Base Line
Highland, CA 92346

Project Proponent: Diversified Pacific
10621 Civic Center Drive
Rancho Cucamonga, CA 91730

Project Location: The Residences at Alta Vista (Project, Proposed Project) Project Site is located north of Greenspot Road, South of Santa Ana Canyon Road, and on either side of Alta Vista in the City of Highland. The approximately 12-acre irregularly shaped Project Site includes Assessor Parcel Numbers (APNs) 1210-371-16 and 1210-371-14 (Figures 1 and 2).

Project Description: The Project would construct 113 detached single-family homes at a density of 9.42 dwelling units per acre (du/ac). The Project would have three distinct floor plans ranging from 1,987 - 2,365 square feet with Spanish, Cottage, and Farmhouse architectural styles. Each lot would include private rear yard space. The Project would include a total of 293 parking spaces, comprised of 226 garage spaces and an additional 67 uncovered guest spaces. The Project proposes approximately 4,213 linear feet of roadway improvements including six private streets and three alleys. The Project would also provide two primary open space areas, one on each side of Alta Vista, totaling approximately 35,000 square feet.

The proposal includes the following entitlement applications: Tentative Tract Map No. 20721 (TTM 23-002), General Plan Amendment (GPA 24-002), Zone Change (ZC 24-002), Conditional Use Permit (CUP 24-006), and Design Review Application (DRA 24-009).

Public Review Period: April 28, 2025 to May 28, 2025

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1: **Pre-construction Special-Status Plant Surveys.** Prior to Project implementation a protocol-level pre-construction plant survey shall be conducted for the 16 special-status plant species that have varying levels of potential to occur on the Project Site, including Parry's spineflower, slender-horned spineflower, Santa Ana River woollystar, California satintail, salt spring checkerbloom, Nevin's Barberry, and thread-leaved brodiaea. The protocol-level survey shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting), the season or the year prior to the start of ground-breaking Project activities. The survey should be conducted by a qualified botanist or biologist experienced with surveying for and identifying these flora. The surveys should be conducted in consideration of the United States Fish and Wildlife Service (USFWS) Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 1996), General Rare Plant Survey Guidelines (Cypher 2002), CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and the California Native Plant Society's (CNPS) Botanical Survey Guidelines (CNPS 2001). If no federally or state-listed or California Rare Plant Rank (CRPR) List 1 or 2 plant species are identified during the survey, Project Site preparation and construction activities may begin, and no further action is necessary.

If CRPR List 1 or 2 plant species or any federally or state-listed plant species are observed on the Project Site during the survey, then a qualified botanist or biologist shall establish a non-disturbance buffer around the location(s) of the individuals or population. The size of the non-disturbance buffer shall be determined by the qualified botanist or biologist based on location of special-status species and expected construction activities. If one or more CRPR List 1 or 2 plant species or any state or federally listed plant species are found on the Project Site and avoidance of the location(s) is not feasible during Project construction, then the qualified biologist and the Project Proponent shall coordinate with CDFW and/or USFWS to determine if additional mitigation measures are necessary. Mitigation measures could include, but are not limited to, additional biological monitoring, seasonal work avoidance, seed collection, or transplanting.

BIO-2: **Biological Monitoring.** A qualified biologist shall be present to monitor all initial ground-disturbing and vegetation-clearing activities conducted for the Project. During each monitoring day, the biological monitor shall perform clearance survey "sweeps" at the start of each workday that vegetation clearing takes place to minimize impacts on special-status species with potential to occur. The monitor will be responsible for ensuring that impacts to special-status species, nesting birds, and active nests will be avoided to the greatest extent possible. Biological monitoring shall take place until the Project Site has been completely cleared of any vegetation. If an active nest is identified, the biological monitor shall establish

an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed no longer active by the biologist. If special-status wildlife species are detected during biological monitoring activities, then consultation with the USFWS and/or CDFW shall be conducted, and a mitigation plan shall be developed to avoid and offset impacts to these species. Mitigation measures may consist of work restrictions and/or additional biological monitoring activities after ground-disturbing activities are complete.

BIO-3: **Pre-construction Crotch Bumble Bee Survey.** If the Crotch bumble bee is no longer a Candidate or formally Listed species under the California Endangered Species Act at the time ground-disturbing activities occur, then no additional protection measures are proposed for the species.

If the Crotch bumble bee is legally protected under the California Endangered Species Act as a Candidate or Listed species at the time ground-disturbing activities are scheduled to occur, it is recommended pre-construction surveys be conducted in accordance with the established survey protocol provided by CDFW. If no such protocol is available and ground-disturbing activities are scheduled to occur during the Crotch bumble bee flight season (February 16 through October 31), then it is recommended a minimum of two Crotch bumble bee pre- construction surveys are conducted by a qualified biologist experienced in identifying the species prior to ground disturbing activities (including vegetation and tree removal). The surveys shall be conducted no more than 14 days and three (3) days prior to ground- disturbing activities and vegetation clearing activities that are to occur during the flight season.

Should vegetation removal or ground-disturbing activities be scheduled to begin during the overwintering season (November 1 to February 15), when Crotch bumble bee are not detectable aboveground, then four (4) focused surveys shall be conducted at least three (3) weeks apart during the peak flight season (late March through August) immediately prior to start of construction.

If Crotch bumble bee is determined to occur within the Project Site at any time, coordination with CDFW shall be required prior to the initiation of Project activities.

BIO-4: **Pre-construction Burrowing Owl Surveys.** Pre-construction surveys for burrowing owls shall be conducted. Prior to ground disturbing activities, a qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys of the Project Site, plus a 500-foot buffer (where access is permissible and suitable habitat is present), to locate active breeding or wintering burrowing owls and burrowing owl burrows between 30 and 14 days prior to construction. The survey methodology shall be consistent with the methods outlined in the CDFW Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012). Additionally, a qualified biologist shall conduct a second pre-construction survey of the Project Site plus an approximately 500-foot buffer no more than 24 hours prior to the start of ground-disturbing

activities associated with construction to identify any additional burrowing owls or burrows necessitating avoidance, minimization, or mitigation measures.

If no burrowing owls or active burrowing owl burrows (e.g., with sign present) are observed during the survey, Project Site preparation and construction activities may begin, and no further action is necessary.

If burrowing owl(s) or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project Site during the surveys, these features must be completely avoided, and the qualified biologist and Project proponent shall coordinate with CDFW prior to preparing a Burrowing Owl Plan to determine the most appropriate avoidance measures. The Burrowing Owl Plan shall describe proposed avoidance, minimization, and monitoring actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrow cannot be avoided, the Burrowing Owl Plan shall also describe relocation actions that will be implemented. Proposed implementation of burrow exclusion and closure should only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to result in take. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls along with proposed relocation actions. The Permittee shall implement the Burrowing Owl Plan following CDFW review and approval.

If ground-disturbing activities occur but the Project Site is left undisturbed for more than 30 days, a pre-construction survey for burrowing owl shall be conducted as described above. If a burrowing owl is found, the same coordination described above shall be necessary.

BIO-5: **Pre-construction Nesting Bird Survey.** To lessen impacts to nesting birds and raptors, it is recommended that vegetation and tree removal be conducted between September 1 and January 31, outside of the typical nesting period for birds protected by the MBTA and California Fish and Game Code. If vegetation or tree removal, or initial ground disturbing Project activities are planned to occur during the nesting season (typically February through August), then a pre-construction nesting bird survey shall be performed no more than three days prior to the start of construction to determine whether the site is being used for nesting. This will avoid violations of the MBTA and California Fish and Game Code Sections 3503, 3503.5, and 3513. The pre-construction nesting bird survey shall include the Project impact area and adjacent areas where Project activities have the potential to cause nest failure. The survey should be conducted by a qualified biologist experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and

nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures..

The pre-construction survey shall be conducted at the appropriate time of day, during appropriate weather conditions, no more than 3 days prior to the initiation of Project activities. The surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the Project Site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate.

If no nesting birds are observed during the survey, Project Site preparation and construction activities may begin. If active nests are found, they shall be flagged and a qualified biologist shall establish suitable buffers around the nest (generally a minimum of 200 feet up to 500 feet for raptors and a minimum of 50 feet up to 300 feet for passerine species), with specific buffer widths to be determined by a qualified biologist. The buffer around the nest shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines nesting species have fledged and the nest is no longer active, or the nest has failed. The qualified biologist shall monitor the nest at the onset of Project activities, and at the onset of any changes in such Project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the qualified biologist determines that such Project activities may be causing an adverse reaction, the qualified biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest) or failed. The qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished. Work can resume within these avoidance areas when no other active nests are found.

BIO-6: **Pre-construction San Bernardino Kangaroo Rat Survey.** Within two years prior to the start of Project activities, a biologist in possession of a Federal 10(a)(1)(A) Recovery Permit and CDFW Scientific Collecting Permit and Memorandum of Understanding shall perform SBKR trapping surveys in accordance with the protocols outlined by USFWS and in the biologist's permit. The survey shall consist of five consecutive nights of trapping, when the animal is active above ground and when the overnight temperatures are 50 degrees Fahrenheit or higher, while avoiding periods of overnight precipitation. The traps shall be spaced approximately 10 meters apart and set in habitats most likely to yield SBKR, to confirm presence/absence of the species.

If San Bernardino kangaroo rat is found on the Project Site and avoidance of the location(s) is not feasible then coordination with CDFW and USFWS shall occur prior to the initiation of Project activities.

Cultural Resources

CUL-1: **Monitoring and Treatment Plan.** 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 Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians). Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

CUL-2: **Contractor Awareness Training.** The Lead Agency shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; Project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting. The training shall be provided to all construction supervisors, forepersons, and operators of ground-disturbing equipment. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the lead agency as proof of compliance.

CUL-3: **Archaeological Monitoring.** Due to the heightened cultural sensitivity of the proposed project area, 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 area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, 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 work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.

CUL-4: **Post Review Discovery.** There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, ECORP recommends the following procedures.

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A

qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
- If the find represents a Native American or potentially Native American resource that does not include human remains, then the agencies shall consult with the tribes on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Tribal Cultural Resource under CEQA, as defined in Section 21074 of the CEQA Guidelines. Preservation in place is the preferred treatment, if feasible. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Tribal Cultural Resource under CEQA; or 2) that the treatment measures have been completed to their satisfaction.
- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of

the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Geology and Soils

GEO-1: **Unanticipated Discovery of Paleontological Resources.** If paleontological resources are discovered during Project construction, a 50-foot buffer would be established around a find until a qualified paleontologist has determined the significance of the find. All work in the area of the find shall cease and a qualified paleontologist shall be retained by the City to investigate the find and to make recommendations on its disposition.

Noise

NOI-1: **Project Noise Abatement Measures.** To ensure interior noise levels at all residences comply with the City of Highland's interior noise reduction standards, all residential structures shall incorporate the following noise control measures:

- Building Construction
    - Walls:
        - All penetrations in exterior walls for pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal and minimize sound transmission.
    - Roof Construction:
        - Roof sheathing of wood construction shall be per manufacturer specifications or consist of caulked plywood of at least ½ inch thickness.
        - Ceilings shall be well-sealed gypsum board of at least ½ inch thickness.
        - Attic insulation with a minimum R-19 rating shall be used to enhance noise attenuation.
- Ventilation & Mechanical Systems
    - While keeping windows closed for noise reduction, all habitable rooms shall be equipped with:

- A forced air circulation system (e.g., HVAC system or air conditioning unit), or
- An active ventilation system (e.g., fresh air supply system) that meets Uniform Building Code requirements. Population and Housing

NOI-2: **Additional Noise Abatement Measures for Lot 8.** To mitigate interior and exterior noise impacts at Lot 8, the following measures shall be implemented:

- Interior Noise Reduction Measures
  - The second floor of the residence on Lot 8 shall be constructed with well-fitted, well-weather-stripped upgraded windows and glass doors with a minimum Sound Transmission Class rating of 30 to ensure compliance with the City of Highland's 45 dBA CNEL interior noise standard.
  - All penetrations in exterior walls (e.g., for pipes, ducts, conduits) shall be caulked or filled with mortar to form an airtight seal and prevent sound leakage.

Tribal Cultural Resources

TCR-1: **Tribal Monitoring.** Due to the heightened cultural sensitivity of the proposed project area, at the discretion of the consulting tribe(s), Tribal monitor(s) authorized to represent YSMN shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, 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). At the discretion of the consulting tribes, a sufficient number of Tribal monitors shall be present each work day 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, as detailed within CUL-1, and submitted to the Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN). Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

TCR-2: **Treatment of Cultural Resources During Project Implementation.** If a pre-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.

The Project Archaeologist shall develop a research design that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from YSMN, the

Archaeologist, and the Lead Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by YSMN. All plans for analysis shall be reviewed and approved by the applicant and YSMN prior to implementation, and all removed material shall be temporarily curated on-site.

It is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by YSMN, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, 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 YSMN. All reburials are subject to a reburial agreement that shall be developed between the landowner and YSMN outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts.

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with YSMN to identify an American Association of Museums (AAM)-accredited facility within the 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 records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and YSMN for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and YSMN.

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

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Term	Definition
100-year flood	A flood that has a 1% chance of being equaled or exceeded in any given year
500-year flood	A flood that has a 0.2% chance of being equaled or exceeded in any given year
A/EQ	Agricultural Equestrian
AB	Assembly Bill
af	Artificial fill
ALUCP	Airport Land Use Compatibility Plan
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARD	Aquatic Resource Delineation
BAAQMD	Bay Area Air Quality Management District
BMPs	Best Management Practices
BSA	Biological Survey Area
BTR	Biological Technical Report
Btu	British Thermal Units
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model (version 2022.1.1.26)
CalEPA	California Environmental Protection Agency
CalGreen	California Green Building Standards Code

Term	Definition
Caltrans	California Department of Transportation
CARB	California Air Resource Board
CASIO	California Independent System Operator
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CGS	California Geologic Survey
CHP	California Highway Patrol
City, Highland	City of Highland
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
Cortese List	list of hazardous waste sites compiled pursuant to Government Code § 65962.5
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranking
CSS	Cross-street stop
CSS	Cross-street stop
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
cy	Cubic yards
DA	Drainage Areas
dB	Decibels
dBA	A-weighted Decibel
DHS	California Department of Health Services
DIF	Developer Impact Fees
DOC	California Department of Conservation
DOF	Department of Finance
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
du/ac	Dwelling units per acre
EBX	East Branch Extension
Edison	Southern California Edison
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
EV	Electric Vehicle
EVWD	East Valley Water District
FEMA	Federal Emergency Management Agency
FEMA Zone A	special flood hazard areas subject to inundation by the 1% annual chance flood (100-year flood)
FEMA Zone X	areas determined to be outside the 0.2% annual chance flood (500-year flood)
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse Gas Emissions
HCM	Highway Construction Manual
HCP	Habitat Conservation Plan

Term	Definition
HFD	Highland Fire Department
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
kV	kilovolts
LD	Low Density Residential
L_{dn}	Day-Night Average
L_{eq}	Equavelent Noise Level
LOMR-F	Letter Of Map Revision based on Fill
LOS	Level of Service
LRA	Local Responsibility Area
LST	Localize Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MRZs	Mineral Resource Zones
MSHCP	Multiple Species Habitat Conservation Plan
MSL	Mean sea level
$MTCO_2e/yr$	Metric tons of carbon dioxide equivalent per year.
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NO_x	Nitrogen Oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ozone
OSFM/CAL FIRE	Office of the State Fire Marshall
PD	Planned Development
PM_{10}	Coarse Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
ppm	Parts per million
PPV	Peak Particle Velocity
PRC	Public Resources Code
PRGP	Peninsular Ranges Geomorphic Province
Project, Proposed Project	The Residences at Alta Vista
PD	Planned Development
Q	Younger Alluvium
Qal	Alluvium, Alluvial valley deposits
Qvyw	Quaternary very young wash deposits
Qya5	Quaternary young axial-valley deposits of Unit 5
R-1	10,000 Single Family Residential
RCP	Reinforced Concrete Pipe
ROG	Reactive Organic Gasses
ROW	Right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RUSD	Redlands Unified School District
SB	Senate Bill

Term	Definition
SBCTA	San Bernardino County Transportation Authority
SBD	San Bernardino International Airport
SBKR	San Bernardino kangaroo rat
SBTAM	San Bernardino Transportation Analysis Model
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SIP	State Implementation Plan
SLF	Sacred Lands File
SM	Silty Sand
SMARA	Surface Mining and Reclamation Act
SNRC	Sterling Natural Resource Center
SoCAB	South Coast Air Basin
SoCalGas	Southern California Gas Company
SP	Sand
SP-SM	Sand with Silt
SR	State Route
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resource Control Board
TCP	Traffic Control Plan
TCR	Tribal Cultural Resource
TS	Traffic Signal
UMWP	Urban Water Management Plan
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
WQMP	Water Quality Management Plan
YSMN	Yuhaaviatam of San Manuel Nation

1.0 BACKGROUND

1.1 Summary

Project Title:	Residences at Alta Vista Project
Lead Agency Name and Address:	City of Highland 27215 Base Line Highland, CA 92346
Contact Person and Phone Number:	Jake Sowder, Project Manager (909) 373-2637
Project Location:	The Residences at Alta Vista Project (Proposed Project, Project) Project Site is located north of Greenspot Road, South of Santa Ana Canyon Road, and on either side of Alta Vista in the City of Highland. The approximately 12-acre irregularly shaped Project Site includes Assessor Parcel Numbers (APNs) 1210-371-16 and 1210-371-14.
General Plan Designation:	Low Density Residential
Zoning:	R1 10,000 Low Density Residential (2.1-6.0 du/ac)

1.2 Introduction

The City of Highland is the Lead Agency for this California Environmental Quality Act (CEQA) Initial Study. This Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Residences at Alta Vista (Project) to satisfy CEQA (Public Resources Code [PRC], Section 21000 et seq.) and state CEQA Guidelines (Title 14, California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences before approving those projects. The City of Highland will use this CEQA Initial Study to determine which CEQA document is appropriate for the Project: Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR).

In accordance with CEQA, this Initial Study/Mitigated Negative Declaration (IS/MND) will be circulated for a 30-day public review and comment period. Written comments on the Draft IS/MND should be submitted to:

Kim Stater, Assistant Community Development Director
City of Highland
27215 Base Line
Highland, CA 92346

kstater@cityofhighland.org

1.3 Environmental Setting

The Project Site consists of approximately 11.98 acres of land located north of Greenspot Road, South of Santa Ana Canyon Road, and on either side of Alta Vista in the City of Highland, San Bernardino County,

California (Figure 1 & Figure 2). A chain-link fence and some debris were observed on the western portion of the Project Site. Sparse shrubs and bushes were observed west of Alta Vista while sparse grasses were observed on the east. The Project Site descends at a low gradient generally towards the west-northwest, with elevations on the Project Site ranging from approximately 1,467 feet above mean sea level (MSL) in the southeast corner to 1,445 feet above MSL in the northwest corner.

Existing improvements within Greenspot Road and Alta Vista were observed to include sewer, water, storm drain, and electrical (streetlights). Overhead power lines are present along Santa Ana Canyon Road. A gate associated with the San Bernardino Flood Control District easement was observed at the eastern Project Site boundary just north of Greenspot Road. Oak Creek, an ephemeral tributary of the Santa Ana River, flows southwest just to the east of the site.

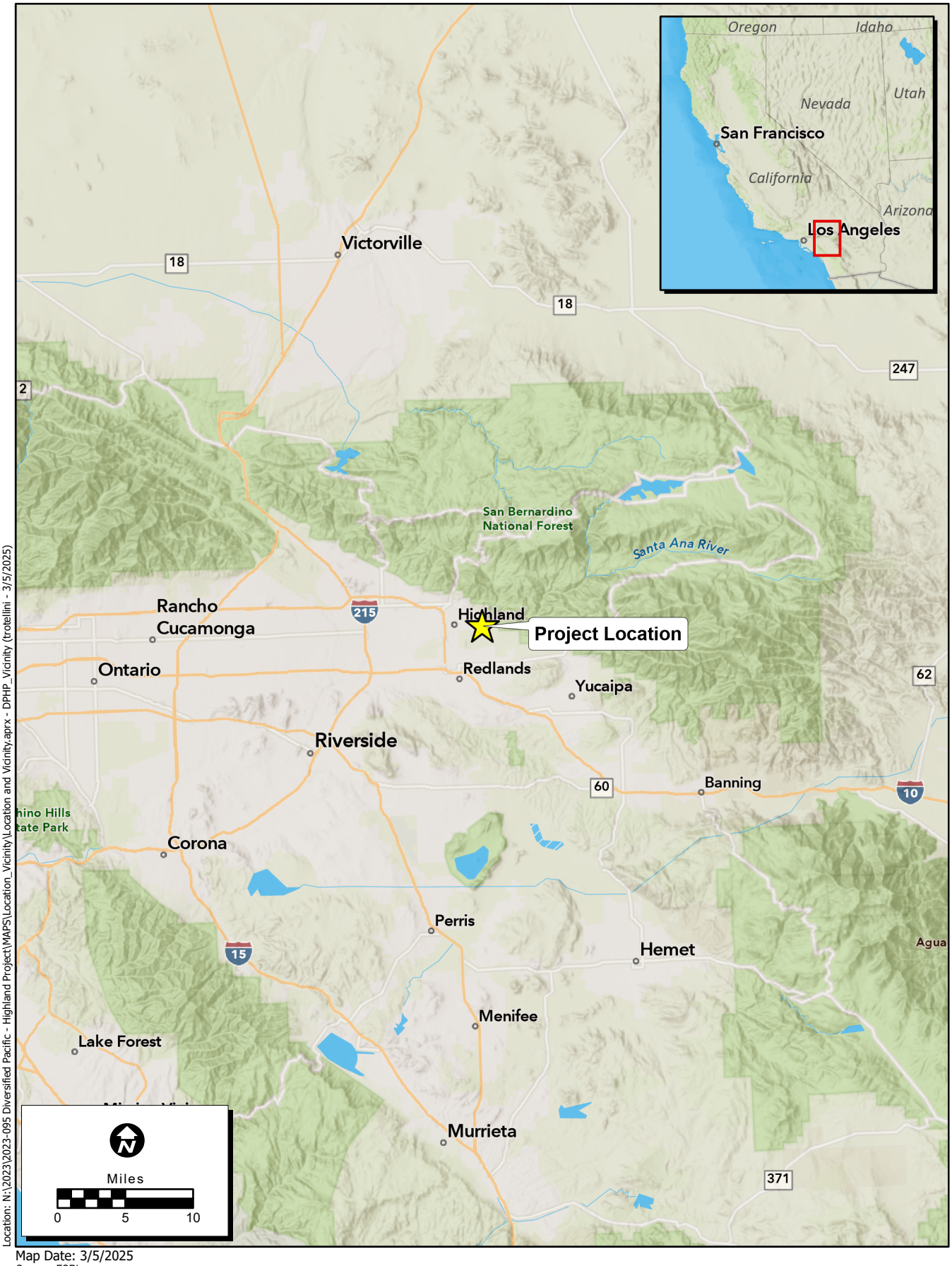
1.4 Surrounding Land Uses

The Project Site is currently vacant and generally bounded by vacant land and residential uses to the north, flood control district property to the east, radio towers to the west, and Greenspot Road to the south. The Project Site and land to the north, east, and west have a General Plan land use designation of Low Density Residential (LD: 2.1-6.0 du/ac). Land south of Greenspot Road has a General Plan land use designation of Agricultural Equestrian (A/EQ: 0-2 du/ac). Refer to Table 1-1 below for details.

Table 1-1. Surrounding Land Uses

	Land Use Designation	Zoning Designation	Existing Land Use
Project Site	(LD) Low Density Single Family Residential	R-1 10,000 (Low Density Residential (2.1-6.0 du/ac)	Vacant
North	(LD) Low Density Single Family Residential	R-1 10,000 (Low Density Residential (2.1-6.0 du/ac)	Residential
East	(LD) Low Density Single Family Residential	R-1 10,000 (Low Density Residential (2.1-6.0 du/ac)	Vacant Land and Gated San Bernardino Flood Control District Property
South	(AG/EQ) Agricultural/Equestrian	AG/EQ Agricultural Equestrian (0-2 du/ac)	Vacant
West	(LD) Low Density Single Family Residential	R-1 10,000 (Low Density Residential (2.1-6.0 du/ac)	Vacant

Source: Highland 2006, 2025; Google Earth Pro 2025



Location: N:\2023\2023-095 Diversified Pacific - Highland Project\MAPS\Location_Vicinity\Location and Vicinity.aprx - DPHP_Vicinity (trotellini - 3/5/2025)

Map Date: 3/5/2025

Sources: ESRI

Figure 1. Project Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-095 Diversified Pacific - Highland Project

Location: N:\2023\2023-095 Diversified Pacific - Highland Project\MAPS\Location_Vicinity\Location and Vicinity.aprx - DPHP_Location_20250303 (trotellini - 3/5/2025)

Map Date: 3/5/2025

Sources: ESRI, San Bernardino County (2024)

Figure 2. Project Location

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2.0 PROJECT DESCRIPTION

2.1 Project Characteristics

The property is currently vacant and zoned R-1 (10,000 Single Family Residential) with a General Plan Land Use designation of LD (Low Density, 2.1-6.0 du/ac). The Proposed Project would require a zone change and general plan amendment to PD (Planned Development).

The Project proposes development of 113 detached single-family homes (9.42 du/ac) with private rear yard space. Lot sizes will range from 2,000 to 5,186 square feet. There will be three distinct floor plans (Plans 1, 2, and 3, Figure 4) with Spanish, Cottage, and Farmhouse architectural styles (Elevations 1, 2, 3; Figure 4). The area of each floor plan is provided below in Table 2.1-1 through Table 2.1-3, with the total number of units proposed as part of the Project presented in Table 2.1-4.

Table 2.1-1. Floor Plan 1

Floor Plan Section	Area (Square Feet)
First Floor	618
Second Floor	948
Total Living Area:	1,566
2-Car Garage	421
Porch	11

Source: Diversified Pacific 2025, See: Figure 3 Project Site Plan and Figure 4 Project Floor Plans.

The Proposed Project would construct 35-units following the design of Floor Plan 1. As shown in table 2.1-1, Floor Plan 1 would be the smallest of the three floorplans constructed as part of the Project. Floor Plan 1 would include 1,566-sf of living area, a 421-sf 2-car garage, and 11-sf porch.

Table 2.1-2. Floor Plan 2

Floor Plan Section	Area (Square Feet)
First Floor	689
Second Floor	1,051
Total Living Area:	1,740
2-Car Garage	423
Porch	78

Source: Diversified Pacific 2025, See: Figure 3 Project Site Plan and Figure 4 Project Floor Plans.

The Proposed Project would construct 43-units following the design of Floor Plan 2. As shown in table 2.1-2, Floor Plan 2 would include 1,740-sf of living area, a 423-sf 2-car garage, and the largest porch of the Development mix at 78-sf.

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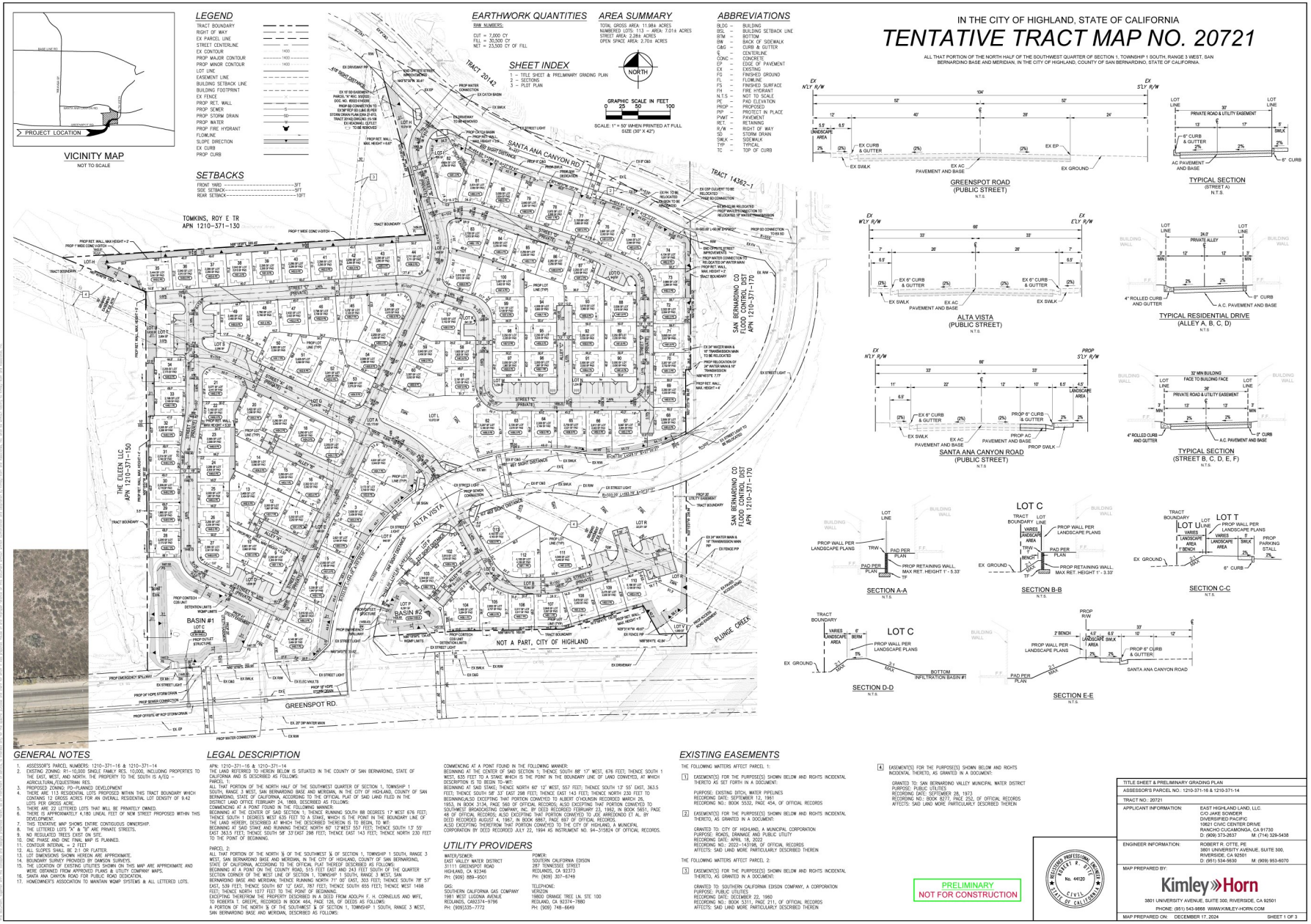


GENERAL NOTES

1. ASSESSOR'S PARCEL NUMBERS: 1210-371-16 & 1210-371-14
2. EXISTING ZONING: R1-10,000 SINGLE FAMILY RES. 10,000, INCLUDING PROPERTIES TO THE EAST, WEST, AND NORTH. THE PROPERTY TO THE SOUTH IS A/1Q – AGRICULTURAL/EQUESTRIAN RES.
3. PROPOSED ZONING: PD–PLANNED DEVELOPMENT
4. THERE ARE 113 RESIDENTIAL LOTS PROPOSED WITHIN THIS TRACT BOUNDARY WHICH CONTAINS 12 GROSS ACRES FOR AN OVERALL RESIDENTIAL LOT DENSITY OF 9.42 LOTS PER GROSS ACRE.
5. THERE ARE 22 LETTERED LOTS THAT WILL BE PRIVATELY OWNED.
6. THERE IS APPROXIMATELY 4,180 LINEAL FEET OF NEW STREET PROPOSED WITHIN THIS DEVELOPMENT.
7. THIS TENTATIVE MAP SHOWS ENTIRE CONTIGUOUS OWNERSHIP.
8. THE LETTERED LOTS "A" & "B" ARE PRIVATE STREETS.
9. NO REGULATED TREES EXIST ON SITE.
10. ONE PHASE AND ONE FINAL MAP IS PLANNED.
11. CONTOUR INTERVAL = 2 FEET
12. ALL SLOPES SHALL BE 2:1 OR FLATTER.
13. LOT DIMENSIONS SHOWN HEREON ARE APPROXIMATE.
14. BOUNDARY SURVEY PROVIDED BY DAWSON SURVEYS.
15. THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS MAP ARE APPROXIMATE AND WERE OBTAINED FROM APPROVED PLANS & UTILITY COMPANY MAPS.
16. SANTA ANA CANYON ROAD FOR PUBLIC ROAD DEDICATION.
17. HOMEOWNER'S ASSOCIATION TO MAINTAIN WQMP SYSTEMS & ALL LETTERED LOTS.

LEGAL DESCRIPTION

APN: 1210–371–16 & 1210–371–14

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCEL 1:

ALL THAT PORTION OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE CITY OF HIGHLAND, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT OF SAID LAND FILED IN THE DISTRICT LAND OFFICE FEBRUARY 24, 1869, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT FOUND IN THE FOLLOWING MANNER:

BEGINNING AT THE CENTER OF SAID SECTION 1; THENCE RUNNING SOUTH 88 DEGREES 17' WEST 676 FEET; THENCE SOUTH 1 DEGREES WEST 635 FEET TO A STAKE, WHICH IS THE POINT IN THE BOUNDARY LINE OF THE LAND HEREBY, DESCRIBED AT WHICH THE DESCRIBED THEREON IS TO BEGIN, TO WIT:

BEGINNING AT SAID STAKE AND RUNNING THENCE NORTH 60' 12'WEST 557 FEET; THENCE SOUTH 13' 55' EAST 363.5 FEET; THENCE SOUTH 58' 33'EAST 298 FEET; THENCE EAST 143 FEET; THENCE NORTH 230 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

ALL THAT PORTION OF THE NORTH ½ OF THE SOUTHWEST ¼ OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE CITY OF HIGHLAND, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE COUNTY ROAD, 515 FEET EAST AND 243 FEET SOUTH OF THE QUARTER SECTION CORNER OF THE WEST LINE OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN; THENCE RUNNING NORTH 71° 00' EAST, 303 FEET; THENCE SOUTH 78° 57' EAST, 539 FEET; THENCE SOUTH 60° 12' EAST, 787 FEET; THENCE SOUTH 655 FEET; THENCE WEST 1498 FEET; THENCE NORTH 1077 FEET TO THE POINT OF BEGINNING;

EXCEPTING THEREFROM THE PROPERTY DESCRIBED IN A DEED FROM ADOLPH F. H. CORNELIUS AND WIFE, TO ROBERTA T. GREEPE, RECORDED IN BOOK 464, PAGE 126, OF DEEDS AS FOLLOWS:

A PORTION OF THE NORTH ½ OF THE SOUTHWEST ¼ OF SECTION 1, TOWNSHIP 1 SOUTH, RANGE 3 WEST, SAN BERNARDINO BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT FOUND IN THE FOLLOWING MANNER:

BEGINNING AT THE CENTER OF SAID SECTION 1; THENCE SOUTH 88' 17' WEST, 676 FEET; THENCE SOUTH 1 WEST, 635 FEET TO A STAKE WHICH IS THE POINT IN THE BOUNDARY LINE OF LAND CONVEYED, AT WHICH DESCRIPTION IS TO BEGIN TO–WIT:

BEGINNING AT SAID STAKE; THENCE NORTH 60' 12' WEST, 557 FEET; THENCE SOUTH 13' 55' EAST, 363.5 FEET; THENCE SOUTH 58' 33' EAST 298 FEET; THENCE EAST 143 FEET; THENCE NORTH 230 FEET TO BEGINNING;ALSO EXCEPTING THAT PORTION CONVEYED TO ALBERT O'HOUNIEN RECORDED MARCH 26, 1953, IN BOOK 3134, PAGE 560 OF OFFICIAL RECORDS; ALSO EXCEPTING THAT PORTION CONVEYED TO SOUTHWEST BROADCASTING COMPANY, INC. BY DEED RECORDED FEBRUARY 23, 1962, IN BOOK 5651, PAGE 48 OF OFFICIAL RECORDS; ALSO EXCEPTING THAT PORTION CONVEYED TO JOE ARREDONDO ET AL. BY DEED RECORDED AUGUST 4, 1967, IN BOOK 6867, PAGE 697 OF OFFICIAL RECORDS;

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE CITY OF HIGHLAND, A MUNICIPAL CORPORATION BY DEED RECORDED JULY 22, 1994 AS INSTRUMENT NO. 94–313824 OF OFFICIAL RECORDS.

UTILITY PROVIDERS

WATER/SEWER:
EAST VALLEY WATER DISTRICT
31111 GREENSPOT ROAD
HIGHLAND, CA 92346
PH: (909) 889–9501

GAS:
SOUTHERN CALIFORNIA GAS COMPANY
1981 WEST LUGONIA AVENUE
REDLANDS, CA92374–9796
PH: (909)335–7772

POWER:
SOUTHERN CALIFORNIA EDISON
287 TENNESSEE STREET
REDLANDS, CA 92373
PH: (909) 307–6749

TELEPHONE:
VERIZON
19800 DIAMOND TREE LN, STE 100
ROLLAND, CA 92374–7980
PH: (909) 748–6649

EXISTING EASEMENTS

THE FOLLOWING MATTERS AFFECT PARCEL 1:

1 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:

PURPOSE: EXISTING DITCH, WATER PIPELINES
RECORDING DATE: SEPTEMBER 12, 1961
RECORDING NO.: BOOK 5532, PAGE 454, OF OFFICIAL RECORDS

2 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: CITY OF HIGHLAND, A MUNICIPAL CORPORATION
PURPOSE: ROADS, DRAINAGE AND PUBLIC UTILITY
RECORDING DATE: APRIL 16, 2002
RECORDING NO.: 2002–143198, OF OFFICIAL RECORDS
AFFECTS: SAID LAND MORE PARTICULARLY DESCRIBED THEREIN

THE FOLLOWING MATTERS AFFECT PARCEL 2:

3 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
PURPOSE: PUBLIC UTILITIES
RECORDING DATE: DECEMBER 22, 1960
RECORDING NO.: BOOK 5311, PAGE 211, OF OFFICIAL RECORDS
AFFECTS: SAID LAND MORE PARTICULARLY DESCRIBED THEREIN

4 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
PURPOSE: PUBLIC UTILITIES
RECORDING DATE: SEPTEMBER 28, 1973
RECORDING NO.: BOOK 8277, PAGE 252, OF OFFICIAL RECORDS
AFFECTS: SAID LAND MORE PARTICULARLY DESCRIBED THEREIN

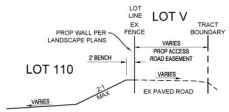
PRELIMINARY
NOT FOR CONSTRUCTION

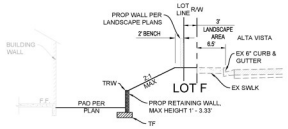
REGISTERED PROFESSIONAL ENGINEER ROBERT R. OTTE No. 44120 CIVIL STATE OF CALIFORNIA

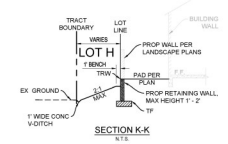
TITLE SHEET & PRELIMINARY GRADING PLAN	
ASSESSOR'S PARCEL NO.: 1210-371-16 & 1210-371-14	
TRACT NO.: 20721	
APPLICANT INFORMATION:	EAST HIGHLAND LAND, LLC. C/O JAKE SOWDER DIVERSIFIED PACIFIC 10621 CIVIC CENTER DRIVE RANCHO CUCAMONGA, CA 91730 D: (909) 373-2637 M: (714) 329-5438
ENGINEER INFORMATION:	ROBERT R. OTTE, PE 3801 UNIVERSITY AVENUE, SUITE 300, RIVERSIDE, CA 92501 D: (951) 534-5630 M: (909) 953-6070
MAP PREPARED BY:	Kimley»Horn 3801 UNIVERSITY AVENUE, SUITE 300, RIVERSIDE, CA 92501 PHONE: (951) 543-9868 WWW.KIMLEY-HORN.COM
MAP PREPARED ON:	DECEMBER 17, 2024 SHEET 1 OF 3

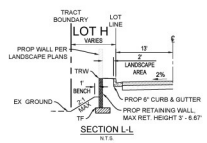
Figure 3. Project Site Plan

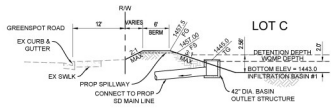
2023-095 Diversified Pacific - Highland Project

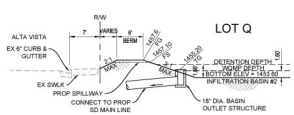












LOT SUMMARY

LOT NUMBER	LOT AREA (SF)	PAD AREA (SF)	PLAN TYPE	ELEVATION
1	4,531	3,544	P3	FARMHOUSE
2	3,172	2,749	P1	COTTAGE
3	2,939	2,439	P2	SPANISH
4	2,621	2,159	P3	COTTAGE
5	2,500	2,190	P2	FARMHOUSE
6	2,339	1,947	P1	SPANISH
7	3,019	2,388	P2	COTTAGE
8	4,140	3,464	P1	FARMHOUSE
9	2,350	2,350	P3	COTTAGE
10	2,901	2,852	P2	SPANISH
11	2,202	2,202	P3	SPANISH
12	2,050	1,987	P1	COTTAGE
13	3,499	3,424	P1	FARMHOUSE
14	3,095	3,060	P3	SPANISH
15	2,350	2,235	P2	COTTAGE
16	2,302	2,302	P3	FARMHOUSE
17	2,200	2,200	P3	SPANISH
18	2,250	2,200	P2	FARMHOUSE
19	2,250	2,250	P3	COTTAGE
20	3,422	3,396	P2	SPANISH
21	3,077	2,441	P1	COTTAGE
22	2,163	1,981	P1	SPANISH
23	2,565	2,556	P2	FARMHOUSE
24	2,269	2,003	P1	COTTAGE
25	2,000	1,987	P1	SPANISH
26	2,250	2,235	P2	FARMHOUSE
27	2,360	2,341	P1	SPANISH
28	2,200	2,175	P3	FARMHOUSE
29	1,960	1,933	P1	COTTAGE
30	2,205	2,175	P2	FARMHOUSE
31	2,214	2,183	P3	SPANISH
32	2,305	2,260	P2	COTTAGE
33	2,196	2,166	P3	FARMHOUSE
34	2,205	2,175	P2	SPANISH
35	3,444	3,541	P2	FARMHOUSE
36	2,040	2,013	P1	COTTAGE
37	2,295	2,265	P2	SPANISH
38	2,040	2,013	P1	COTTAGE
39	2,295	2,265	P2	FARMHOUSE
40	2,295	2,265	P3	SPANISH

LOT NUMBER	LOT AREA (SF)	PAD AREA (SF)	PLAN TYPE	ELEVATION
41	2,295	2,295	P2	COTTAGE
42	2,295	2,295	P3	SPANISH
43	2,295	2,295	P2	FARMHOUSE
44	2,711	2,711	P3	COTTAGE
45	3,237	3,148	P2	COTTAGE
46	2,796	2,796	P3	FARMHOUSE
47	2,432	2,432	P2	SPANISH
48	2,760	2,760	P3	COTTAGE
49	2,490	2,490	P2	FARMHOUSE
50	2,883	2,334	P1	FARMHOUSE
51	3,438	3,090	P3	SPANISH
52	3,341	3,004	P2	COTTAGE
53	2,588	2,275	P3	FARMHOUSE
54	2,588	2,588	P1	SPANISH
55	2,250	2,250	P2	COTTAGE
56	2,670	2,670	P1	SPANISH
57	3,423	3,102	P2	SPANISH
58	1,920	1,920	P1	COTTAGE
59	2,643	2,430	P1	FARMHOUSE
60	3,257	3,032	P3	COTTAGE
61	2,181	2,181	P3	FARMHOUSE
62	3,297	3,185	P3	COTTAGE
63	2,726	2,570	P2	SPANISH
64	2,329	2,164	P1	FARMHOUSE
65	2,759	2,521	P2	COTTAGE
66	2,617	2,402	P1	SPANISH
67	3,067	2,694	P3	FARMHOUSE
68	2,659	2,269	P1	COTTAGE
69	2,250	2,225	P2	SPANISH
70	2,207	2,132	P1	FARMHOUSE
71	2,606	2,457	P2	COTTAGE
72	2,322	2,094	P1	SPANISH
73	2,666	2,256	P2	FARMHOUSE
74	4,134	3,207	P1	COTTAGE
75	3,044	2,596	P2	FARMHOUSE
76	2,691	2,302	P1	SPANISH
77	3,155	2,690	P3	COTTAGE
78	2,970	2,565	P2	FARMHOUSE
79	2,640	2,287	P1	SPANISH
80	3,038	2,624	P2	FARMHOUSE

LOT NUMBER	LOT AREA (SF)	PAD AREA (SF)	PLAN TYPE	ELEVATION
81	2,874	2,599	P1	COTTAGE
82	4,604	3,764	P3	FARMHOUSE
83	2,735	2,513	P3	SPANISH
84	2,250	2,235	P2	COTTAGE
85	2,250	2,235	P3	FARMHOUSE
86	2,250	2,250	P2	SPANISH
87	2,303	2,203	P1	FARMHOUSE
88	2,536	2,516	P3	FARMHOUSE
89	2,250	2,235	P2	SPANISH
90	2,000	2,000	P1	COTTAGE
91	2,000	2,000	P1	FARMHOUSE
92	2,250	2,235	P2	COTTAGE
93	3,015	2,995	P3	SPANISH
94	4,009	3,983	P3	FARMHOUSE
95	2,250	2,235	P2	SPANISH
96	2,000	1,987	P1	COTTAGE
97	2,000	1,987	P1	SPANISH
98	2,250	2,235	P2	FARMHOUSE
99	2,141	2,128	P1	SPANISH
100	3,607	3,482	P2	COTTAGE
101	2,810	2,513	P3	FARMHOUSE
102	2,819	2,819	P3	FARMHOUSE
103	2,344	2,344	P2	SPANISH
104	3,485	3,264	P3	COTTAGE
105	2,852	2,707	P2	FARMHOUSE
106	2,217	2,017	P1	SPANISH
107	2,848	2,557	P2	FARMHOUSE
108	2,478	2,253	P3	COTTAGE
109	2,475	2,250	P2	SPANISH
110	5,186	3,109	P1	COTTAGE
111	4,046	4,046	P3	FARMHOUSE
112	4,105	4,105	P2	COTTAGE
113	4,163	4,163	P3	SPANISH
TOTAL AREA (SF)	305,315			
TOTAL AREA (AC)	7.01			
AVERAGE LOT(SF)	2,702			

LETTERED LOT SUMMARY

LOT LETTER	LOT AREA (SF)
LOT A	105,173
LOT B	16,462
LOT C	25,005
LOT D	1,636
LOT E	480
LOT F	948
LOT G	2,476
LOT H	10,214
LOT I	926
LOT J	459
LOT K	641
LOT L	13,072
LOT M	1,234
LOT N	1,234
LOT O	942
LOT P	8,291
LOT Q	254
LOT R	22,071
LOT S	2,280
LOT T	2,664
LOT U	3,616
LOT V	1,089
TOTAL STREETS AREA (SF)	2.70
TOTAL OPEN SPACE AREA (SF)	2.26

PRELIMINARY
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER ROBERT R. OTTE No. 44120 CIVIL STATE OF CALIFORNIA

SECTIONS

ASSESSOR'S PARCEL NO.: 1210-371-16 & 1210-371-14

TRACT NO.: 20721

APPLICANT INFORMATION: EAST HIGHLAND LAND, LLC.
C/O JAKE SOWDER
DIVERSIFIED PACIFIC
10621 CIVIC CENTER DRIVE
RANCHO CUCAMONGA, CA 91730
D: (909) 373-2637 M: (714) 329-5438

ENGINEER INFORMATION: ROBERT R. OTTE, PE
3801 UNIVERSITY AVENUE, SUITE 300,
RIVERSIDE, CA 92501
D: (951) 534-5630 M: (909) 953-6070

MAP PREPARED BY:
Kimley»Horn
3801 UNIVERSITY AVENUE, SUITE 300, RIVERSIDE, CA 92501
PHONE: (951) 543-9868 WWW.KIMLEY-HORN.COM

MAP PREPARED ON: DECEMBER 17, 2024 SHEET 2 OF 3

Figure 3. Project Site Plan

2023-095 Diversified Pacific - Highland Project

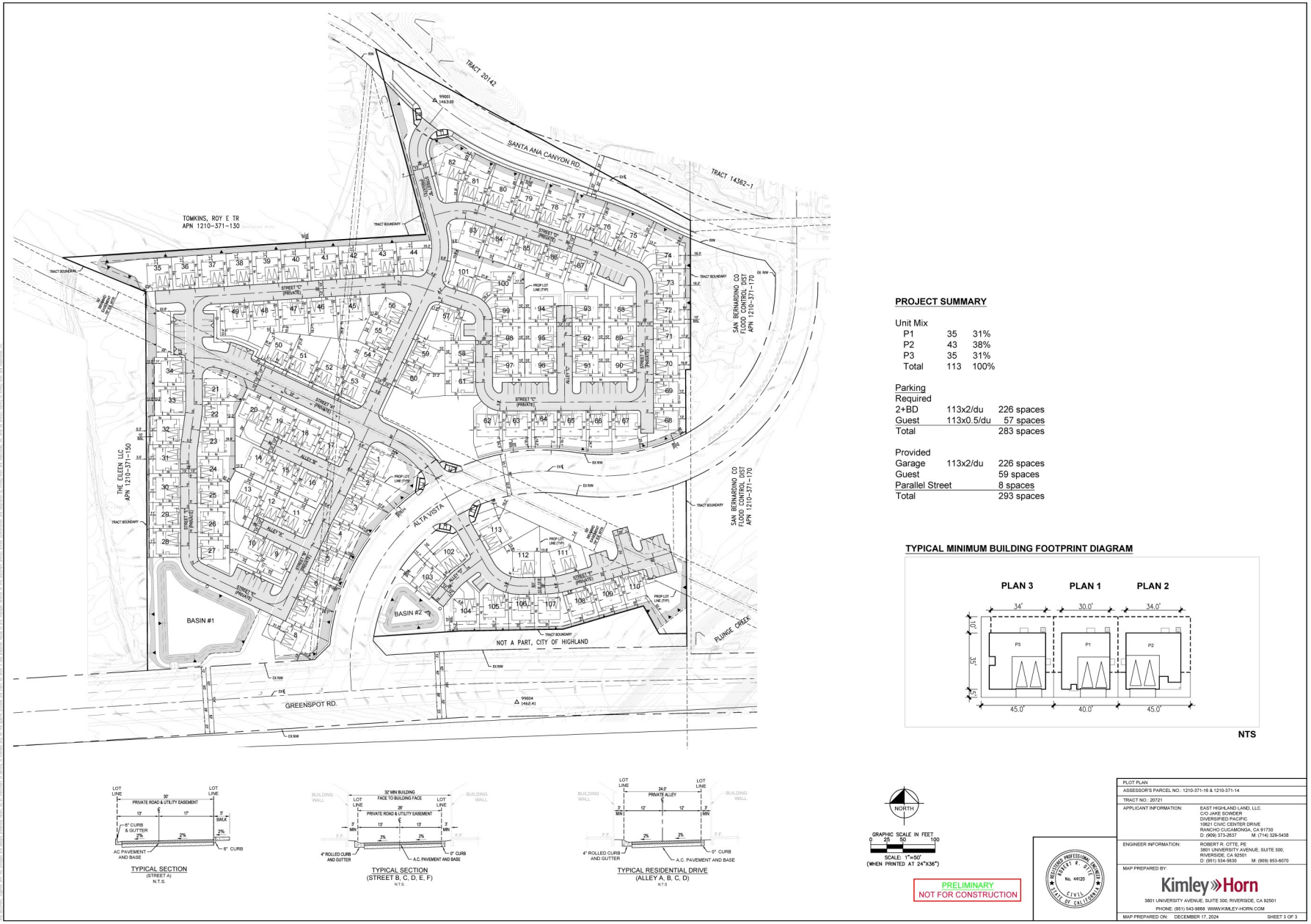


Figure 3. Project Site Plan

2023-095 Diversified Pacific - Highland Project

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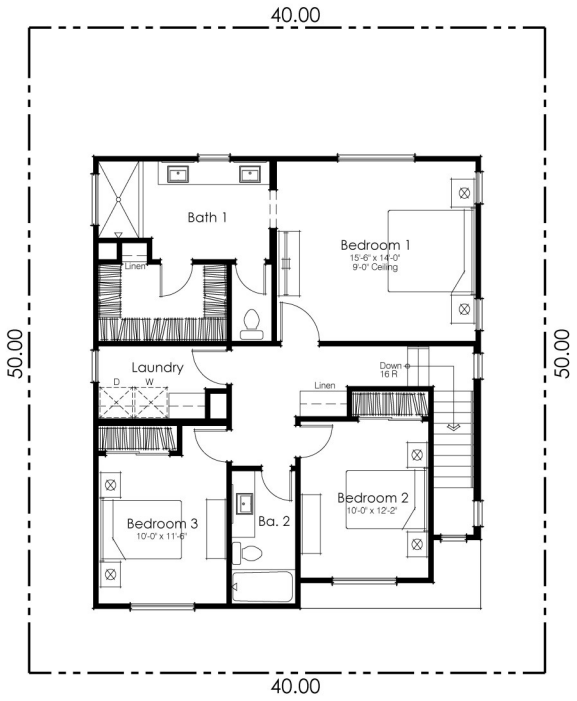
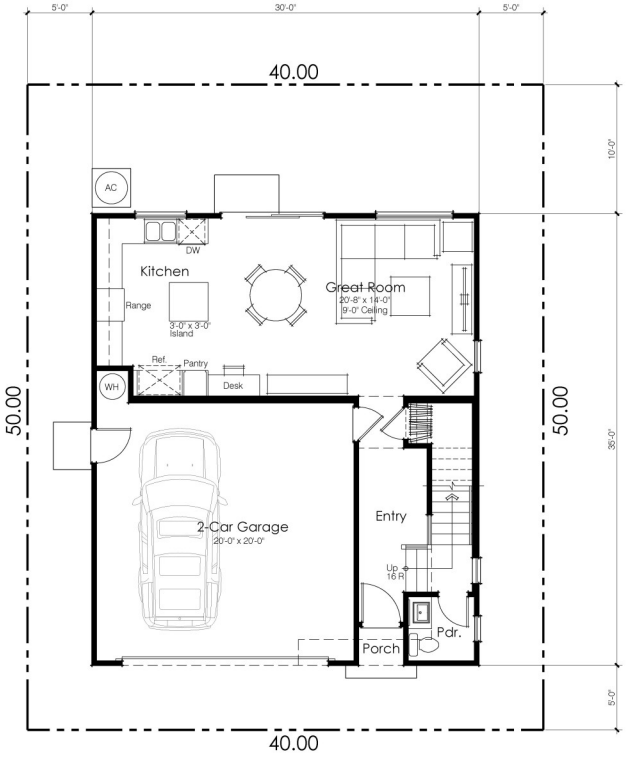


Second Floor Plan



First Floor Plan

Square Footage Tabulation:

First Floor	618 sq. ft.
Second Floor	948 sq. ft.
Total Living Area:	1,566 sq. ft.
2-Car Garage	421 sq. ft.
Porch	11 sq. ft.

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DIVERSIFIED PACIFIC COMMUNITIES

East Highland Ranch, Highland Ca.

Title
Plan 1
Conceptual
Floor Plan

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision

Sheet No.
A-1

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Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project

Left Elevation

Front Elevation
Scheme 1

Right Elevation

Rear Elevation

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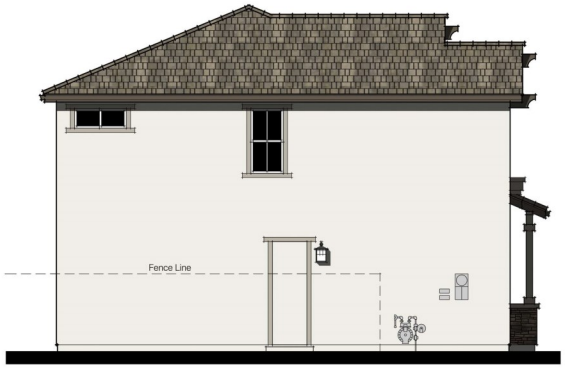
DIVERSIFIED PACIFIC COMMUNITIES

East Highland Ranch, Highland Ca.

Title
Plan 1
Elevation 'A'
Spanish

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11-25-24
Sheet No.
A-2

Figure 4. Project Floor Plans



Left Elevation

Front Elevation
Scheme 4

Right Elevation

Rear Elevation

MGA

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DIVERSIFIEDPACIFIC COMMUNITIES

East Highland Ranch, Highland Ca.

Title
Plan 1
Elevation 'B'
Cottage

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11-25-24
Sheet No.
A-3

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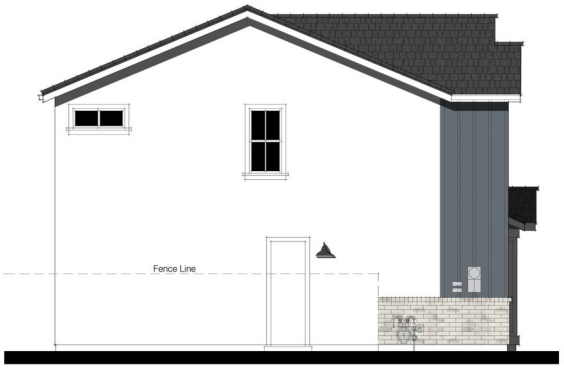
Figure 4. Project Floor Plans

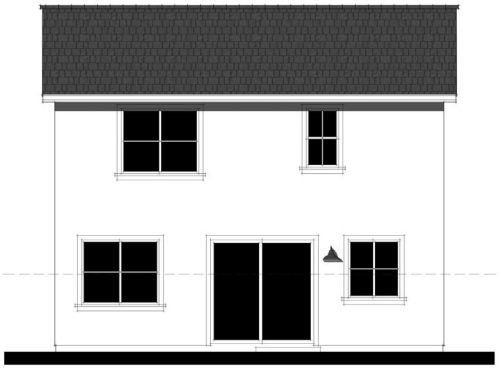
2023-095 Diversified Pacific - Highland Project



Left Elevation

Front Elevation
Scheme 7

Right Elevation



Rear Elevation

MGA

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East Highland Ranch, Highland Ca.

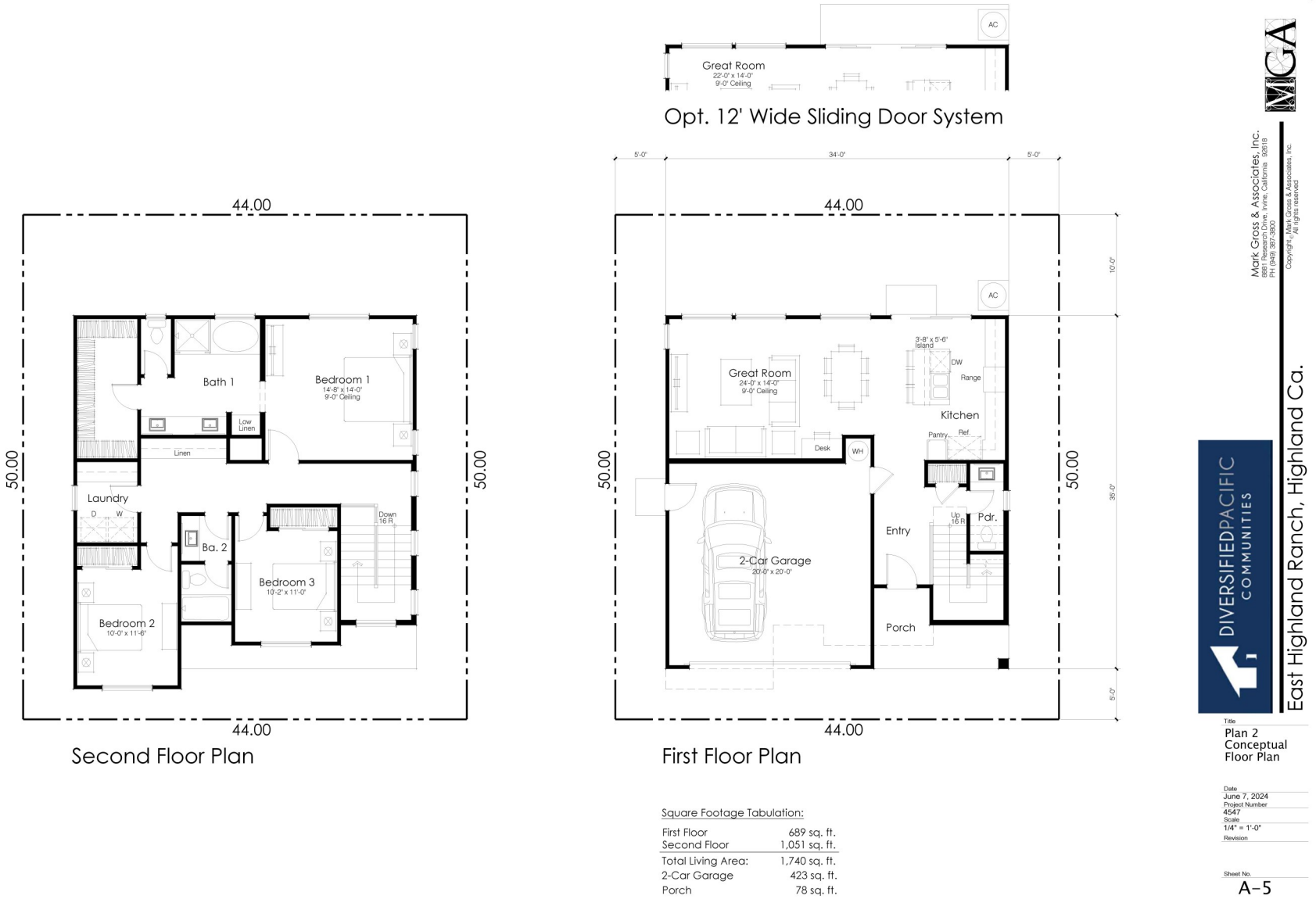
DIVERSIFIEDPACIFIC COMMUNITIES

Title
Plan 1
Elevation 'C'
Farmhouse

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11-25-24
Sheet No.
A-4

Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project



Square Footage Tabulation:

First Floor	689 sq. ft.
Second Floor	1,051 sq. ft.
Total Living Area:	1,740 sq. ft.
2-Car Garage	423 sq. ft.
Porch	78 sq. ft.

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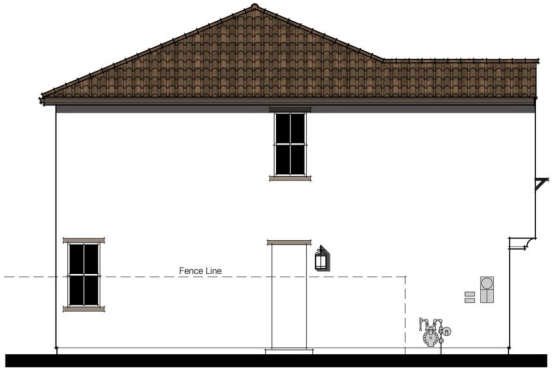
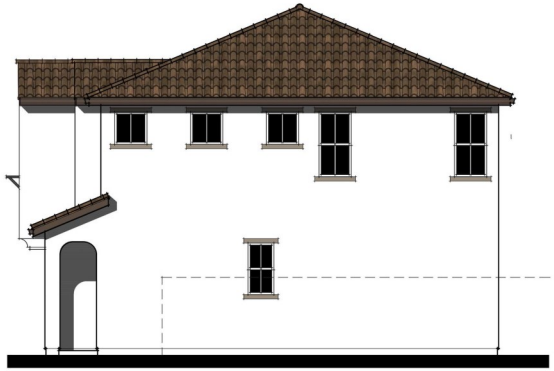
Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project



Left Elevation

Front Elevation
Scheme 2



Right Elevation

Rear Elevation

MGA

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East Highland Ranch, Highland Ca.

DIVERSIFIED PACIFIC COMMUNITIES

Title
Plan 2
Elevation 'A'
Spanish

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11-25-24
Sheet No.
A-6

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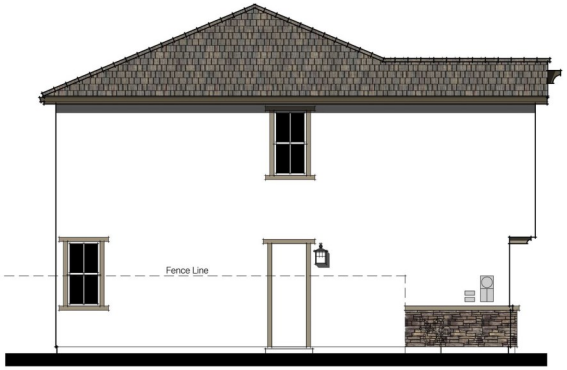
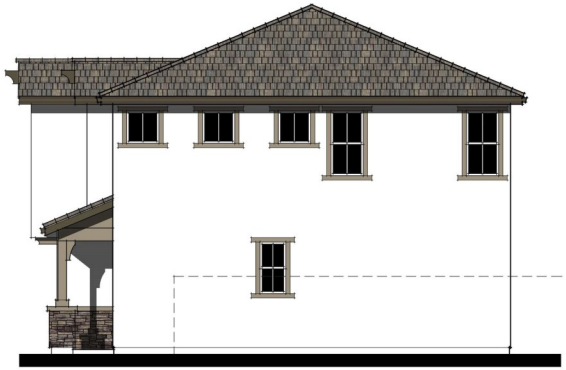
Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project

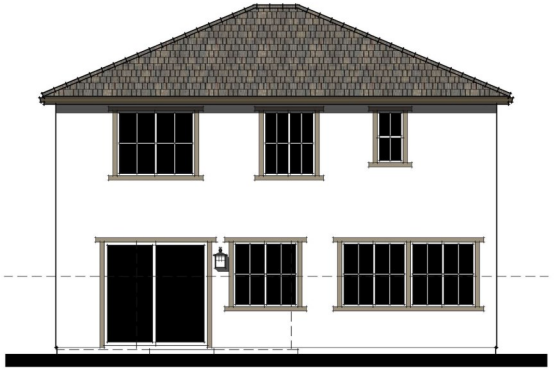


Left Elevation

Front Elevation
Scheme 5



Right Elevation



Rear Elevation

MGA

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DIVERSIFIEDPACIFIC COMMUNITIES

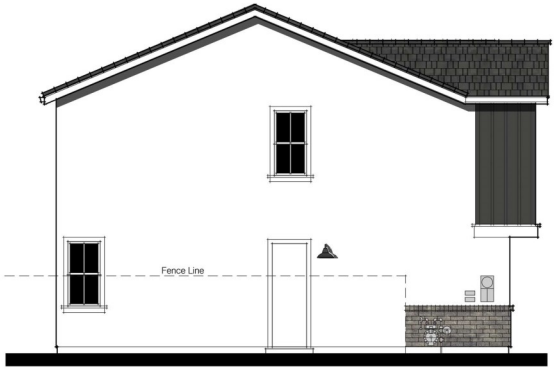
East Highland Ranch, Highland Ca.

Title
Plan 2
Elevation 'B'
Cottage

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11-25-24

Sheet No.
A-7

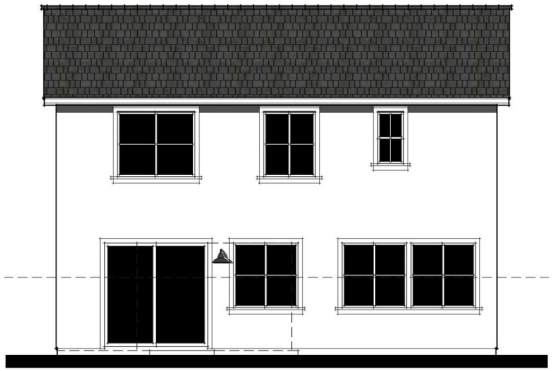
Figure 4. Project Floor Plans



Left Elevation

Front Elevation
Scheme 8

Right Elevation



Rear Elevation

MGA

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East Highland Ranch, Highland Ca.

DIVERSIFIED PACIFIC COMMUNITIES

Title
Plan 2
Elevation 'C'
Farmhouse

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11/25/24
Sheet No.
A-8

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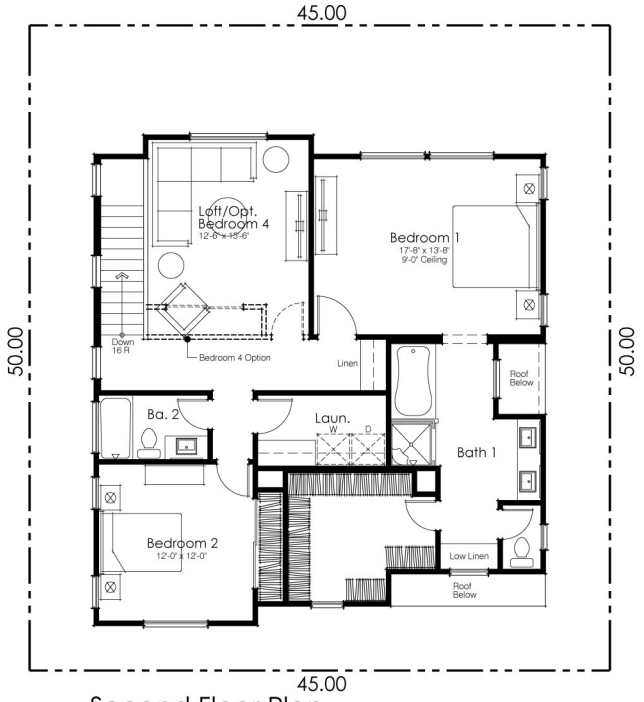
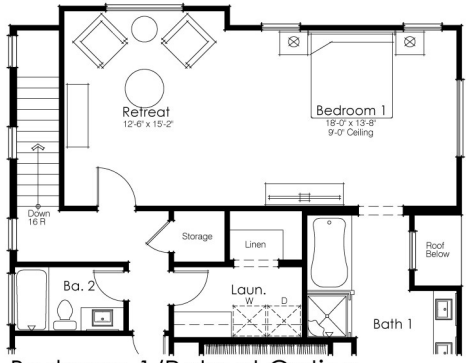
Figure 4. Project Floor Plans

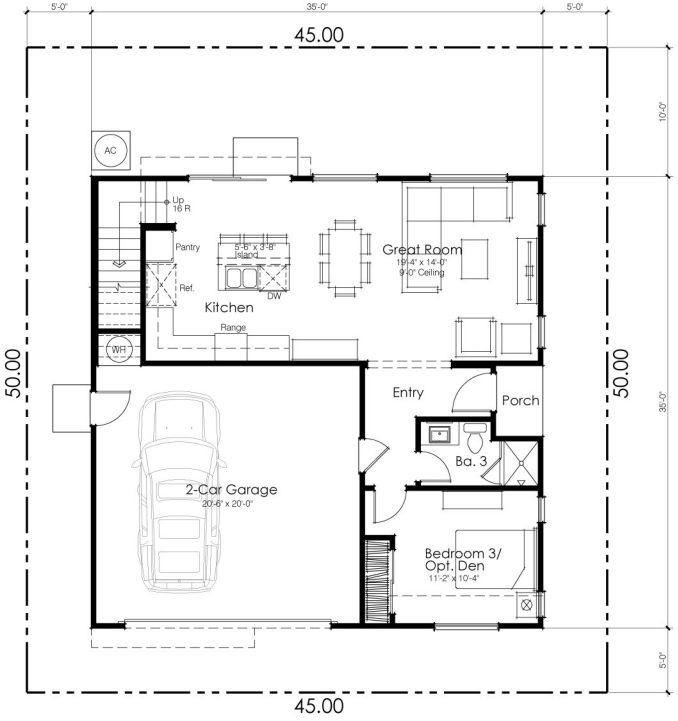
2023-095 Diversified Pacific - Highland Project



Second Floor Plan



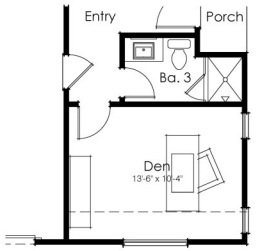
Bedroom 1/Retreat Option



First Floor Plan

Square Footage Tabulation:

First Floor	772 sq. ft.
Second Floor	1,160 sq. ft.
Total Living Area:	1,932 sq. ft.
2-Car Garage	433 sq. ft.
Porch	20 sq. ft.



Den Option

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DIVERSIFIED PACIFIC COMMUNITIES

East Highland Ranch, Highland Ca.

Title
Plan 3
Conceptual
Floor Plan

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision

Sheet No.
A-9

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Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project

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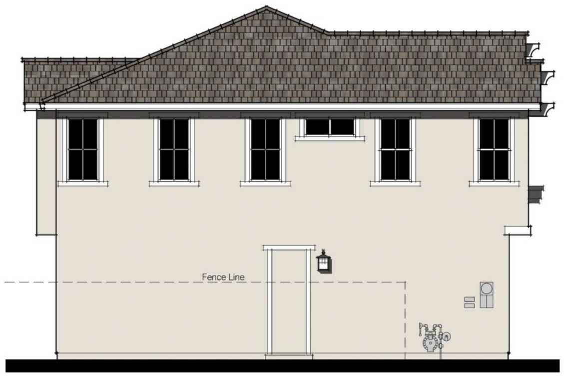
Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project



Left Elevation

Front Elevation
Scheme 6

Right Elevation

Rear Elevation

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East Highland Ranch, Highland Ca.

DIVERSIFIEDPACIFIC COMMUNITIES

Title
Plan 3
Elevation 'B'
Cottage

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11-25-24
Sheet No.
A-11

Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project

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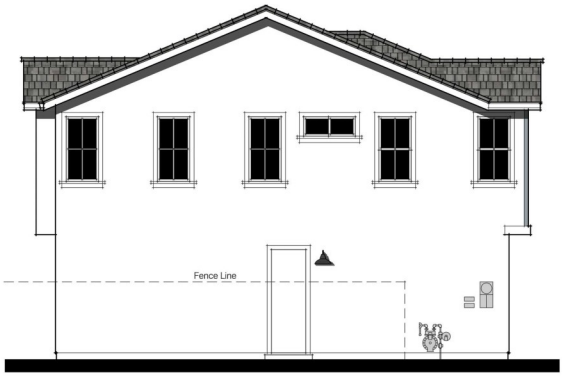

Left Elevation

Front Elevation
Scheme 9

Right Elevation

Rear Elevation

MGA

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East Highland Ranch, Highland Ca.

DIVERSIFIED PACIFIC COMMUNITIES

Title
Plan 3
Elevation 'C'
Farmhouse

Date
June 7, 2024
Project Number
4547
Scale
1/4" = 1'-0"
Revision
11-25-24
Sheet No.
A-12

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Figure 4. Project Floor Plans

2023-095 Diversified Pacific - Highland Project

Table 2.1-3. Floor Plan 3	
Floor Plan Section	**Area (Square Feet)**
First Floor	722
Second Floor	1,160
Total Living Area:	1,932
2-Car Garage	433
Porch	20

Source: Diversified Pacific 2025, See: Figure 3 Project Site Plan and Figure 4 Project Floor Plans.

The Proposed Project would construct 35-units following the design of Floor Plan 3. As shown in table 2.1-3, Floor Plan 3 would be the largest of the three floor plans constructed as part of the Project. Floor Plan 3 would include 1,932-sf of living area.

Table 2.1-4. Project Development Mix	
Floor Plan Type	**Units Proposed**
Floor Plan 1	35
Floor Plan 2	43
Floor Plan 3	35
Total Number of Units:	113

Source: Diversified Pacific 2025, See: Figure 3 Project Site Plan and Figure 4 Project Floor Plans.

In summary, the Proposed Project would develop 113 residential lots, totaling 7.13-acres on an approximately 12-acre site at a density of 9.42-lots/ac (gross) with single family homes. The Proposed Project would not include gated access. In addition to the 113 Proposed single-family homes, the Project would include a total of 293 on-site parking spaces, comprised of 226 garage spaces, and 67 additional uncovered guest spaces distributed throughout the Project. Project access would be provided by six private streets (4,213 linear feet). There would be two primary open space amenities, one on each side of Alta Vista, totaling approximately 35,000 square feet.

- Open Space 1 would play equipment, benches, picnic tables, barbecues, turf, and exercise equipment.
- Open Space 2 is designed as a passive area with benches, turf, and exercise equipment along a pathway.

Additional Project improvements include 6-foot-high walls along Greenspot Road at Lots 103 through 109 and Lot 8, two flood control basins, a new storm drain connection underneath Greenspot Road, an improved concrete v-ditch, retaining walls, a 20-foot utility easement, and associated utility connections.

2.2 Project Timing

Construction of the Proposed Project is anticipated to start in January 2026 for a duration of approximately 12-months. Construction of the Proposed Project would involve the use of standard construction equipment. Cut and fill work is required to establish the Proposed Project's design grades.

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the Project, involving at least one impact that is a *Potentially Significant Impact,* as indicated by the checklist on the following pages.

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

Determination

On the basis of this initial evaluation:

I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	☐
I find that although the 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 Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	☐
I find that the 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 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 Project, nothing further is required.	☐

Kim Stater,
Assistant Community Development Director

April 10, 2025

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4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Aesthetics (I) Environmental Checklist and Discussion

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?	☐	☐	☑	☐

Less than Significant Impact.

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. The California Department of Transportation (Caltrans) can designate a highway as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view (Caltrans 2023). The California Scenic Highway System indicated that no existing or proposed State Scenic highways are located within the vicinity of the Project Site.

The City of Highland General Plan identifies scenic value from the panoramic views of the mountains which provide a scenic background to the entire city, and locally important scenic highways. Scenic resources within the City include unique visual features which provide attractive views as you approach Highland and from within the City. Major visual resources identified in the City's General Plan include topographic features, local flora, and historic buildings. Generally, views of local topographic features like the San Bernardino Mountains or the Santa Ana River area are identified as locally important visual resources (Highland 2006). Furthermore, the City of Highland General Plan identified Greenspot Road as a local scenic highway.

The Proposed Project would construct residences along the northern side of Greenspot Road. However, the residential nature Project would be visually consistent with other residential land uses to the east and west of the Project Site along Greenspot Road (Figures 3, 4, and 5). As the Project is located to the north of Greenspot Road, the Project would not substantially interfere with views of the Santa Ana river wash to the south. Further, due to the regional topography, and slope to the north of the Project Site it is also assumed that distant views of the San Bernardino Mountains to the north would not be substantially affected. Therefore, a less than significant impact would occur.

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
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑

No Impact.

The California Scenic Highway System indicated that no existing or proposed State scenic highways are located in the vicinity of the Project Site. The closest eligible scenic highway is State Route (SR) -330, approximately 2.88-miles northwest of the Project Site. The closest officially designated State scenic highway is SR-38 approximately 8-miles east of the Project Site. Therefore, the Proposed Project would have no impact on scenic resources within a state scenic highway.

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

Less than Significant Impact.

The City's General Plan provides the following relevant goals and policies to help preserve the City's scenic resources (Highland 2006):

> *Policy 1:* *Incorporate view corridor planning in related development efforts and capital improvement programs.*

The Project Site is located along Greenspot Road, which is identified as a local scenic highway. However, the Project Site does not contain open space, hillsides, or ridgelines. As discussed above in response 4.1, a), above, the Proposed Project is consistent with this goal.

> *Policy 2:* *Along roadway-based view corridors, frame views of attractive features of the natural and built environment with appropriately placed median and street tree landscaping. Use of fire-resistant vegetation and ample spacing between trees and shrubs is encouraged to reduce the spread of fires.*

The Project Site is located along Greenspot Road, which is identified as a local scenic highway. As discussed above in response 4.1, a), above, the Proposed Project is consistent with this goal.

Policy 3: *Enforce hillside development standards that call for natural contour grading, environmentally sensitive design, shape and siting techniques, and fire-retardant building materials.*

The Project Site does not contain hillsides or ridgelines that could be affected by Project Implementation. No significant hillsides or ridgelines would be modified as part of the Project. The Proposed Project is consistent with this policy.

Policy 4: *Work with San Bernardino County and the City of San Bernardino to develop consistent regulations for the protection of ridgelines, slope areas and hilltops within the surrounding foothill communities.*

The Project Site is relatively flat and does not contain hillsides or ridgelines. The Proposed Project is consistent with this policy.

Policy 5: *Require that all excess excavated material (waste materials) be properly removed and disposed of or otherwise reincorporated into the development plan without compromising natural contours or aesthetic qualities of the site.*

Although the Proposed Project would require the export of some oversized rocks (greater than 12-inches) is anticipated. However, the Project would not involve the export of excavated soil materials, the Project would require the import of 12,102-cy of imported material for grading activities (Urban Crossroads 2024a; Appendix A). Further, appreciable cut or fill slopes are not anticipated (Petra 2024; Appendix F). The Proposed Project is consistent with this policy.

Policy 6: *Require that hillside development be located below ridgelines and that structures themselves and accompanying landscaping conceal cut slopes and grading.*

The Project Site is relatively flat and does not contain hillsides or ridgelines. The Proposed Project is consistent with this policy.

Policy 7: *Encourage developers in high slope gradient areas to use raised floor systems and stepped footages to leave slope contours in a more natural state.*

The Project Site is relatively flat and does not contain hillsides or ridgelines. The Proposed Project is consistent with this policy.

Policy 8: *Retain existing vegetation within or alongside hillside development areas except where such vegetation poses a risk to buildings in high fire hazard zones (see Goal 6.5, Public Health and Safety Element). Use native, fire resistant, drought-tolerant plant material in fuel modification areas when existing vegetation cannot be retained.*

The Project Site is relatively flat and is not located within or along a hillside development area. Further, the Project Site is located within a Very High Fire Hazard Severity Zone (VHFHSZ). Prior to the issuance of permits, the Project Site plans and Landscaping plans would require City approval. Project Landscaping plan is provided as Figure 5. The Proposed Project is consistent with this policy.

Policy 9: Preserve mature trees, natural hydrology, native plant materials and areas of visual interest.

The Project Site does not contain existing vegetation that provides an aesthetic benefit. The Project Site consists of large areas of disturbed and developed land, and fallow agriculture. The Proposed Project is consistent with this policy.

The Project Site is located in an urbanized area characterized by residential land uses with a nearby recreational land use. The Project proposes the construction and operation of a residential land use that is in proximity to existing residential uses in the Project vicinity. The Project Site has a zoning designation of R1 10,000. The Project Site would have a gross density of 9.42 du/ac. A zoning designation amendment is proposed for existing APNs 1210-371-14 and 1210-371-16 to change them from R-1 (10,000 Single Family Residential) to PD (Planned Development). With the zoning amendment, the Proposed Project would conform with zoning regulations. The Project would also comply with applicable City Municipal Code design guidelines and development standards for residential development. As such, impacts would be less than significant, and no mitigation is required.

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
d) Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

Less than Significant Impact.

The Project Site is largely undeveloped; however, it is located within an urban area with numerous nearby light sources. In addition to the lighting typical of residential development to the north, east and west, streetlights are present along Alta Vista, Greenspot Road, and Santa Ana Canyon Road. The Proposed Project would require temporary lighting for onsite security and safety during the construction phase. However, this onsite lighting would be temporary in nature, and no nighttime construction is proposed. Therefore, project related impacts from glare and additional light sources during Project construction would be less than significant.

With development of the Project new light sources would be added, including lights from vehicle headlights, lighting from the proposed residential units on site, as well as parking lot lighting and nighttime lighting for safety and wayfinding. Thus, light produced by the Proposed Project would be similar to the lighting from residential uses that already exists in the Project vicinity. Therefore, the impact from glare and additional light sources during Project operation would be less than significant.

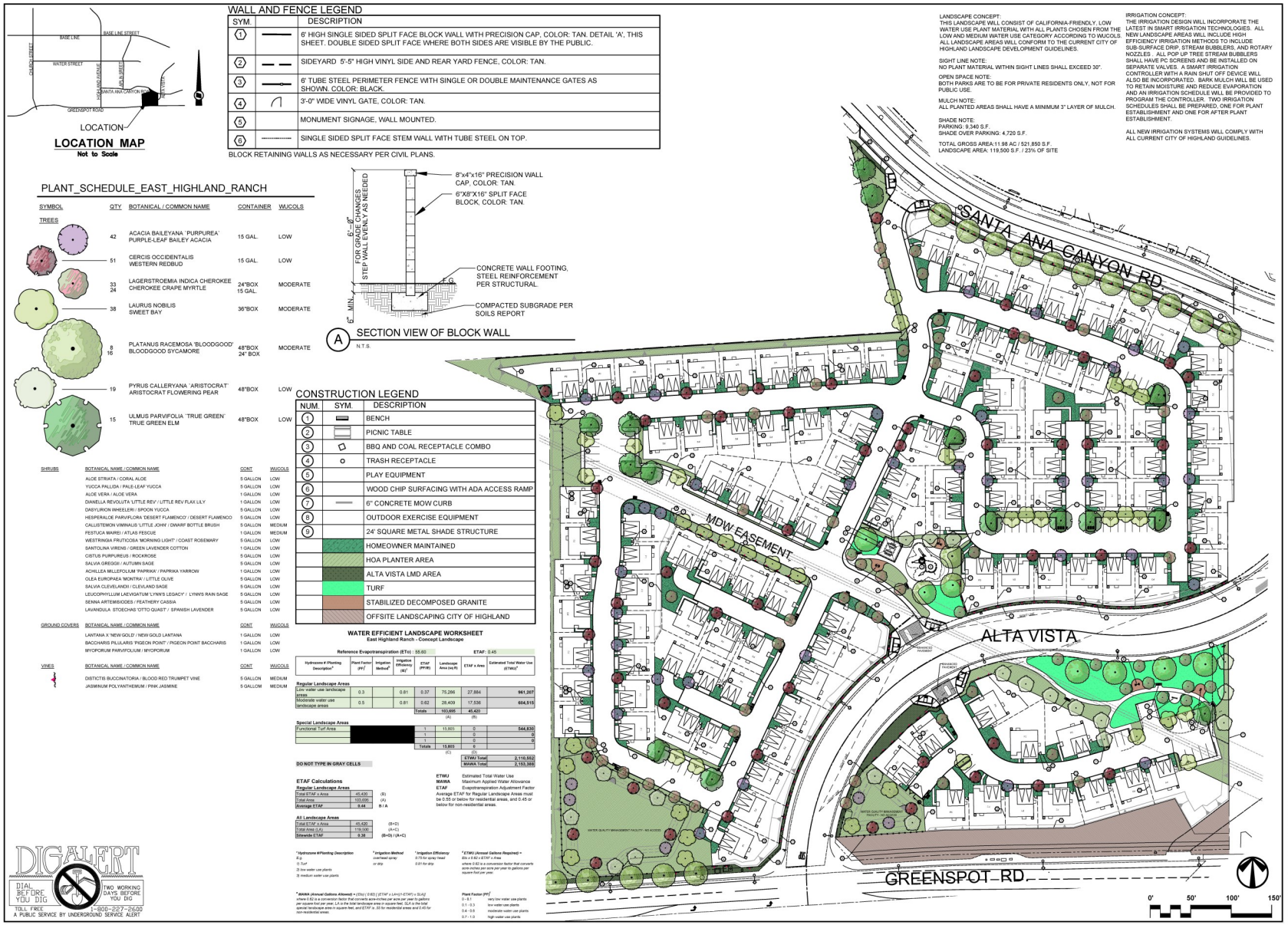

Figure 5. Project Landscape Plan

2023-095 Diversified Pacific - Highland Project

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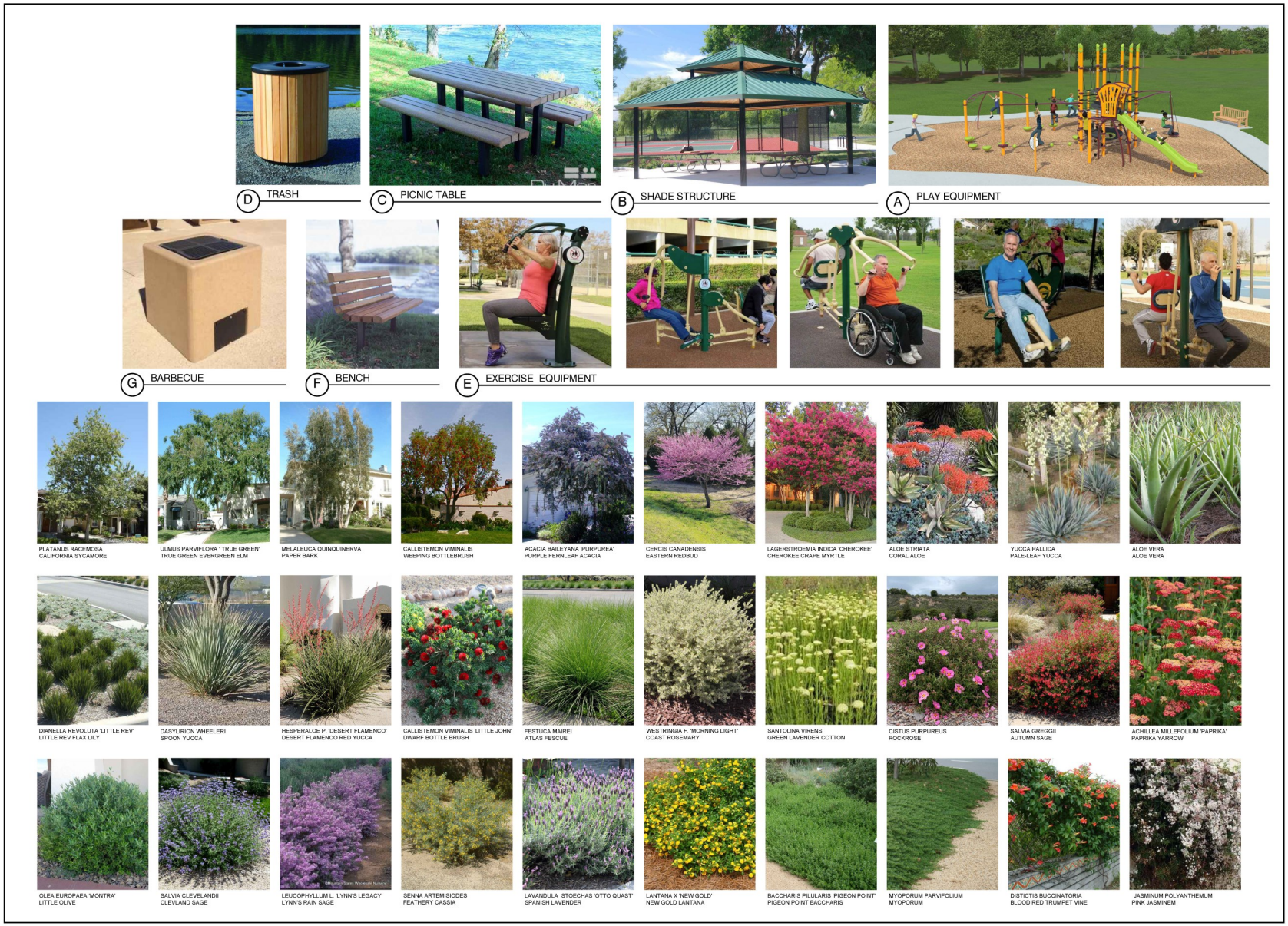

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Figure 5. Project Landscape Plan

2023-095 Diversified Pacific - Highland Project

4.1.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.2 Agriculture and Forestry Resources

4.2.1 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☑

No Impact (a, b, c, d, e).

As detailed on the Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP) and Williamson Act maps, neither the Project Site nor adjacent properties are State-designated Farmland, enrolled in Williamson Act contracts, or support forest land or resources (California Department of Conservation [DOC] 2022). The Project Site is designated as Grazing Land east of Alta Vista, and Other Land west of Alta Vista and south of Greenspot Road. The DOC FMMP identifies approximately 19.45 acres of Prime Farmland, and 1.09-acres of Unique Farmland, surrounded on three sides by Urban and Built-Up Land to the North of the Project Site, across Santa Ana Canyon Road. However, at the time of site visit, this appears to have been fully developed with single-family residential homes. Additionally, grading

activities for this community are visible on aerial imagery dating back to September 15, 2022 (Google Earth 2025).

The Project Site is zoned R-1 10,000, however the Project Proponent is requesting a change of zoning to PD Planned Development to allow for an increase in density. No forest land or Timberland is located on the Project Site. Land zoned Agriculture/Equestrian (A/EQ) is separated from the Project Site by Greenspot Road. Therefore, the Project Site is not located on or adjacent to agricultural land or forest land and the Project would not involve any development that could result in the conversion of farmland to non-agricultural uses. The Project would have no impact with respect to conversion of Farmland to non-agricultural use; conflict with existing agricultural zoning or Williamson Act contract; result in the loss of forest land or conversion of forest land to non-forest use; or other conversion of farmland to non-agricultural use. Therefore, no impact would occur. No further analysis of this subject is required.

4.2.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.3 Air Quality

This section is based in part on the results of the Air Quality Impact Analysis prepared by Urban Crossroads in September 2024 (Urban Crossroads 2024a; Appendix A). This assessment was prepared using methods and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD) and the County of San Bernardino. Regional and local existing conditions are presented, along with pertinent pollutant emissions standards and regulations. The purpose of this assessment is to estimate criteria air pollutants attributable to the Project and determine the level of impact the Project would have on the environment.

4.3.1 Air Quality (III) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑	☐

Less than Significant Impact.

As part of its enforcement responsibilities, the U.S. Environmental Protection Agency (USEPA) requires each State with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and State ambient air quality standards. Air

quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project Site is located within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In December 2022, SCAQMD released the final 2022 Air Quality Management Plan (2022 AQMP). The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State (California) and national air quality standards in order to reduce such emissions. The 2022 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, the Southern California Association of Governments (SCAG), and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Proposed Project is subject to the SCAQMD's 2022 AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment. California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) violations would occur if regional or localized significance thresholds were exceeded.

a) Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?

As shown in Table 4.3-1, 4.3-2, and 4.3-3 below, the Proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. Therefore, the Proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

b) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

As shown in Table 4.3-1 and 4.3-3 below, the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Because the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, SCAQMD's second criterion for determining Project consistency focuses on whether or not the Proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2022 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2022 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Highland. Specifically, SCAG's Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's 2024-205 RTP/SCS provides socioeconomic forecast projections of regional population growth. The Highland General Plan is referenced by SCAG in order to assist forecasting future growth in Highland. Peak day emissions generated by construction activities are largely independent of land use assignments but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds would be exceeded, a less than significant impact would result.

The City of Highland General Plan designates the Project Site as "Low Density Residential (LD)" land uses and "R-1 10,000 Single Family Residential (R-1)" zoning uses (Highland 2006). The Project proposes a General Plan Amendment, which would change the land use designation from "Low Density Residential (LD)" to "Planned Development (PD)." The Planned Development (PD) designation is designated for residential land uses and support uses. The Project proposes a Zone Change Amendment, which would change the zoning use designation from "R-1 10,000 Single Family Residential (R-1)" to "Planned Development (PD)."

The Project would develop 113 single family residential dwelling units. The Project is inconsistent with the current land use and zoning designation and would require a General Plan and Zone Change Amendment. Although this finding is inconsistent with the current land use and zoning designation, the Project on an individual basis does not have an impact and as such, the Proposed Project would not conflict with the goals and objectives of the AQMP. Furthermore, the Project, as evaluated herein, would not exceed the regional or localized air quality significance thresholds.

The Project would not have the potential to result in or cause NAAQS or CAAQS violations. Although the Project's proposed uses are not consistent with the General Plan land use and zoning designation, as the Project would not exceed the regional or localized construction and operational thresholds, the Project's

development intensity is consistent with the development intensities allowed within the General Plan. As such, the Project is considered to be consistent with the AQMP.

As a result, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2022 AQMP. The City's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City as well as the City's projected growth according to local input received during the SCAG 2024 RTP analysis.; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

b) Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Proposed Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the 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. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce coarse particulate matter (PM10) emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce reactive organic gases (ROG) emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the Proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The 2022 AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project would not have the potential to result in or cause NAAQS or CAAQS violations. Although the Project's proposed uses are not consistent with the General Plan land use and zoning designation, as the Project would not exceed the regional or localized construction and operational thresholds, the Project's development intensity is consistent with the development intensities allowed within the General Plan.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The Proposed Project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards as it is not projected to exceed SCAQMD regional thresholds. The Proposed Project's long-term influence would also be consistent with the goals and

policies of the SCAQMD 2022 AQMP. As the Project would be consistent with the emission-reduction goals of the 2022 AQMP, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☑	☐

Less Than Significant Impact.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Air pollutant emission impacts were assessed in accordance with methodologies recommended by the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022.1.1.26. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for San Bernardino County (Urban Crossroads 2024a; Appendix A). Operational air pollutant emissions were based on the Project Site plans and traffic trip generation rates from Urban Crossroads (2024d; Appendix L).

4.3.1.2 Construction Impacts

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Attachment A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 4.3-1. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 4.3-1. Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Pollutant (pounds per day)					
	ROG	**NO_X**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Summer						
Construction Year One	1.34	11.13	17.16	0.03	1.02	0.53
Winter						
Construction Year One	55.67	36.08	33.08	0.10	7.66	4.36
Construction Year Two	54.21	1.17	1.93	0.00	0.14	0.05
Maximum Daily Emissions	**55.67**	**36.08**	**33.08**	**0.10**	**7.66**	**4.36**
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2022.1.1.26. Refer to Urban Crossroads 2024a (Appendix A), for Model Data Outputs.

As shown in Table 4.3-1, emissions generated during Project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.

Localized Construction Significance Analysis

As shown in Figure 6, the nearest sensitive receptors to the Project Site include residences located to the north and east. In order to identify localized air toxic-related impacts to sensitive receptors, the SCAQMD recommends addressing Localize Significance Thresholds (LSTs) for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4).

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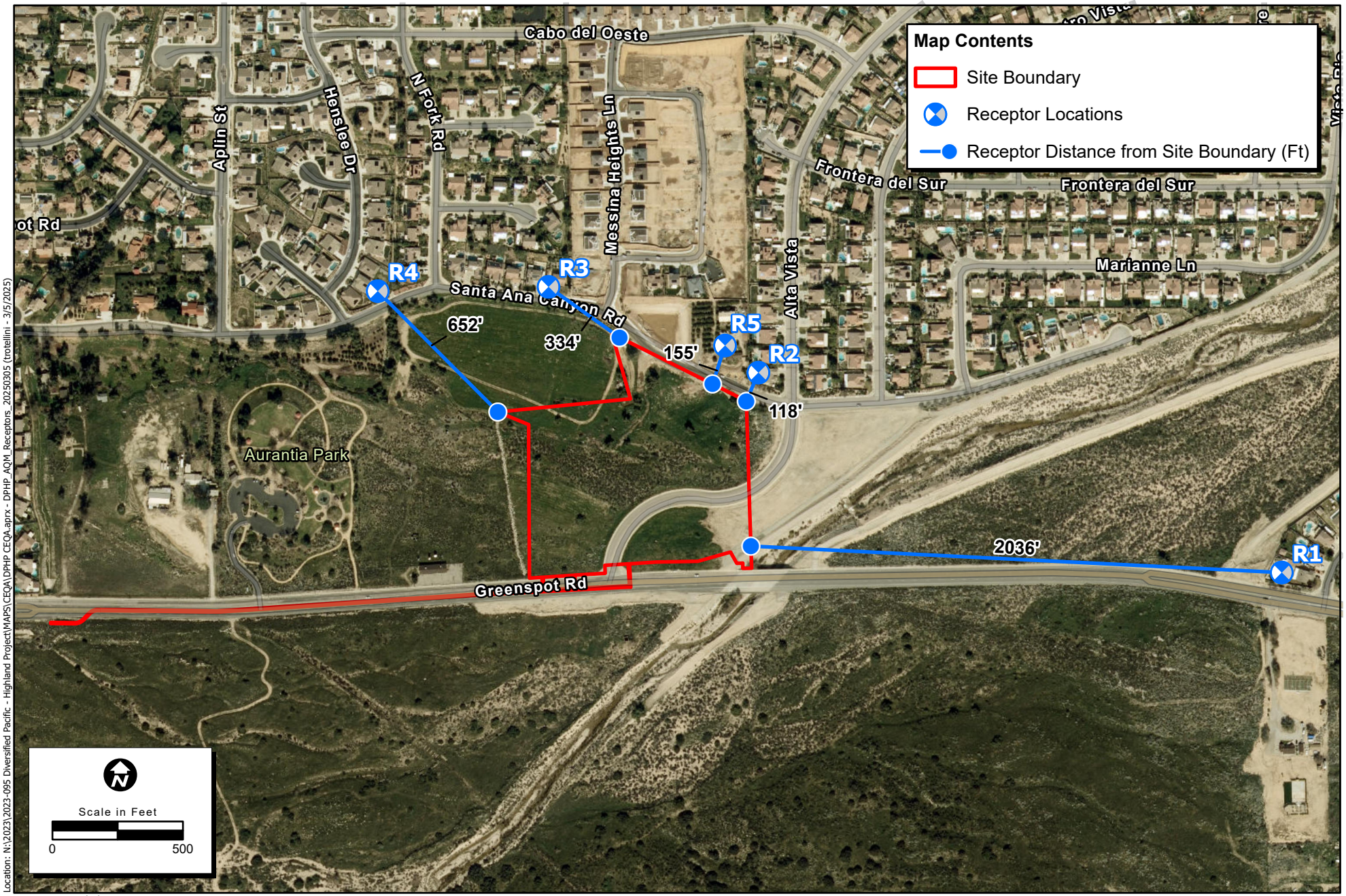

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Map Date: 3/5/2025

Sources: ESRI, San Bernardino County (2024), Urban Crossroads (2024)

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Figure 6. Sensitive Receptor Locations

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The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized project-specific level impacts associated with proposed projects.

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved American Meteorological Society/EPA Regulatory Model (AERMOD) dispersion model was utilized. The SCAQMD's methodology clearly states that "offsite mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. Table 4.3-2 presents the results of localized emissions. Emissions during the peak construction activity will not exceed the SCAQMD's localized significance thresholds at the maximally exposed receptor location, as illustrated in Table 4.3-2. All other modeled locations in the study area would experience a lesser concentration and consequently experience a lesser impact.

Table 4.3-2. Construction-Related Emissions (Localized Significance Analysis)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.10	0.02	6.65E-02	0.97	0.93
Background Concentration[1]	1.6	1.2	0.056	N/A	
Total Concentration	**1.70**	**1.22**	**0.12**	**0.97**	**0.93**
SCAQMD Localized Significance Threshold	*20*	*9*	*0.18*	*10.4*	*10.4*
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**	**No**

Source: AERMOD California Energy Emissions Model (CalEEMod) version 2022.1.1.26. Refer to Urban Crossroads 2024 for Model Data Outputs.
Notes: [1]Highest Concentration from the last three years of available data.
PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm. Based on SCAQMD's LST Methodology, background concentrations are considered only for CO and NO_2.

Table 4.3-2 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: Further-Reduced Health Risk. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NOx, CO, PM_{10}, and $PM_{2.5}$ demonstrates that the Project would likely not adversely impact the neighboring receptors in the vicinity of the Project. This impact is less than significant, and no mitigation is required.

4.3.1.3 Long-Term Operational Impacts

Regional Operational Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as O_3 precursors such as ROGs and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use. As previously described, operational air pollutant emissions were based on the Project Site plans and traffic trip generation rates from Urban Crossroads (Urban Crossroads 2024a; Appendix A). Long-term operational emissions attributable to the Project are identified in Table 4.3-3 and compared to the operational significance thresholds promulgated by the SCAQMD.

Table 4.3-3. Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Summer Emissions						
Mobile Source	3.89	3.41	32.93	0.08	7.44	1.93
Area Source	5.57	1.94	7.21	0.01	0.15	0.15
Energy Source	0.05	0.89	0.38	0.01	0.07	0.07
Total:	**9.51**	**6.24**	**40.52**	**0.10**	**7.66**	**2.15**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Mobile Source	3.63	3.66	27.69	0.08	7.44	1.93
Area Source	5.01	1.87	0.80	0.01	0.15	0.15
Energy Source	0.05	0.89	0.38	0.01	0.07	0.07
Total:	**8.68**	**6.43**	**28.87**	**0.10**	**7.66**	**2.15**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: California Energy Emissions Model (CalEEMod) version 2022.1.1.26. Refer to Urban Crossroads 2024a for Model Data Outputs.

As shown in Table 4.3-3, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

The San Bernardino County portion of the SoCAB is listed as a nonattainment area for federal O_3, $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (Urban Crossroads 2024a). O_3 is a health threat to people who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 4.3-3, the Proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NO_x, PM_{10}, and $PM_{2.5}$, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SCAQMD is contained in the SCAQMD 2022 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project only if the project includes stationary sources (e.g., smokestacks) or attracts heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Proposed Project does not include such uses. Therefore, in the case of the Proposed Project, the operational LST protocol is not applied. This impact is less than significant, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐

Less Than Significant Impact.

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular

and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The location of nearest residences assessed as sensitive receptors relative to the Project Site are shown on Figure 6.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NOx, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SoCAB which encompasses the Project area is designated as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$, and PM_{10} standards (Urban Crossroads 2024a; Appendix A). Thus, existing O_3, PM_{10}, and $PM_{2.5}$ levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-1 and Table 4.3-2, the Project would not exceed the SCAQMD regional or localized significance thresholds for emissions.

The health effects associated with O_3 are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O_3 precursor emissions (ROG or NOx) in excess of the SCAQMD thresholds, the Project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to have a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SCAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions of exhaust PM_{10}, considered a surrogate for DPM and includes emissions of exhaust $PM_{2.5}$, would be 4.36 pounds per day for construction activities associated with the Proposed Project (Urban Crossroads 2024a; Appendix A). PM_{10} exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM. As with O_3 and NOx, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is designated as in attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the South Coast Air Quality Management District's (SCAQMD's) 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD is the air pollution control officer for much of southern California, including the Project Site. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured

at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD), the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The Proposed Project is anticipated to result in 1,066 daily traffic trips (Urban Crossroads 2024a; Appendix A). Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the Project traffic exceeding CO values. This impact is less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☑	☐

Less than Significant Impact.

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the

concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Construction

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, the Project would have less than significant construction-related odor impacts.

Operations

The SCAQMD CEQA Air Quality Handbook (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, the Project would have less than significant operational-related odor impacts.

4.3.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.4 Biological Resources

This section is based on the analysis and recommendations presented in the Biological Technical Report (BTR) prepared by ECORP Consulting, Inc. (ECORP) for the Proposed Project (ECORP 2025a, Appendix B). Reconnaissance-level surveys of the 11.98-acre Project Site were conducted as part of the BTR to identify plant communities and to assess the presence of suitable habitat for special-status plant and wildlife species. The BTR assessed the Proposed Project's potential impacts to biological resources identified within the Project's Biological Study Area (BSA). The BSA is composed of the Proposed Project's impact area plus a 500-foot buffer. The buffer was identified to determine potential indirect Project effects on sensitive biological resources that may not be present within the Proposed Project's impact area but may be indirectly affected by Project activities if located in adjacent areas.

4.4.1 Environmental Setting

The Project Site consists of two adjacent parcels which are surrounded by roadways, residential developments, and open undeveloped land. The Project Site is located within an alluvial valley area of the San Bernardino Mountains, upstream of the confluence of Plunge Creek and the Santa Ana River. Soil types within the Project Site consist of Greenfield sandy loam, 2 to 9 percent slopes; Hanford coarse sandy loam, 2 to 9 percent slopes; Psamments, Fluvents, and frequently flooded soils; Soboba gravelly loamy sand, 0 to 9 percent slopes; and Soboba stony loamy sand, 2 to 9 percent slopes (ECORP 2025a). The Project Site is located north of Greenspot Road and is detached from the Santa Ana River floodplain and has been disconnected from periodic flooding and scouring, typical of an alluvial area, due to flood control improvements in the area.

4.4.1.1 Vegetation Communities

The Project Site contained two vegetation communities and three land cover types, including scale broom scrub (Lepidospartum squamatum shrubland alliance), wild oats and annual brome grasslands (Avena spp. – Bromus spp. herbaceous semi-natural alliance), fallow agriculture, developed land, disturbed land, and disturbed land (ECORP 2025a). The Project Site contained large areas of disturbed and developed land, and fallow agriculture, which typically do not provide suitable habitat for the special-status species that could occur in the vicinity of the Project Site. However, the Project Site did contain a large patch of scale broom scrub that could provide habitat for special-status plant and wildlife species.

Scale Broom Scrub

Scale broom scrub is characterized by scale broom as a dominant or codominant with cheese bush (*Ambrosia salsola*), California sagebrush (*Artemisia californica*), California cholla (*Cylindropuntia californica*), Brittlebush (*Encelia farinosa*), and/or California buckwheat (*Eriogonum fasciculatum*) in an open to continuous shrub layer and variable or grassy herbaceous layer. It is found in intermittently or rarely flooded, low-gradient alluvial deposits along streams, washes, and fans, at elevations ranging from 164 to 4,921 feet (50 to 1,500 meters) above mean sea level (ECORP 2025a). Within the Project Site, scale broom scrub was dominated by scale broom and California buckwheat but was also degraded by heavy infestations of nonnative plants such as cheatgrass (*Bromus tectorum*), mustard species (*Brassica* spp.), foxtail chess (*Bromus madritensis*), and redstem filaree (*Erodium cicutarium*). Scale broom scrub was documented throughout most of the central portion of the Project Site. Approximately 4.98 acres of scale broom scrub habitat were mapped within the Project Site.

Wild Oats and Annual Brome Grassland

Wild oats and annual brome grasslands are described as having wild oats and brome species as the dominant or co-dominant species with other nonnatives in the herbaceous layer. This vegetation community is typically composed of annual grasses which originated in the Mediterranean region, which is climatically like southern California, making it easy for them to thrive. Characteristic species include wild oats, foxtail chess, cheatgrass, and ripgut brome. This vegetation community can occur in all topographic settings but is often associated with abandoned fields, eroded washes, overgrazed rangeland, road verges, foothills, waste places, and lower montane slopes. Associated plant species within this community on the Project Site included wild oat, foxtail chess, mustard, and cheatgrass in the north central portion of the Project Site. Approximately 2.41 acres of Wild oats and annual brome grasslands habitat were mapped within the Project Site (ECORP 2025a).

Fallow Agriculture

Areas designated as fallow agriculture have previously contained agriculture but are no longer actively being farmed and contain either escaped cultivars or nonnative species. Fallow agriculture is not a vegetation community classification, but rather a land use type that is not restricted to a known elevation. Within the Project Site, fallow agriculture usually consisted of recently disced areas that contained emergent nonnative grasses and forbs, such as cheatgrass, ripgut brome, and doveweed (*Croton setiger*).

Fallow agriculture was documented along the western border of the Project Site. Approximately 1.20 acres of fallow agriculture were mapped within the Project Site (ECORP 2025a).

Disturbed

The disturbed classification includes areas where the native vegetation community has been heavily influenced by human actions, such as grading, trash dumping, and off-road use, but lacks development. Disturbed is not a vegetation classification, but rather a land cover type and is not typically restricted to a known elevation. Disturbed areas located throughout the Project Site included an area previously used for storing agricultural equipment along the northwest border of the Project Site and a recently graded area south and east of Alta Vista. In areas classified as disturbed, vegetation was absent or sparse and consisted primarily of nonnative species, such as red brome, redstem filaree, and Mediterranean grass. Approximately 3.93 acres of disturbed land cover were mapped within the Project Site (ECORP 2025a).

Developed

Areas designated as developed will have infrastructure present and any vegetation in the immediate surroundings represents ornamental landscaping. Developed is not a vegetation classification, but rather a land cover type and is not restricted to a known elevation. The developed area within the Project Site was associated with the Alta Vista ROW which accounts for approximately 1.02 acres of developed land cover were mapped within the Project Site (ECORP 2025a).

4.4.1.2 Plants

Plant species observed on the Project Site were generally characteristic of scale broom scrub and wild oats and annual brome grasslands. Common plants identified on the Project Site included ripgut grass, common mediterranean grass, California buckwheat, scalebroom, and brittlebush. A full list of plant species observed on the Project Site is included in Appendix B (ECORP 2025a).

4.4.1.3 Wildlife

Wildlife species observed on the Project Site were generally characteristic of the vegetation communities mapped onsite. Vegetation communities that provide wildlife habitat onsite include scale broom scrub, wild oats, annual brome grasslands, and disturbed areas. Some of the wildlife species present on the Project Site at the time of the survey included side-blotched lizard (*Uta stansburiana*), California scrub jay (*Aphelocoma californica*), California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), and house finch (*Haemorhous mexicanus*). A full list of wildlife species observed on and adjacent to the Project Site is included in Appendix B (ECORP 2025a).

4.4.1.4 Potential Waters of the U.S.

ECORP prepared an Aquatic Resource Delineation (ARD) for the Proposed Project (ECORP 2025b; Appendix C). As part of the ARD, ECORP mapped a total of 0.008-acres of potential California Department of Fish and Wildlife (CDFW) jurisdiction, and approximately 0.001-acres of aquatic resources (Non-Wetland waters – Intermittent Drainage) within the Study Area. However, ECORP identified that no

wetlands are located within the area of development, Furthermore, none of the aquatic features present support wetland characteristics (ECORP 2025b).

4.4.1.5 Special-Status Plants

There were 32 special-status plant species that appeared in the literature review and database searches that could occur on and/or near the Project Site (ECORP 2025a). A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status plant species on the list. Of the 32 special-status plants identified in the literature review, five species were found to have a high potential to occur, two have a moderate potential to occur and nine have a low potential to occur. The remaining 16 species are presumed absent from the Project Site. A table outlining each species, their designations, and the potential for these species to occur on the Project Site can be found in Appendix B (ECORP 2025a).

4.4.1.6 Special-Status Wildlife

The literature search documented 48 special-status wildlife species that occur within the vicinity of the Project Site. A list was generated from the results of the literature review and the Project Site was evaluated for suitable habitat that could support any of the special-status wildlife species on the list. The Project Site's disturbed nature, proximity to commercial development, and the presence of anthropogenic influences on the site likely preclude many of these species from occurring. A complete list of the 48 special-status wildlife species, with details regarding habitat requirements and potential for occurrence designations, is included in Appendix B (ECORP 2025a).

4.4.1.7 Wildlife Movement Corridors

Although the Project Site is undeveloped, it is surrounded by development to the north, east, and west and isolated from large, contiguous blocks of native habitat. The Project Site is bordered by Santa Ana Canyon Road to the north, Greenspot Road to the south, and Aurantia Park to the west. Alta Vista Road bisects the southeast section of the Project Site. These features isolate the habitat that is present within the Project Site from its surrounding area and provide potential barriers to wildlife movement. Additionally, the lack of consistent vegetative cover within the Project Site, the urban nature of the site, and the high level of disturbance on and in the vicinity of the site would likely deter wildlife from using the Project Site for movement opportunities. Although wildlife could pass through the site while moving about their home range, it would not be considered a movement corridor, linkage, or significant ecological area.

4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

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 Wildlife or U.S. Fish and Wildlife Service?	☐	☑	☐	☐

Less than Significant Impact with Mitigation Incorporated

The Project Site contained two vegetation communities and three land cover types, including scale broom scrub, wild oats and annual brome grasslands, fallow agriculture, developed land, and disturbed land. The areas of disturbed and developed land, and fallow agriculture typically do not provide suitable habitat for the special-status species that could occur in the vicinity of the Project Site. The literature review and database searches identified 32 special-status plant species that could occur in the vicinity of the Project Site. Of the 32 special-status plant species, five species (Parry's spineflower, slender-horned spineflower, Santa Ana River woollystar, California satintail, and salt spring checkerbloom) were determined to have a high potential to occur on the Project Site, two species (Nevin's barberry and white bracted spineflower) were determined to have a moderate potential to occur on the Project Site, and nine species (chaparral sand-verbena, Jaeger's milk-vetch, thread-leaved brodiaea, smooth tarplant, mesa horkelia, Parish's desert-thorn, Parish's bush-mallow, chaparral ragwort, and San Bernardino aster) were determined to have a low potential to occur on the Project Site based on the habitat present and documented species records within five miles of the Project Site. Sixteen species were also presumed absent from the Project Site due to the lack of suitable habitat (including elevation, soils, and vegetation communities) or because the Project is located outside of the known range for the species. A focused protocol-level rare plant survey conducted in 2016 was negative and no special-status plant species were observed (LSA 2016c). Additionally, no special-status or rare plants were identified during the biological survey conducted in 2023 or 2024. Nonetheless, four special-status plant species with potential to occur on the Project Site are federally or state-listed species (slender-horned spineflower, Santa Ana River woollystar, Nevin's barberry, and thread-leaved brodiaea) and any direct impacts associated with Project implementation to these species would be considered significant under CEQA. If special-status plants are present on the Project Site, direct impacts in the form of ground disturbance, vegetation removal, habitat loss, and mortality may occur. Impacts to special-status plants would be less than significant with the implementation of Mitigation Measures BIO-1 and BIO-2.

The literature review and database searches identified 48 special-status wildlife species that could occur in the vicinity of the Project Site, and although no special-status wildlife species were documented during the biological reconnaissance surveys, one special-status species (San Diego desert woodrat) was captured during focused San Bernardino kangaroo rat (SBKR) trapping surveys (LSA 2016a; ECORP 2023). Additionally, the Project Site contained suitable habitat for 13 special-status wildlife species with varying

levels of potential to occur. Of those 13 species, five species were determined to have a high or moderate potential to occur: California glossy snake, red-diamond rattle snake, coastal California gnatcatcher, Crotch bumble bee, and Los Angeles pocket mouse. California glossy snake, red-diamond rattlesnake, and Los Angeles pocket mouse are all CDFW SSC, and if present on the Project Site, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. However, due to the lack of high-quality habitat within the Project Site, the site's history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Site, if present on the Project Site, these three species are only expected to occur in low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to California glossy snake and red-diamond rattlesnake would not be considered significant under CEQA, and additional surveys and mitigation are not necessary.

Suitable habitat for coastal California gnatcatcher was present within the scale broom scrub vegetation on the Project Site. Focused protocol-level presence/absence surveys conducted in 2016 were negative and no gnatcatchers were detected during the survey (LSA 2016b). Although this species is not expected to occur on the Project Site, if present, this species could be subject to direct impacts through ground disturbance and vegetation removal and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. Coastal California gnatcatchers are a federally listed (endangered) species and any direct or indirect impacts to coastal California gnatcatchers associated with Project implementation would be considered significant under CEQA. However, impacts to coastal California gnatcatcher would be less than significant with the implementation of Mitigation Measures BIO-2 and BIO-5.

Crotch bumble bee (candidate species for listing [endangered] under the California Endangered Species Act) was determined to have a moderate potential to occur on the Project Site based on the presence of marginally suitable habitat and recent species records, but not within five miles of the Project Site. No Crotch bumble bees were observed during the 2023 and 2024 biological surveys. However, if present on the Project Site, this species could be subject to direct impacts through ground disturbance and vegetation removal and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. Any direct impacts to Crotch bumble bee associated with Project implementation would be considered significant under CEQA. However, implementation of Mitigation Measures BIO-2 and BIO-3 would reduce impacts to Crotch bumble bee to a level that is less than significant.

Eight species were determined to have a low potential to occur due the presence of marginally suitable habitat for the species occurring on site and a known occurrence has been reported in the database, but not within five miles of the site; or a historic documented observation (more than 20 years old) was recorded within five miles of the Project Site; or suitable habitat strongly associated with the species occurs on site, but no records were found in the database search. Of these eight species, two are listed or proposed for listing, including burrowing owl (state candidate for listing [endangered/threatened]) and San Bernardino kangaroo rat (federally listed [endangered], state listed [endangered]. Focused protocol level surveys conducted for these two species in 2016, and an additional focused protocol-level San

Bernardino kangaroo rat survey conducted in 2023 were negative and no burrowing owl or San Bernardino kangaroo rat were observed or detected (LSA 2016a; LSA 2016d; ECORP 2023). Additionally, no burrowing owls or burrowing owl burrows were observed or detected during the 2023 and 2024 biological surveys. Although these species are not expected to occur on the Project Site, if present, they could be subject to direct impacts through ground disturbance and vegetation removal and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. Any direct or indirect impacts to San Bernardino kangaroo rat and/or direct impacts to burrowing owl associated with Project implementation would be considered significant under CEQA. However, impacts to burrowing owl would be less than significant with the implementation of Mitigation Measures BIO-2, BIO-4, BIO-5 and impacts to San Bernardino kangaroo rat would be less than significant with the implementation of Mitigation Measures BIO-2 and BIO-6.

The remaining 34 special-status wildlife species are presumed absent from occurring on or adjacent to the site due to the lack of suitable habitat; proximity to the surrounding residential, commercial, and industrial development; and the presence of anthropogenic disturbances associated with the commercial and industrial development surrounding the site. No significant impacts to the 34 special-status wildlife species that are presumed absent are anticipated to result from the development of this Project, and additional surveys and mitigation measures are not required at this time.

The trees and large shrubs on the Project Site, as well as the trees adjacent to the Project Site, could provide nesting habitat for nesting birds and raptors protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Furthermore, the Project Site could provide nesting habitat for ground-nesting bird species. If construction of the Proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat on the Project Site, and indirectly through increased noise, vibrations, and increased human activity. However, impacts to nesting birds would be less than significant with the implementation of Mitigation Measure BIO-2 and BIO-5.

Therefore, with the implementation of Mitigation Measures BIO-1 through BIO-6 all potential Project related impacts to candidate, sensitive, or special-status species would be reduced to a less than significant level.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

The Project Site contained two vegetation communities and three land cover types, including scale broom scrub, wild oats and annual brome grasslands, fallow agriculture, developed land, and disturbed land

(ECORP 2025a; Appendix B). The Project Site does not contain any riparian habitat and the removal of the remnant area of scale broom scrub would not be significant if determined to be devoid of listed species, since it is a fragmented habitat area separated from Plunge Creek watershed. With the implementation of Mitigation Measures BIO-1, BIO-3, BIO-4, BIO-5, and Bio-6, the potential Project related impacts to other sensitive natural communities would be reduced to a less than significant threshold.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☑

No Impact.

The BTR identified features that required further investigation, as such, ECORP prepared an Aquatic Resource Delineation (ECORP 2025b; Appendix C). No wetlands are located within the Study Area. None of the aquatic features present within the ARD Study Area supported wetland characteristics. ECORP mapped a total of 0.008-acre of potential CDFW jurisdiction within the Study Area across Plunge Creek, which consisted of a partially vegetated streambed. No riparian vegetation communities are present within the Study Area. One intermittent drainage was mapped within the Project Site, Plunge Creek, a small portion flows across the southeastern portion of the Study Area.

The placement of dredged or fill material into Waters of the U.S. would require a permit pursuant to Section 404 of the Clean Water Act (CWA) and certification or waiver in compliance with Section 401 of the CWA. The placement of dredge or fill material into Waters of the State that are not Waters of the U.S. would require issuance of a Waste Discharge Requirement by the State or Regional Water Quality Control Board. Impacts to CDFW-regulated resources would require a Section 1600 Lake and Streambed Alteration Agreement by the CDFW.

ECORP mapped a total of 0.001-acre of intermittent drainage (Plunge Creek) within the Study Area. Approximately 0.008-acre of streambed (Plunge Creek) within the Study Area would likely be regulated under California Fish and Game Code Section 1600 (ECORP 2025b; Appendix C). These acreages represent a calculated estimation of the extent of aquatic resources within the Study Area and are subject to modification following an agency review and/or verification process. Plunge Creek would be completely avoided and development of the Project would not impact Waters of the U.S., Waters of the State, or streambeds regulated under Section 1600 of the California Fish and Game Code. Therefore, regulatory agency permits for impacts to aquatic resources will not be necessary. As the Project would avoid impacts to state and federal wetlands no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☑	☐

Less than Significant Impact.

The Project Site is located adjacent to areas containing existing disturbances (e.g., paved roads and residential developments). The Project Site could provide wildlife movement opportunities because it consists of open and unimpeded land. The Project Site is exposed and does not contain any large drainages that likely support wildlife movement through the area and the site's value as a corridor is lessened by the fact that it borders residential developments to the north and the busy Greenspot Road to the south. The study area is separated from the pending Santa Ana River Wash Habitat Conservation Plan by Greenspot Road. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project Site. No impacts to these resources are expected to occur during the development of the Project Site

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

Less than Significant Impact.

The BTR notes that there are an estimated 25 non-native Peruvian pepper trees on the study area, which may or may not be considered "heritage trees." There is a cluster of multiple trunk native sycamore trees in the agricultural area of the property, which may meet criteria for City "heritage tree." Also, the laurel sumac shrubs are large specimens that may also be considered "heritage trees" (ECORP 2025a: Appendix B). City ordinance (Ord. 103 § 4, 1990), defines a "heritage tree" as:

> *Any native, non-native, or ornamental live tree, shrub or woody plants in excess of 15 feet in height and having a single trunk circumference of 24 inches or more, as measured four and one-half feet above ground level; or multi- trunk tree(s) having a total circumference of 30 inches or more, measured four and one-half feet from ground level; or a stand of trees, the nature of which makes each dependent upon the others for survival; or any other tree as may be deemed historically or culturally significant by the community development director or designee because of size, condition, location, or aesthetic qualities. No person, firm, or corporation shall remove, relocate or destroy any heritage tree within the city limits, including an applicant for a building permit, without first obtaining a tree removal permit from the community development director or designee or reviewing authority. An*

application for a tree removal permit shall be filed, together with any required fee as set by resolution of the city council, with the community development director on forms provided for the purpose.

Therefore, prior to issuance of a construction permit, the Project Proponent would be required by the City to apply for a tree removal permit with payment of all applicable fees prior to issuance of a building permit. With the payment of all applicable fees, and City approval, the Project would comply with local policies regarding the preservation of biological resources. A less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☑

No Impact.

San Bernardino Valley-Wide Multiple Species Habitat Conservation Plan

The proposed San Bernardino Valley-wide Multiple Species Habitat Conservation Plan (MSHCP) encompasses approximately 500 square miles containing six unlisted species, six State-listed as endangered or threatened species, 13 federally listed as endangered threatened species, and 53 species of special concern. The schedule for completion and adoption of the San Bernardino Valley-wide MSHCP is uncertain at this time. Completion of the plan is not expected anytime within the near future. The City participated in previous planning efforts, with the intent of being a Local Permittee upon adoption of the plan.

Upper Santa Ana River Wash Land Management and Habitat Conservation Plan

The Project Site is located outside of, but adjacent to areas covered by the finalized Upper Santa Ana River Wash Land Management and Habitat Conservation Plan (HCP) for the Upper Santa Ana Wash. This HCP involves an area of approximately 4,365 acres located in the upper Santa Ana River Wash area. The HCP was completed in July 2020 following Federal approval, marking the culmination of a two-decade planning process. The plan facilitates the enhancement of facilities planned for the Wash area. It should be noted that activities related to all utilities belonging to Southern California Edison within the Project footprint and the East Branch Extension (EBX) Foothill Pipeline, also located within the Project footprint, are excluded from the covered activities described in the HCP. The Project Site is separated from the Santa Ana River Wash Habitat Conservation Plan by Greenspot Road.

Covered Species are those species addressed in the finalized HCP for which conservation actions will be implemented and for which the applicants have received incidental take authorizations for a period of up to 30 years. These include two federally listed endangered plants (Santa Ana River woollystar and slender-horned spineflower), the federally listed endangered San Bernardino kangaroo rat, the federally listed

threatened coastal California gnatcatcher, and the cactus wren (*Campylorhynchus brunneicapillus*), which is not currently listed under the Federal Endangered Species Act.

The Project Site is not located in a species habitat conservation plan and the Proposed Project is not a Covered Activity. No action is necessary for compliance with the proposed Santa Ana River Wash Land Management and Habitat Conservation Plan. Therefore, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan and no impact would occur.

4.4.3 Mitigation Measures

BIO-1: **Pre-construction Special-Status Plant Surveys.** Prior to Project implementation a protocol-level pre-construction plant survey shall be conducted for the 16 special-status plant species that have varying levels of potential to occur on the Project Site, including Parry's spineflower, slender-horned spineflower, Santa Ana River woollystar, California satintail, salt spring checkerbloom, Nevin's Barberry, and thread-leaved brodiaea. The protocol-level survey shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting), the season or the year prior to the start of ground-breaking Project activities. The survey should be conducted by a qualified botanist or biologist experienced with surveying for and identifying these flora. The surveys should be conducted in consideration of the United States Fish and Wildlife Service (USFWS) Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 1996), General Rare Plant Survey Guidelines (Cypher 2002), CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and the California Native Plant Society's (CNPS) Botanical Survey Guidelines (CNPS 2001). If no federally or state-listed or California Rare Plant Rank (CRPR) List 1 or 2 plant species are identified during the survey, Project Site preparation and construction activities may begin, and no further action is necessary.

If CRPR List 1 or 2 plant species or any federally or state-listed plant species are observed on the Project Site during the survey, then a qualified botanist or biologist shall establish a non-disturbance buffer around the location(s) of the individuals or population. The size of the non-disturbance buffer shall be determined by the qualified botanist or biologist based on location of special-status species and expected construction activities. If one or more CRPR List 1 or 2 plant species or any state or federally listed plant species are found on the Project Site and avoidance of the location(s) is not feasible during Project construction, then the qualified biologist and the Project Proponent shall coordinate with CDFW and/or USFWS to determine if additional mitigation measures are necessary. Mitigation measures could include, but are not limited to, additional biological monitoring, seasonal work avoidance, seed collection, or transplanting.

BIO-2: **Biological Monitoring.** A qualified biologist shall be present to monitor all initial ground-disturbing and vegetation-clearing activities conducted for the Project. During each

monitoring day, the biological monitor shall perform clearance survey "sweeps" at the start of each workday that vegetation clearing takes place to minimize impacts on special-status species with potential to occur. The monitor will be responsible for ensuring that impacts to special-status species, nesting birds, and active nests will be avoided to the greatest extent possible. Biological monitoring shall take place until the Project Site has been completely cleared of any vegetation. If an active nest is identified, the biological monitor shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed no longer active by the biologist. If special-status wildlife species are detected during biological monitoring activities, then consultation with the USFWS and/or CDFW shall be conducted, and a mitigation plan shall be developed to avoid and offset impacts to these species. Mitigation measures may consist of work restrictions and/or additional biological monitoring activities after ground-disturbing activities are complete.

BIO-3: **Pre-construction Crotch Bumble Bee Survey.** If the Crotch bumble bee is no longer a Candidate or formally Listed species under the California Endangered Species Act at the time ground-disturbing activities occur, then no additional protection measures are proposed for the species.

If the Crotch bumble bee is legally protected under the California Endangered Species Act as a Candidate or Listed species at the time ground-disturbing activities are scheduled to occur, it is recommended pre-construction surveys be conducted in accordance with the established survey protocol provided by CDFW. If no such protocol is available and ground-disturbing activities are scheduled to occur during the Crotch bumble bee flight season (February 16 through October 31), then it is recommended a minimum of two Crotch bumble bee pre- construction surveys are conducted by a qualified biologist experienced in identifying the species prior to ground disturbing activities (including vegetation and tree removal). The surveys shall be conducted no more than 14 days and three (3) days prior to ground- disturbing activities and vegetation clearing activities that are to occur during the flight season.

Should vegetation removal or ground-disturbing activities be scheduled to begin during the overwintering season (November 1 to February 15), when Crotch bumble bee are not detectable aboveground, then four (4) focused surveys shall be conducted at least three (3) weeks apart during the peak flight season (late March through August) immediately prior to start of construction.

If Crotch bumble bee is determined to occur within the Project Site at any time, coordination with CDFW shall be required prior to the initiation of Project activities.

BIO-4: **Pre-construction Burrowing Owl Surveys.** Pre-construction surveys for burrowing owls shall be conducted. Prior to ground disturbing activities, a qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction surveys of the Project Site, plus a 500-foot buffer (where access is permissible

and suitable habitat is present), to locate active breeding or wintering burrowing owls and burrowing owl burrows between 30 and 14 days prior to construction. The survey methodology shall be consistent with the methods outlined in the CDFW Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012). Additionally, a qualified biologist shall conduct a second pre-construction survey of the Project Site plus an approximately 500-foot buffer no more than 24 hours prior to the start of ground-disturbing activities associated with construction to identify any additional burrowing owls or burrows necessitating avoidance, minimization, or mitigation measures.

If no burrowing owls or active burrowing owl burrows (e.g., with sign present) are observed during the survey, Project Site preparation and construction activities may begin, and no further action is necessary.

If burrowing owl(s) or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project Site during the surveys, these features must be completely avoided, and the qualified biologist and Project proponent shall coordinate with CDFW prior to preparing a Burrowing Owl Plan to determine the most appropriate avoidance measures. The Burrowing Owl Plan shall describe proposed avoidance, minimization, and monitoring actions. The Burrowing Owl Plan shall include the number and location of occupied burrow sites, acres of burrowing owl habitat that will be impacted, details of site monitoring, and details on proposed buffers and other avoidance measures if avoidance is proposed. If impacts to occupied burrowing owl habitat or burrow cannot be avoided, the Burrowing Owl Plan shall also describe relocation actions that will be implemented. Proposed implementation of burrow exclusion and closure should only be considered as a last resort, after all other options have been evaluated as exclusion is not in itself an avoidance, minimization, or mitigation method and has the possibility to result in take. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls along with proposed relocation actions. The Permittee shall implement the Burrowing Owl Plan following CDFW review and approval.

If ground-disturbing activities occur but the Project Site is left undisturbed for more than 30 days, a pre-construction survey for burrowing owl shall be conducted as described above. If a burrowing owl is found, the same coordination described above shall be necessary.

BIO-5: **Pre-construction Nesting Bird Survey.** To lessen impacts to nesting birds and raptors, it is recommended that vegetation and tree removal be conducted between September 1 and January 31, outside of the typical nesting period for birds protected by the MBTA and California Fish and Game Code. If vegetation or tree removal, or initial ground disturbing Project activities are planned to occur during the nesting season (typically February through August), then a pre-construction nesting bird survey shall be performed no more than three days prior to the start of construction to determine whether the site is being used for nesting. This will avoid violations of the MBTA and California Fish and Game Code Sections 3503, 3503.5, and 3513. The pre-construction nesting bird survey shall include the Project

impact area and adjacent areas where Project activities have the potential to cause nest failure. The survey should be conducted by a qualified biologist experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures..

The pre-construction survey shall be conducted at the appropriate time of day, during appropriate weather conditions, no more than 3 days prior to the initiation of Project activities. The surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the Project Site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate.

If no nesting birds are observed during the survey, Project Site preparation and construction activities may begin. If active nests are found, they shall be flagged and a qualified biologist shall establish suitable buffers around the nest (generally a minimum of 200 feet up to 500 feet for raptors and a minimum of 50 feet up to 300 feet for passerine species, with specific buffer widths to be determined by a qualified biologist. The buffer around the nest shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines nesting species have fledged and the nest is no longer active, or the nest has failed. The qualified biologist shall monitor the nest at the onset of Project activities, and at the onset of any changes in such Project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the qualified biologist determines that such Project activities may be causing an adverse reaction, the qualified biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest) or failed. The qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished. Work can resume within these avoidance areas when no other active nests are found.

BIO-6: **Pre-construction San Bernardino Kangaroo Rat Survey.** Within two years prior to the start of Project activities, a biologist in possession of a Federal 10(a)(1)(A) Recovery Permit and CDFW Scientific Collecting Permit and Memorandum of Understanding shall perform SBKR trapping surveys in accordance with the protocols outlined by USFWS and in the biologist's permit. The survey shall consist of five consecutive nights of trapping, when the animal is active above ground and when the overnight temperatures are 50 degrees Fahrenheit or higher, while avoiding periods of overnight precipitation. The traps shall be spaced

approximately 10 meters apart and set in habitats most likely to yield SBKR, to confirm presence/absence of the species.

If San Bernardino kangaroo rat is found on the Project Site and avoidance of the location(s) is not feasible then coordination with CDFW and USFWS shall occur prior to the initiation of Project activities.

4.5 Cultural Resources

ECORP Consulting, Inc. (ECORP) prepared a Cultural Resources Inventory and Evaluation Report (ECORP 2025c; Appendix D) for the Proposed Project to determine if cultural resources were present in or adjacent to the Project Area and assess the sensitivity of the Project Area for undiscovered or buried cultural resources. Cultural resources include prehistoric archaeological sites, historic archaeological sites, and historic structures, and generally consist of artifacts, food waste, structures, and facilities made by people in the past. Prehistoric archaeological sites are places that contain the material remains of activities carried out by the native population of the area (i.e., Native Americans) prior to the arrival of Europeans in Southern California. Places that contain the material remains of activities carried out by people during the period when written records were produced after the arrival of Europeans are considered historic archaeological sites. Historic structures include houses, garages, barns, commercial structures, industrial facilities, community buildings, and other structures and facilities that are more than 50 years old. Historic structures may also have associated archaeological deposits, such as abandoned wells, cellars, privies, refuse deposits, and foundations of former outbuildings.

The information provided below is an abridged version of the Cultural Resources Inventory and Evaluation Report and is included here to provide a brief context of the potential cultural resources in the Project Area. Due to the sensitive nature of cultural resources and their records and documentation, which are restricted from public distribution by state and federal law, the IS/MND appendices do not include the cultural resources report; however, all pertinent information necessary for impact determinations is included in this section. A redacted version of the cultural resources report that does not include site records or locations may be obtained by contacting the City of Highland.

4.5.1 Environmental Setting

The records search results indicate 39 previously recorded historic-era cultural resources are located within one mile of the Project Area. However, these resources are primarily associated with infrastructure and water conveyance systems. None of the 39 resources are located within the Project Area. The nearest resource to the Project Area is the historic-era Greenspot Road Bridge over Plunge Creek. This resource was previously evaluated as not eligible for listing on the Caltrans Historic Bridge Inventory. It was relocated within close proximity to Aurantia Park and replaced in 1992.

ECORP contacted the California Native American Heritage Commission (NAHC) on April 9, 2024, to request a search of the Sacred Lands File for the Area of Potential Effect (APE) (Appendix D). This search was to determine whether Sacred Lands have been recorded by California Native American tribes within the APE, because the Sacred Lands File is populated by members of the Native American community with knowledge of the locations of tribal resources. In requesting a search of the Sacred Lands File (SLF),

ECORP solicited information from the Native American community regarding TCRs, but the responsibility to formally consult with the Native American community lies exclusively with the federal and local agencies under applicable state and federal law. The results of the Sacred Lands File search by the NAHC were positive for the presence of Native American Cultural Resources within the Project Area.

ECORP was not delegated authority by the lead agency to conduct tribal consultation.

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

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?	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

An Archaeological Resources Inventory and Evaluation Report was prepared by ECORP in 2025 (ECORP 2025c; Appendix D) for the Project to determine if cultural resources were present in or adjacent to the Project Area and assess the sensitivity of the Project Area for undiscovered or buried cultural resources. ECORP surveyed the Project Area for archaeological resources in 2024. As a result of the field survey, ECORP recorded five cultural resources within the Project Area: EH-01, EH-02, EH-03, EH-04, and EH-05-I. EH-01 is a historic-period refuse deposit, EH-02 is a historic-period foundation, EH-03 and EH-04 are pre-contact bedrock milling features, and EH-05-I is a granite mano.

ECORP then conducted subsurface testing at resource EH-01 through EH-04 in 2025, under the supervision of a tribal monitor from the Yuhaaviatam of San Manuel Nation. Resource EH-05 was not tested, as isolated artifacts do not have associated cultural materials that can be excavated. Further discussion of resource testing results is provided in Appendix D.

ECORP evaluated the significance of all five historic-period resources using the National Register of Historic Places and California Register of Historical Resources eligibility criteria. ECORP evaluated resources EH-01, EH-02, EH-03, and EH-05-I, and recommends that they are not eligible for inclusion in the NRHP and CRHR and, therefore, are not Historical Resources under CEQA or Historic Properties under National Historic Preservation Act (NHPA) Section 106. ECORP evaluated EH-04, and concludes this resource has sufficient integrity given the presence of in situ subsurface resources to yield important information. Additionally, the Sacred Lands File search by the NAHC was positive, indicating the presence of Native American resources within the Project Area. Therefore, ECORP recommends site EH-04 be considered eligible for inclusion in the NRHP and CRHR under Criterion D/4; therefore, site EH-04 is considered a Historical Resource as defined by CEQA or Historic Property under NHPA Section 106. As EH-04 is considered a Historical Resource as defined by CEQA, the Project has the potential to result in a substantial adverse change in the significance of a historical resource. Implementation of Mitigation Measure CUL-1, would ensure that impacts to resource EH-04 would be reduced to a less than significant level.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

Due to the presence of alluvium along Plunge Creek and the likelihood of pre-contact archaeological sites located along perennial waterways, combined with the positive results from a search of the NAHC Sacred Lands File, and the presence of subsurface resources determined by the testing program, the Project Area has a moderate-to-high potential for buried pre-contact archaeological sites. If previously unrecorded historical resources are encountered during construction, implementation of Mitigation Measures CUL-2, CUL-3, and CUL-4 would reduce potential impacts to a less than significant threshold.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

No formal cemeteries are located in or near the Project Area. However, the possibility exists that human remains could be uncovered during construction of the Proposed Project. Additionally, most Native American human remains are found in prehistoric and archeological sites. Due to the presence of alluvium along Plunge Creek and the likelihood of pre-contact archaeological sites located along perennial waterways, combined with the positive results from a search of the NAHC Sacred Lands File, and the presence of subsurface resources determined by the testing program, the Project Area has a moderate-to-high potential for buried pre-contact archaeological sites (ECORP 2025c Appendix D). Implementation of Mitigation Measure CUL-2, CUL-3, and CUL-4 would ensure that impacts to human remains are less than significant.

4.5.3 Mitigation Measures

CUL-1: **Monitoring and Treatment Plan.** 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 Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN, also known as San Manuel Band of Mission Indians). Once all parties review and approve the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

CUL-2: **Contractor Awareness Training.** The Lead Agency shall ensure that a Contractor Awareness Training Program is delivered to train equipment operators about cultural resources. The program shall be designed to inform construction personnel about: federal and state regulations pertaining to cultural resources and tribal cultural resources; the subsurface indicators of resources that shall require a work stoppage; procedures for notifying the lead agency of any occurrences; Project-specific requirements and mitigation measures; and enforcement of penalties and repercussions for non-compliance with the program.

The training shall be prepared by a qualified professional archaeologist and may be provided either through a brochure, video, or in-person tailgate meeting. The training shall be provided to all construction supervisors, forepersons, and operators of ground-disturbing equipment. All personnel shall be required to sign a training roster. The construction manager is responsible for ensuring that all required personnel receive the training. The Construction Manager shall provide a copy of the signed training roster to the lead agency as proof of compliance.

CUL-3: **Archaeological Monitoring.** Due to the heightened cultural sensitivity of the proposed project area, 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 area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, 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 work day to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage.

CUL-4: **Post Review Discovery.** There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, ECORP recommends the following procedures.

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
    - If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.

- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
- If the find represents a Native American or potentially Native American resource that does not include human remains, then the agencies shall consult with the tribes on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Tribal Cultural Resource under CEQA, as defined in Section 21074 of the CEQA Guidelines. Preservation in place is the preferred treatment, if feasible. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Tribal Cultural Resource under CEQA; or 2) that the treatment measures have been completed to their satisfaction.
- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the

lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

4.6 Energy

This section is based in part on the results of the Energy Analysis prepared by Urban Crossroads in September 2024 (Urban Crossroads 2024b; Appendix E). This IS/MND analyzes energy consumption due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal) and emissions of pollutants during the construction and operational phases.

4.6.1 Environmental Setting

Energy relates directly to environmental quality. Energy use can adversely affect air quality and other natural resources. The vast majority of California's air pollution is caused by burning fossil fuels. Consumption of fossil fuels is linked to changes in global climate and depletion of stratospheric ozone. Transportation energy use is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes (auto, carpool, and public transit); vehicle speeds; and miles traveled by these modes. Construction and routine operation and maintenance of transportation infrastructure also consume energy. In addition, residential, commercial, and industrial land uses consume energy, typically through the usage of natural gas and electricity.

4.6.1.1 Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with a majority of its electricity followed by renewables, large hydroelectric and nuclear (California Energy Commissions [CEC] 2021). Southern California Edison (SCE) provides electrical services to Highland through state-regulated public utility contracts. Southern California Edison, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 15 million people with electricity across a service territory of approximately 50,000 square miles.

The California Public Utilities Commission (CPUC) regulates SCE. The CPUC has developed energy efficiency programs such as smart meters, low-income programs, distribution generation programs, self-generation incentive programs, and a California solar initiative. Additionally, the CEC maintains a power plant database that describes all of the operating power plants in the state by county.

SoCalGas provides natural gas services to the Project Area and services approximately 5.9 million customers, spanning roughly 20,000 square miles of California.

4.6.1.2 Existing Transmission and Distribution Facilities

The components of transmission and distribution systems include the generating facility, switching yards and stations, primary substation, distribution substations, distribution transformers, various sized transmission lines, and the customers. The United States contains over a quarter million miles of

transmission lines, most of them capable of handling voltages between 115 kilovolts (kV) and 345 kV, and a handful of systems of up to 500 kV and 765 kV capacity. Transmission lines are rated according to the amount of power they can carry, the product of the current (rate of flow), and the voltage (electrical pressure). Generally, transmission is more efficient at higher voltages. Generating facilities, hydro-electric dams, and power plants usually produce electrical energy at fairly low voltages, which is increased by transformers in substations. From there, the energy proceeds through switching facilities to the transmission lines. At various points in the system, the energy is "stepped down" to lower voltages for distribution to customers. Power lines are either high voltage (115, 230, 500, and 765 kV) transmission lines or low voltage (12, 24, and 60 kV) distribution lines. Overhead transmission lines consist of the wires carrying the electrical energy (conductors), insulators, support towers, and grounded wires to protect the lines from lightening (called shield wires). Towers must meet the structural requirements of the system in several ways. They must be able to support both the electrical wires, the conductors, and the shield wires under varying weather conditions, including wind and ice loading, as well as a possible unbalanced pull caused by one or two wires breaking on one side of a tower. Every mile or so, a "dead-end" tower must be able to take the strain resulting if all the wires on one side of a tower break. Every change in direction requires a special tower design. In addition, the number of towers required per mile varies depending on the electrical standards, weather conditions, and the terrain. All towers must have appropriate foundations and be available at fairly regular spacing along a continuous route accessible for both construction and maintenance.

A right-of-way is a fundamental requirement for all transmission lines. A right-of-way must be kept clear of vegetation that could obstruct the lines or towers by falling limbs or interfering with the sag or wind sway of the overhead lines. If necessary, land acquisition and maintenance requirements can be substantial. The dimensions of a right-of-way depends on the voltage and number of circuits carried and the tower design. Typically, transmission line rights-of-way range from 100 to 300 feet in width. The electric power supply grid within San Bernardino County is part of a larger supply network operated and maintained by SCE that encompasses a large portion of the Southern California region. This system ties into yet a larger grid known as the California Power Pool that connects with the San Diego Gas and Electric and Pacific Gas and Electric Companies. These companies coordinate the development and operation, as well as purchase, sale, and exchange of power throughout the State of California. Within San Bernardino County, SCE owns most of the transmission and distribution facilities.

The California Independent System Operator (CAISO) manages the flow of electricity across the high-voltage, long-distance power lines (high-voltage transmissions system) that make up 80 percent of California's and a small part of Nevada's grid. This nonprofit public benefit corporation keeps power moving to and throughout California by operating a competitive wholesale electricity market, designed to promote a broad range of resources at lower prices, and managing the reliability of the electrical transmission grid. In managing the grid, CAISO centrally dispatches generation and coordinates the movement of wholesale electricity in California. As the only independent grid operator in the western U.S., CAISO grants equal access to 26,000 circuit miles of transmission lines and coordinates competing and diverse energy resources into the grid where it is distributed to consumers. Every five minutes, CAISO forecasts electrical demand and dispatches the lowest cost generator to meet demand while ensuring enough transmission capacity for delivery of power.

4.6.2 Energy (VI) Environmental Checklist and Discussion

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?	☐	☐	☑	☐

Less Than Significant Impact.

Construction

Based on CalEEMod estimations within the modeling output files used to estimate GHG emissions associated with the Project, construction-related vehicle trips would result in approximately 231,729 VMT and consume an estimated 13,986 gallons of diesel fuel during the construction phases. Additionally, on-site construction equipment would consume an estimated 49,800 gallons of diesel fuel. Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel- powered equipment and are enforced by CARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the Proposed Project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impacts related to electricity and fuel consumption would be less than significant.

Operations

Operation of the Proposed Project would consume energy as part of building operations and transportation activities. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on CalEEMod energy use estimations, operations for the Project would result in approximately 959,825 kWh/year of electricity and 3,535,738 kBtu/year of natural gas annually.

Development of the Project would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Operational energy would also be consumed during vehicle trips associated with the Project envisioned under the Proposed Project. Fuel consumption would be primarily related to vehicle use by residents and visitors associated with the Project. Based on CalEEMod energy use estimations, Project-related vehicle trips would result in an approximately 3,725,967 VMT and consume an estimated 147,418 gallons of gasoline and diesel combined, annually.

The Project would provide parking and EV infrastructure that would further reduce fuel consumption demand. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. For these reasons, this impact would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☑	☐

Less Than Significant Impact

The Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The Project would be built to the *Energy Efficiency Standards for Residential and Nonresidential Buildings*, as specified in Title 24, Part 6, of the CCR (Title 24) Title 24 was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years. The most recent Title 24 updates went into effect on January 1, 2020 (2019 Standards). The 2019 Standards focuses on several key areas to improve the energy efficiency of newly constructed and remodeled or altered buildings and are a major step toward meeting Zero Net Energy. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. Additionally, in January 2010, the State of California adopted the California Green Building Standards Code (CalGreen) that establishes mandatory green building standards for all buildings in California. The code was subsequently updated in 2013. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. Furthermore, the Project would also be consistent with the City's General Plan Conservation and Sustainable Communities Element, which strives for energy efficient design in new development. For these reasons, this impact would be less than significant.

4.6.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.7 Geology and Soils

4.7.1 Environmental Setting

The Project Site is relatively flat with a low gradient generally towards the west-northwest, with elevations ranging from approximately 1,467 feet above mean sea level (MSL) in the southeast corner to 1,445 feet above MSL in the northwest corner. The surficial soils across the site are generally loose and dry with some cobbles and boulders exposed on the ground surface.

4.7.1.1 Geomorphic Setting

A Preliminary Geotechnical Evaluation Report was prepared by Petra Geosciences Inc. in August 2024 (Petra 2024; Appendix F). The report presents data from background review, field exploration, and laboratory testing, providing conclusions regarding the geotechnical conditions at the Project Site, and provides recommendations regarding the design and construction of the proposed improvements.

Regionally, the Project Site is located within the northmost portion of the Peninsular Ranges Geomorphic Province (PRGP), near the boundary with the Transverse Ranges Geomorphic Province on a portion of a large alluvial fan that extends southwest from the adjacent San Bernardino Mountains to the northeast. The PRGP is composed of a series of ranges, separated by northwest trending valleys, subparallel to faults and extends south to Baja California, east to the Colorado Desert, and west into the Pacific Ocean.

Locally, the Project Site is located on an alluvial fan and active wash deposits emanating from Oak Creek, located less than one mile to the northeast. The alluvial-fan deposits in the vicinity of the site are on the order of hundreds of feet thick, and composed of silty sands, sands, gravel, cobble, and boulders.

4.7.1.2 Regional Seismicity and Fault Zones

The California Department of Conservation, Division of Mines and Geology, defines an *active fault* as one that has been subjected to surface displacement within the last 11,000 years. A fault is considered *inactive* if it has not shown geologic evidence of surface displacement in the last 11,000 years.

4.7.1.3 Soils

The Preliminary Geotechnical Report prepared by Petra Geosciences encountered five soil units during the excavation of twelve exploratory test pits: Artificial Fill (af), Alluvium (Qal), Silty Sand (SM), Sand with Silt (SP-SM), and Sand (SP) (Petra 2024; Appendix F).

4.7.1.4 Paleontological Resources

The Society for Vertebrate Paleontology (SVP) defines four categories of paleontological sensitivity for rock units: High Potential, Low Potential, Undetermined Potential, and No Potential. The County of San Bernardino General Plan EIR identifies the Project Site as within an area of Low-to-High Paleontological Sensitivity (SB County 2019). The Cultural Resource Section of the County's 2019 General Plan EIR, and CGS's geologic map of California identify the Project Site is underlain by Pleistocene-Holocene Age

Alluvium Sediments (Q: Younger Alluvium) GCS identifies surficial deposits at the Project Site include Qal (Alluvial Valley Deposits), and Qw (Alluvial Wash Deposits) (SB County 2019; CGS 2025).

4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause 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?	☐	☐	☑	☐

Less than Significant Impact (i, ii)

The Project Site is not located in an Alquist-Priolo Earthquake Fault Zone and no known faults cross the Project Site. However, the Project Site is located in a seismically active region of Southern California, where several fault systems are considered to be active or potentially active. Nearby active faults are present in the San Andreas Fault Zone, located approximately 0.4-miles north of the Project Site (DOC 2025). The Project Site may be subject to ground shaking in the event of an earthquake originating along one of the faults designated as active or potentially active in the Project vicinity. This hazard is common throughout California. Additionally, the Project would be constructed in compliance with the California Building Code as well as City development standards, and the recommendations presented within the site-specific geotechnical report. Therefore, the proposed development on the Project Site would pose no greater risk to public safety or destruction of property than is already present for the region. A less than significant impact would occur.

Less than Significant Impact (iii)

Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. Typically, liquefaction occurs in areas where groundwater lies within the upper 50 feet of the ground surface. The loss of soil strength occurs when cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include the loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements.

The Project Site is located within a San Bernardino County Liquefaction Zone, generally susceptible to medium liquefaction. However, due to the gravelly to cobbly nature of the underlying alluvial-fan materials, as well as the depth to groundwater (expected to be deeper than 100 feet bgs), the potential for liquefaction is considered to be very low (Petra 2024; Appendix F). Thus, neither liquefaction nor dynamic settlement were identified as major geotechnical concerns for site development. Additionally, the Project would be constructed in compliance with the California Building Code as well as City development standards, and the recommendations presented within the site-specific geotechnical report. A less than significant impact would occur, and no mitigation is required.

Less than Significant Impact (iv)

The Project Site is relatively flat and is located outside of a general landslide susceptibility zone (SB County 2025). The City of Highland General Plan identified the Project Site as being located within Landslide Zone 1, the Lowest Susceptibility zone (Highland 2006). As such, the Project Site is not located in an area that would be highly susceptible to landslides.

Secondary effects of seismic activity normally considered as possible hazards to a site include several types of ground failure. Various general types of ground failures, which might occur due to severe ground shaking at the site include ground subsidence, ground lurching, and lateral spreading. The probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from faults, topography, subsoil, and groundwater conditions, among other factors. The potential for ground lurching and lateral spreading are considered very low. Additionally, the Project would be constructed in compliance with the California Building Code as well as City development standards, and the recommendations presented within the site-specific geotechnical report. Therefore, a less than significant impact would occur, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐

Less than Significant Impact.

Implementation of the Proposed Project would require ground-disturbing activities, such as grading, which could potentially result in soil erosion or loss of topsoil. Erosion is a condition that could adversely affect development on any site. Site grading could temporarily exacerbate erosion conditions, but implementation of erosion control measures would limit such effects. Construction of the Proposed Project would be required to comply with the Construction General Permit, which would require the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Best Management Practices (BMPs) are included as part of the SWPPP prepared for the Proposed Project and would be implemented to manage erosion and the loss of topsoil during construction-related activities (see Section 10., Hydrology and Water Quality of this Initial Study). The Proposed Project's grading plan would also

ensure that the proposed earthwork is designed to avoid soil erosion. Impacts associated with soil erosion or the loss of topsoil would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☑	☐

Less than Significant Impact.

Please refer to the responses to Section 4.7 question a), above. The Project would comply with the California Building Code. Impacts related to an unstable geological unit or soil resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☑	☐

Less than Significant Impact.

Expansive soils can shrink and swell with drying and wetting. The shrink-swell potential of expansive soils can result in differential movement beneath foundations. Two soil units or types were encountered within the Project Site: Artificial Fill, and Alluvial Fan Deposits (Petra 2024; Appendix F). Laboratory testing conducted by Petra found soils within the Project Site are very sandy and have a very low expansion potential. Furthermore, with implementation of the Conclusions and Recommendations of the Final Site-Specific Geotechnical Report, near-surface compacted fill soils within the site are expected to exhibit an expansion index of 0 to 20, or non-expansive. As such, a less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☑

No Impact.

The Proposed Project would be connected to the local wastewater treatment system. The Project does not include septic tanks or alternative wastewater disposal systems. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

The Proposed Project would be located near Oak Creek, and along existing Roadways. As stated previously, the San Bernardino County General Plan identifies the Project Site as being located within an area of Low-to-High Paleontological Sensitivity (SB County 2019). Artificial fill was observed overlaying two of the twelve test pits excavated as part of the Preliminary Geotechnical Report at a depth of 1.5 to 2.5-feet. Alluvial fan deposits were noted at all twelve of the test pit locations (Petra 2024; Appendix F). Excavation required during construction would generally be limited to less than five feet below the existing ground level to accommodate recommended over excavations. However, the actual depths and horizontal limits of removals and over-excavations would be evaluated during grading by the Project's geotechnical consultant (Petra 2024; Appendix F). Excavation in sediments below the level of previous disturbance has the potential to encounter unknown paleontological resources. With the implementation of Mitigation Measure GEO-1 impacts from the unanticipated discovery of paleontological resources would be less than significant.

4.7.3 Mitigation Measures

GEO-1: **Unanticipated Discovery of Paleontological Resources.** If paleontological resources are discovered during Project construction, a 50-foot buffer would be established around a find until a qualified paleontologist has determined the significance of the find. All work in the area of the find shall cease and a qualified paleontologist shall be retained by the City to investigate the find and to make recommendations on its disposition.

4.8 Greenhouse Gas Emissions

This section is based in part on the results of the Greenhouse Gas Analysis conducted for the Project (Urban Crossroads 2024c; Appendix G). This analysis was prepared using methods and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD). This section presents regional and local existing conditions in addition to pertinent Greenhouse Gas (GHG) emissions-related standards and regulations. The purpose of this assessment is to estimate Project-generated GHG emissions and to determine the level of impact the Project would have on the environment.

4.8.1 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

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?	☐	☐	☑	☐

Less Than Significant Impact.

The City of Highland has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 MTCO2e/yr to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City of Highland and numerous cities in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required.

4.8.1.1 Project Construction-Generated Greenhouse Gas Emissions

Construction-related activities that would generate greenhouse gas (GHG) emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., tractors, graders, dozers). Construction-generated GHG emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Construction is anticipated to last approximately 12 months. Construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. Please refer to Appendix G for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 4.8-1. Construction-Related Greenhouse Gas Emissions	
Year	**CO_2e (Metric Tons / Year)**
2026	475.93
2027	0.81
Total	476.74
SCAQMD Threshold	*3,000*
Exceed Threshold?	**No**

Source: CalEEMod version 2022.1.1.26. Refer to Appendix G for Model Data Outputs.

As shown in Table 4.8-1, Project construction would result in the generation of approximately 476.74 metric tons of carbon dioxide equivalents per year ($MTCO_2e/yr$) over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD recommendations, Project construction GHG emissions have been amortized of the expected life of the Project, which is considered to be 30 years per the SCAQMD. The amortized construction emissions are added to the annual average operational emissions (see Table 4.8-2).

As such, the Project would not exceed the SCAQMD's numeric bright-line threshold of 3,000 metric tons of CO_2e annually. Therefore, the impact is less than significant.

4.8.1.2 Project Operational Greenhouse Gas Emissions

Operation of the Project would result in an increase in GHG emissions primarily associated with mobile sources. Long-term operational GHG emissions attributed to the Project are identified in Table 4.8-2.

Table 4.8-2 Operational-Related Greenhouse Gas Emissions	
Emissions Source	**CO_2e (Metric Tons/ Year)**
Construction Emissions (amortized over the 30-year life of the Project)	15.89
Area Source	28.96
Energy	339.73
Mobile	1337.21
Waste	34.09
Water	13.12
Refrigerants	0.22
Total:	**1,769.22**

Source: Urban Crossroads 2024c; Appendix G, CalEEMod version 2022.1.1.26 Refer to Appendix 3.1 of Urban Crossroads 2024c; Appendix G for Model Data Outputs.

As shown in Table 4.8-2, The Project would result in approximately 1,769.22 MTCO2e/yr; the proposed Project would not exceed the SCAQMD's numeric threshold of 3,000 MTCO2e/yr. Additionally, the Project

would be consistent with the CARB 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), as described in Section 8, Response b), below, Thus, the Project would result in a less than significant impact with respect to GHG emissions.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

Less than Significant Impact.

The City of Highland does not currently have an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. However, the State of California promulgates several mandates and goals to reduce statewide GHG emissions, including the goal to reduce statewide GHG emissions to 1990 levels by the year 2020 (Assembly Bill 32), and the goal to reduce statewide GHG emissions to 40 percent below 1990 levels by the year 2030 (Senate Bill 32). As previously stated, pursuant to 15604.4 of the *CEQA Guidelines*, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions (54). As such, the Project's consistency with the 2022 Scoping Plan, is discussed below. It should be noted that the Project's consistency with the 2022 Scoping Plan also satisfies consistency with AB 32 since the 2022 Scoping Plan is based on the overall targets established by AB 32 and SB 32. Consistency with the 2008 and 2017 Scoping Plan is not necessary since both of these plans have been superseded by the 2022 Scoping Plan. For reasons outlined herein, the proposed Project would result in a less than significant impact with respect to GHG emissions.

4.8.1.3 2022 Scoping Plan Consistency

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the Project will comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, Off-Road Zero-Emission Targeted Manufacturer Rule, Clean Off-Road Fleet Recognition Program, Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation, carbon pricing through the Cap-and-Trade Program, and the Low Carbon Fuel Standard. As such, the Proposed Project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs Therefore, this impact would be less than significant. No mitigation is required.

4.8.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined by the California Health and Safety Code, Section 25501 as follows:

> "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

A hazardous material is defined in 22 CCR Section 662601.10 as follows:

> A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

Transporters of hazardous waste in California are subject to several federal and state regulations. They must register with the California Department of Health Services (DHS) and ensure that vehicle and waste container operators have been trained in the proper handling of hazardous waste. Vehicles used for the transportation of hazardous waste must pass an annual inspection by the California Highway Patrol (CHP). Transporters must allow CHP or DHS to inspect their vehicles and must make certain required inspection records available to both agencies. The transport of hazardous materials that are not wastes is regulated by the U.S. Department of Transportation through national safety standards.

Other risks resulting from hazardous materials include the use of these materials in local industry, businesses, and agricultural production. The owner or operator of any business or entity that handles hazardous material above threshold quantities is required by state and federal laws to submit a business plan to the local Certified Unified Program Agency (CUPA). The San Bernardino County Fire Department is designated by the State Secretary for Environmental Protection as the CUPA for San Bernardino County in order to focus the management of specific environmental programs at the local government level. The CUPA program is designed to consolidate, coordinate, and uniformly and consistently administer permits and conduct inspection and enforcement activities throughout San Bernardino County. This approach strives to reduce overlapping and sometimes conflicting requirements of different governmental agencies independently managing these programs. The County will refer large cases of hazardous materials contamination or violations to the Santa Ana Regional Water Quality Control Board (SARWQCB) (Region 6) and the California Department of Toxic Substances Control (DTSC). It is not uncommon for other agencies, such as federal and state Occupational Safety and Health Administrations, to become involved when issues of hazardous materials arise.

Under Government Code Section 65962.5, both the DTSC and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites. The Project Site is not listed by the DTSC as a hazardous substances site on the list of hazardous waste sites compiled pursuant to Government Code § 65962.5 (Cortese List). Per the SWRCB Cortese List, the nearest hazardous site is a LUST Cleanup Site located approximately 1-mile from the Project Site at 7000 Club View Drive. The cleanup status is complete, and the case was closed in October 1994.

4.9.2 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

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?	☐	☐	☑	☐

Less than Significant Impact.

Construction

The construction phase of the Project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, pesticides, and other similar materials. The transport of hazardous materials by truck is regulated by federal safety standards under the authority of the U.S. Department of Transportation. Additionally, the implementation of BMPs stipulating proper storage of hazardous materials and vehicle refueling would be implemented during construction as part of the Stormwater Pollution Prevention Plan (SWPPP). All transport, handling, use, and disposal of substances such as petroleum products paints, and solvents related to the operation and maintenance of the Project would comply with all federal, state, and local laws regulating management and use of hazardous materials. Therefore, the use of such material would not create a significant hazard to the public and impacts would be less than significant.

Operation

The operation phase of the Project would involve the operation of the proposed residential Project. The types and amounts of hazardous materials that would be used in connection with the occupancy of the Proposed Project would be typical of residential uses, such as cleaning solutions, solvents, pesticides for landscaping, painting supplies, and petroleum products used in normal vehicles operations. These substances can be hazardous in high concentrations; however, the routine and proper use of these standard construction and household products would not result in significant hazards due to small quantities of use. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☑	☐

Less than Significant Impact.

Construction

Construction personnel would maintain supplies on-site for containing and cleaning small spills of hazardous materials such as diesel and gasoline fuels, paints, solvents cement, and asphalt. Furthermore, construction activities would be conducted in accordance with the Storm Water Pollution Prevention Plan (SWPPP) as part of the National Pollution Discharge Elimination System (NPDES) permit. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non stormwater discharges from the construction site. BMPs for hazardous materials may include, but are not limited to, off- site refueling, placement of generators on impervious surfaces, establishing cleanout areas for cement, etc.

Operation

While the risk of exposure to hazardous materials cannot be eliminated, adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials and with the safety procedures mandated by applicable federal, state, and local laws and regulations. Compliance with these regulations would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with the Project and the potential for accident or upset is less than significant.

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

No Impact.

There are no schools located within a one-quarter mile radius of the Project Site (Google Earth 2025). The closest school to the Project Site is Cram Elementary, approximately 0.35-miles northwest of the Project Site at 29700 Water Street. Therefore, no impact would occur in this regard.

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

No Impact.

Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC), the State Department of Health Services, the State Water Resources Control Board (SWRCB), and the California Integrated Waste Management Board to compile and annually update lists of hazardous waste sites and land designated as hazardous waste property throughout the State.

The California Environmental Protection Agency's (CalEPA) Cortese List Data Resources records were reviewed to help determine whether hazardous materials have been handled, stored, or generated on the Project Site or the adjacent properties and businesses (CalEPA 2025). The list, although covering the requirements of Section 65962.5, has always been incomplete because it does not indicate if a specific site was at one time included in the abandoned site program.

The list is a compilation of five separate websites that includes:

1. DTSC's EnviroStor – identifies waste or hazardous substances sites.
2. SWRCB's GeoTracker – identifies underground storage tanks for which an unauthorized release report was filed, cleanup sites, and all solid waste disposal facilities from which there is a mitigation of hazardous waste for which a regional board has notified DTSC.
3. A pdf of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit.
4. A list of cease-and-desist orders and clean up and abatement orders.
5. A list of hazardous waste facilities subject to corrective action.

Results of the records search indicate the following:

- DTSC's EnviroStor indicated that that Project Site was not identified as a hazardous waste or substances site (DTSC 2023).
- GeoTracker did not identify the Project Site as having an underground storage tank for which an unauthorized release report was filed, a cleanup site, or a solid waste disposal facility from which there is a mitigation of hazardous waste for which a regional board has notified DTSC (SWRCB 2023). The database indicates that the nearest hazardous site is a LUST Cleanup Site located approximately 1-mile from the Project Site at 7000 Club View Drive. The cleanup status is complete, and the case was closed in October 1994.

- A list of solid waste disposal sites with waste constitutes above hazardous waste levels outside the waste management unit was also checked. No records were listed.
- The list of cease-and-desist orders and clean up and abatement orders did not include the Project Site.
- The list of hazardous facilities subject to corrective action does not include the Project Site.

As the Project Site is not listed on one of the five websites provided to fulfill the Cortese List, the Project would not create a significant hazard to the public or the environment. Furthermore, as part of the Phase I ESA prepared by RMA Group, a search of governmental records pertaining to hazardous materials and wastes was made by EDR, an environmental records search firm. The search encompassed federal, state, regional, and local records. Environmental concerns were searched within a radius of 0.25- to 1-mile of the Project Site, or limited to the target property, depending on the record searched. The record search did not identify any environmental issues at the Project Site.

A total of three sites were identified within a one-mile radius of the Project Site, and no violations were reported for any of the three sites.

Two of the three sites, 29906 and 2996 Santa Ana Canyon Road, are listed as having underground storage tanks. 29906 Santa Ana Canyon Road is listed on the CA FID UST and SWEEPS UST lists and 29996 Santa Ana Canyon Road is listed on the historic underground storage tank (UST) list. Both sites are listed as being under the same ownership, and both addresses list two tanks, one 280-gallon and one 550-gallon. This appears to be the same site, the citrus orchard north of the site and Santa Ana Canyon Road. The closest structures on the orchard site is about 150-feet from the site. Neither address is listed on the GeoTracker website. The third site is listed is a Verizon Wireless property at 29700 Greenspot Road listed as San Bernardino County permitted hazmat handler. The orphan sites identified by EDR appear to be sufficiently distant so as not to be a concern with respect to the subject site. The results of the EDR record search are presented in the Phase I Environmental Site Assessment (ESA), included as Appendix H (RMA 2014).

In conclusion, there are no hazardous waste facilities and sites with known contamination, or sites where there may be reasons to investigate further located on the Project Site or in its vicinity. Therefore, no impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project Area?	☐	☐	☐	☑

No Impact.

The Redlands Municipal Airport and San Bernardino International Airport (SBD) are the two closest Airports to the Project Site. SBD does not have an adopted Airport Land Use Compatibility Plan (ALUCP) and is located approximately 3.5-miles west of the Project Site, beyond I-210. The closest airport is Redlands Municipal, located approximately 1.7-miles south of the Project Site. As depicted on the Redlands Municipal ALUCP Noise Contour Figure, the Project Site is located outside of the 60 dBA CNEL noise contour, and outside of common flight tracks (Redlands 2003). Additionally, as noted in the City of Highland's General Plan Public Health, Safety and Environment Section, the Project Site is located outside of the Redlands Municipal and SBD influence areas, and Redlands Municipal Airport Area of Special Compatibility Concern (Highland 2006). Although the Project Site is located within the vicinity of two airports, it is not located within an airport land use planning area. As such, no impact would occur.

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

Less than Significant Impact.

The City of Highland General Plan identifies Greenspot Road as an east-west evacuation route for the City. Additionally, the general plan notes that population impacts on emergency response services are currently evaluated on a project-by-project basis through the development review process (Highland 2006). During construction, the contractor would be required to maintain adequate emergency access for emergency vehicles as required by the City. The Proposed Project would require construction within the Greenspot Road ROW and require temporary lane closures for the construction of a new 48-inch storm drain within the Greenspot Road ROW (Figure 3). As the Proposed Project would require improvements within an emergency evacuation route identified by the City of Highland, the Project would require the preparation and implementation of a Traffic Control Plan (TCP) prior to any lane closures to ensure proper access to residences by emergency vehicles during construction and to maintain traffic flow on Greenspot Road. With the implementation of a TCP, Project construction impacts to emergency access would be reduced to a less than significant level.

Site access for operations would be subject to approval of the Site Plan by the City. Development facilitated by the Project would accommodate future population growth and would increase vehicle miles travelled in the City. This could lead to increased congestion during emergency evacuations. However, the City reviews and approves projects to ensure that emergency access meets City standards. This Project would comply with road standards and would be reviewed by the City to ensure development would not interfere with evacuation routes and would not impede the effectiveness of evacuation plans. Therefore, the Project would not impair implementation of or physically interfere with evacuation or emergency response plans. Therefore, the Project would have a less than significant impact.

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

Less than Significant Impact.

The Project Site is located within a Very High Fire Hazard Severity Zone (VHFHSZ), and Local Responsibility Area (LRA). The City of Highland requires development review for projects located within a VHFHSZ. The Proposed Project's site plan has been reviewed by the City's Fire Marshall, Craig Sanchez. The Proposed Project would be developed in compliance with the requirements of the City of Highland's Municipal Code, California Fire Code, and California Building Code. These standards include building requirements that increase wildfire resilience, including require home hardening and defensible space in accordance with state standards within Very High Fire Hazard Severity Zones.

As the Project would comply with all applicable codes and standards, including compliance with the most current Fire Safe Regulations and Fire Hazard Reduction around Buildings and Structures Regulations. Additionally, the Project would require the preparation of a Fire Protection Plan that describes Project-specific fuel modification shall be required. A less than significant impact would occur.

4.9.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 Site Hydrology and Onsite Drainage

The existing Project Site is currently vacant, generally flat, and vegetation consists primarily of grasses, flowering plants, large bushes, small trees on the north half of the site, and grasses, shrubs, and small trees on the south end of the site. The preliminary Hydrology Report prepared by Kimley-Horn and Associated (Kimley-Horn 2024a; Appendix I) identified two drainage areas (DA) on the Project Site. The first drainage area, DA-1 flows drain west of the site where the stormwater flows currently experience some localized ponding onsite before continuing downstream through the natural drainage course. The second, DA-2, sheet flows west towards Alta Vista and ultimately onto the street continuing westerly on Greenspot Road along curb and gutter until it is conveyed to an existing public storm inlet located on Weaver Street.

Under existing conditions, the Project Site not only conveys onsite flows, but it also accepts offsite flows from the north from a low point in Santa Ana Canyon Road. Offsite flows sheet flow onsite and mix with onsite flows. The combined onsite and offsite flows will ultimately discharge west, as described above.

The Project Site also accepts flows from an existing 36-inch reinforced concrete pipe (RCP) storm drain at the northern boundary of the Project Site. The existing 36-inch RCP storm drain conveys to an existing outlet headwall into a rock swale, which ultimately discharges into the site. The existing 36-inch RCP storm drain discharging into the Project Site does not have any direct connections from the Project Site.

4.10.2 Hydrology and Water Quality (X) Environmental Checklist and Discussion

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?	☐	☐	☑	☐

Less than Significant Impact.

Potential water quality impacts associated with the Proposed Project include short term construction-related erosion/sedimentation and construction related hazardous materials discharge. Because the area of disturbance affected by the construction of the Proposed Project would exceed one acre, the Proposed Project would be subject to the requirements of the statewide National Pollutant Discharge Elimination System (NPDES) stormwater permit for construction activity (Order 98-08 DWQ), and as such would prepare a SWPPP in accordance with the Statewide Construction General Permit. Impacts associated with construction-related water quality impacts would be avoided or reduced to a less than significant level through implementation of standard construction BMPs and conformance with the NPDES requirements.

During Project operations a Water Quality Management Plan (WQMP) would be implemented to comply with the State Water Resources Control Board (SWRCB) MS4 permit requirements. The Conceptual WQMP prepared by Kimley-Horn details the Proposed Project's stormwater management system to address post-construction runoff quality and quantity (Kimley-Horn 2024b; Appendix J). The Project's stormwater management system would include two detention basins along the Project Site's southern boundary along Greenspot Road within Lots C and P (Figure 3) as well as permanent post-construction BMPs for water quality control to allow for onsite stormwater infiltration. Therefore, impacts to surface or ground water quality during Project operation would be less than significant.

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

Less than Significant Impact.

The Proposed Project would include both pervious (detention basin and landscape areas) and impervious (hardscapes, building footprints) surfaces. The Project would not involve the withdrawal of groundwater.

Water supply for the residential uses would be provided by the East Valley Water District (EVWD). The Proposed Project's stormwater management system includes the use of two detention basins, which would allow for groundwater recharge. Therefore, the Project is not anticipated to substantially affect groundwater recharge. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
i) result in substantial erosion or siltation onsite or offsite;	☐	☐	☑	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	☐	☐	☑	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☑	☐
iv) impede or redirect flood flows?	☐	☐	☑	☐

Less than Significant Impact.

i) The Proposed Project would be subject to City review and approval which would ensure that the proposed grading plan and stormwater management system meet City development standards. As such, implementation of an approved grading plan is not anticipated to result in the substantial alteration of existing drainage patterns in a manner that could result in substantial erosion or siltation on- or off-site. Furthermore, the site is relatively flat and there are no streams or rivers on the Project Site that would be affected. Impacts would be less than significant.

ii) As stated previously, the Proposed Project's stormwater management system would manage surface runoff originating from the Project Site. The Proposed Project's stormwater management system includes the use of two new water retention basins, and an offsite storm drain connection to the existing box culverts approximately 0.3-mile west of the Project Site traversing underneath Greenspot Road. Surface runoff would be primarily conveyed to these facilities via surface flows. Water retention facilities are designed to allow stormwater to infiltrate into the ground, reducing the velocity and volume of stormwater that is discharged

from the Project Site. As such, the potential for flooding on- or off-site is reduced. Impacts would be less than significant.

iii) The Proposed Project's stormwater management system was designed by a registered civil engineer to ensure that the system's components are sized to treat the runoff volumes that are anticipated for the post-development condition. The system has also been designed to treat polluted runoff that is typical for residential development. Additionally, as detailed in the Conceptual WQMP for the Proposed Project, Permanent and Operational Source Control Measures for the Project include maintaining landscape using minimum or no pesticides and sweeping sidewalks regularly to prevent accumulation of litter/debris (Kimley-Horn 2024b). Impacts would be less than significant.

iv) The proposed grading plan and stormwater management system are designed to prevent flooding conditions. Runoff from the proposed development would be conveyed to the Project Site's detention basin for on-site infiltration. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	☐	☐	☑	☐

Less than Significant Impact.

Flood Hazard

The site is located in Zone A and Zone X per the Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM) panel 06071C8707J, dated September 2, 2016 (FEMA 2016). Zone A, special flood hazard areas subject to inundation by the 1% annual chance flood, is defined by FEMA as the 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The section of the Project Site located in Zone A will be rezoned through a Letter of Map Revision based on Fill (LOMR-F), from Zone A to Zone X. According to FEMA, LOMR-F is applicable under the following circumstances;

> *"small areas where **earthen fill** may have been placed during construction, thereby elevating a small area within the SFHA to an elevation that is at or above the BFE. This construction may have taken place during the time the engineering study was being performed or subsequent to that study. Because of the limited extent of the elevated area and the limitations of the map scale, it may not have been possible for FEMA to show this area as being outside the SFHA and so these areas have been incorrectly included in the SFHA on the FIRM" (FEMA 2025).*

Pending review of Project Site conditions and approval of LOMR-F by FEMA, the Project Site would be located wholly within FEMA Zone X, or areas determined to be outside the 0.2% annual chance flood. With the approval of LOMR-F, a less than significant impact would occur.

Tsunami / Seiche

The potential for seismically induced flooding due to tsunami, seiche (i.e., a wave-like oscillation of the surface of water in an enclosed basin), is considered negligible due to the sites distance from the Pacific Ocean and closed bodies of water, respectively. As such, risk of pollutant release as a result of tsunami or seiche is unlikely. A less than significant impact would occur.

Seven Oaks Dam Failure

Extrapolation of the County of San Bernardino Flood Control District, Seven Oaks Dam, Dam Inundation Based on Dam Breach Map 2 of 7, failure of the Seven Oaks Dam, located approximately 3 miles to the east, would result in inundation in roughly 15 minutes from the breach, with water encompassing the entire site, ranging from approximately 5 feet in the north to 20 feet in the south (Petra 2024). These numbers are based on the dam failing while at capacity. To date, the dam has only ever been filled to one-third of its capacity, and the dam was built to withstand a magnitude 8.0 earthquake (Petra 2024). Based on the dam's design and limited actual storage, the probability of the site becoming inundated is considered very low (Petra 2024). As the risk of Project inundation as a result of dam failure at Seven Oaks Dam is considered very low, the release of pollutants as a result of Project inundation is unlikely. Therefore, a less than significant impact would occur.

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

Less than Significant Impact.

The Proposed Project would comply with the NPDES stormwater permit for construction activity (Order 98-08 DWQ), and as such would prepare a SWPPP. Furthermore, operation of the Project would comply with the requirements of the final approved WQMP. Therefore, construction and operation of the Proposed Project would not interfere with any groundwater management or recharge plan. Impacts would be less than significant.

4.10.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.11 Land Use and Planning

4.11.1 Land Use and Planning (XI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☑	☐

Less than Significant Impact.

The Proposed Project would construct 113 single-family residential units on approximately 12 gross acres north of Greenspot Road, along either side of Alta Vista in the City of Highland. The Project Site is currently undeveloped and is surrounded by residential uses, radio towers, and vacant land. The Proposed Project would not physically divide an established community, as the Project would be completely located within an undeveloped lot and all associated development would be confined to the Project Site. Although the Proposed Project would require a General Plan Amendment and Zone Change, the Project would not cause a separation of uses, disrupt access between land uses, nor divide an established community. Therefore, a less than significant impact would occur.

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

Less than Significant Impact.

The Proposed Project would have a gross density of 9.42 du/ac. The Project would require both a General Plan Amendment and Zone Change as the Project's proposed density would not comply with the adopted land use plan. As such, the Project proposes to amend the General Plan land use designation of the assessor's parcel numbers (APNs) 1210-371-16 and 1210-371-14 from Low Density Residential: Max 6 du/ac LDR to Planned Development: Max 9.42 du/ac (PD). Densities for Planned Development areas vary and typically range from 4.6 to 12.0 dwelling units per acre.

Additionally, a zoning designation amendment is proposed for APNs 1210-371-16 and 1210-371-14 to change them from Single-Family Residential R-10,000 to PD. With the land use designation and zoning amendments, the Proposed Project would conform with the City's General Plan and zoning designations. The Project, under the City's Project/Design Review Procedure, would be reviewed for approval by City Staff or Planning Commission. Therefore, with adoption of the proposed General Plan and Zoning amendments, the Proposed Project would be consistent with the applicable land use plans, policies, and regulations. Impacts would be less than significant.

4.11.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.12 Mineral Resources

4.12.1 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed by inorganic processes and organic substances. Minable minerals are defined as a deposit of ore or minerals having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area. The conservation, extraction, and processing of mineral resources is essential to meeting the needs of society.

The Surface Mining and Reclamation Act of 1975 (SMARA) states that cities and counties shall adopt ordinances "...that establish procedures for the review and approval of reclamation plans and financial assurances and the issuance of a permit to conduct surface mining operations..." (PRC Section 2774). The intent of this legislation is to ensure the prevention or mitigation of the adverse environmental impacts of mining, the reclamation of mined lands, and the production and conservation of mineral resources are consistent with recreation, watershed, wildlife, and public safety objectives (PRC Section 2712).

SMARA requires the State Geologist to classify land into Mineral Resource Zones (MRZs) according to the known or inferred mineral potential of that land. The process is based solely on geology, without regard to existing land use or land ownership. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision makers and considered before land use decisions, which could preclude mining, are made. Areas subject to California mineral land classification studies are divided into the following MRZ categories that reflect varying degrees of mineral potential:

- MRZ-1: Areas of no mineral resource significance
- MRZ-2: Areas of identified mineral resource significance
- MRZ-3: Areas of undetermined mineral resource significance
- MRZ-4: Areas of unknown mineral resource significance

4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion

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?	☐	☐	☑	☐

Less than Significant Impact.

The Project Site is located in an area classified by the California Geological Survey as Mineral Resource MRZ-2 (Highland 2006), where significant deposits are likely to be present. As noted in the City's General Plan, more than half of the City is underlain by MRZ-2 rated mineral resources. The nearest active mining operation to the Project Site is the CEMEX Highland Redlands Aggregates Quarry, approximately 1-mile southwest of the Project Site. The City contains approximately 6,052-acres of land classified as MRZ-2, with 2,345-acres remaining undeveloped (Highland 2006).

The Proposed Project would result in the loss of 12-acres of a known mineral resource that would be of value to the region and the residents of the state, or less than one percent (0.51-percent) of the remaining undeveloped MRZ-2 area within the City of Highland. However, the Project Site is located within an area characterized by residential land uses and is not zoned for mineral resource production. Therefore, the Project would result in a less than significant impact on mineral resources.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☑	☐

Less than Significant Impact.

As stated previously, although the 12-acre Project Site is located within an area containing known mineral resources, the Project Site is located within an area characterized by residential land uses and is not zoned for mineral resource production. Further, more than half of the City is underlain by MRZ-2 rated mineral resources attributed to the large washes and stream channels located in the City. The Project would result in the loss of less than one percent of the MRZ-2 area within the City of Highland. As such, a less than significant impact would occur.

4.12.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.13 Noise

This section documents the results of a Project Noise Impact Assessment, prepared by Urban Crossroads in January 2025 (Urban Crossroads 2025a; Appendix K), as a comparison of predicted Proposed Project noise levels to noise standards promulgated by the City of Highland Municipal Code. The purpose of this section is to estimate Project-generated noise levels and determine the level of impact the Proposed Project would have on the environment. This section describes the existing environmental and regulatory conditions specific to noise and addresses the potential impact posed by the Proposed Project.

4.13.1 Environmental Setting

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- **Equivalent Noise Level (L_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **Day-Night Average (L_{dn})** is a 24-hour average L_{eq} with a 10-dBA "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- **Community Noise Equivalent Level (CNEL)** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations.

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed (FHWA 2011).

4.13.1.1 Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0-dBA change is considered a just-perceivable difference.
- A change in level of at least 5.0 dBA is required before any noticeable change in community response would be expected. An increase of 5.0 dBA is typically considered substantial.
- A 10.0-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

4.13.1.2 Noise Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as hospitals, historic sites, cemeteries, and certain recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The nearest existing noise-sensitive land uses to the Project Site are residential properties adjacent to the northern Project Site boundary, and a residence to the east on Greenspot road. Sensitive receptor locations are depicted in Figure 6.

4.13.1.3 Vibration Fundamentals

Ground vibration can be measured several ways to quantify the amplitude of vibration produced, including through peak particle velocity (PPV) or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively.

Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

4.13.1.4 Existing Ambient Noise Environment

The most common and significant source of noise in the City of Highland is mobile noise generated by transportation-related sources. Other sources of noise are the various land uses (i.e., residential and commercial) that generate stationary-source noise. The Project Site is bound by residences to the north radio towers to the west, undeveloped land and Greenspot Road to the south, and San Bernardino County Flood Control District owned lands including Oak Creek to the east. As shown in Table 4.13-1 below, the ambient recorded daytime noise levels range from 55.1 to 70.7 dBA L_{eq} near the Project Site. Nighttime ambient noise levels ranged from 44.3 to 66.7 dBA L_{eq}.

4.13.1.5 Existing Ambient Noise Measurements

The Project Site is currently undeveloped land surrounded mainly by residences and vacant land. To quantify existing ambient noise levels in the Project Area, Urban Crossroads. conducted a 24-hour noise measurement. This 24-hour noise measurement site is representative of typical existing noise exposure on the Project Site during a typical 24-hour day (Urban Crossroads 2025a; Appendix K). The average noise levels and sources of noise measured at each location are listed in Table 4.13-1.

Table 4.13-1. Existing (Baseline) Noise Measurements

24 Hour Noise Measurement			
Location Number	**Location**	**Energy Average Noise Level (L_{eq} dBA)**	
		Daytime	**Nighttime**
1	Located west of the site near the residence at 7914 Calle Del Rio St.	70.7	66.7
2	Located north of the site near the residence at 7796 Alta Vista	58.9	54.5
3	Located northwest of the site near the residence at 29894 Santa Ana Canyon Rd.	51.1	44.3
4	Located northeast of the site near the residence at 7735 Henslee Dr.	55.2	49.4

Source: Urban Crossroads 2025a; Appendix K
Notes: [1] See Figure 6 for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Table 4.13-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. The ambient recorded

daytime noise levels range from 51.1 to 70.7 dBA L_{eq} over the course of the 24-hour noise measurements taken in the Project vicinity. The most common noise in the Project vicinity is produced by automotive vehicles (e.g., cars, trucks, buses, motorcycles) on nearby roadways, primarily Greenspot Road.

4.13.2 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☑	☐	☐

Less Than Significant with Mitigation Incorporated.

Noise impacts can occur from construction operations and long-term operations of a project, which for residential projects consist of vehicle traffic noise, and stationary sources, such as air conditioning noise. Potential noise impacts from these sources were analyzed in the report, East Highland Ranch – Alta Vista Noise Impact Analysis, prepared by Urban Crossroads, dated January 8, 2025, and included in Appendix K.

Construction Noise

To describe the temporary Project construction noise level contributions to the existing ambient noise environment, the Project construction noise levels were combined with the existing ambient noise level measurements at the nearest off-site receiver locations. The difference between the combined Project-construction and ambient noise levels is used to describe the construction noise level contributions. Temporary noise level increases that would be experienced at sensitive receiver locations when Project construction-source noise is added to the ambient daytime conditions are presented in Table 413-2. A temporary noise level increase of 20 dBA is considered a potentially significant impact.

Table 4.13-2 Daytime Construction Noise Level Increases

Receiver Location	Total Project Construction Noise Level	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Increase Criteria Threshold	Threshold Exceeded?
R1	46.5	70.7	70.7	0.0	20	No
R2	61.6	58.9	63.5	4.6	20	No
R3	57.2	51.1	58.2	7.1	20	No
R4	53.3	55.2	57.4	2.2	20	No

Source: Urban Crossroads 2025a; Appendix K
Notes: See Figure 6 for the noise level measurement locations.

As indicated in Table 4.13-2, the Project would contribute construction noise level increases ranging from less than 0.1 to 7.1 dBA L_{eq} during the daytime hours at the nearest receiver locations. The unmitigated construction noise analysis shows that the nearest receiver locations would not exceed the Caltrans substantial 20 dBA L_{eq} noise level increase significance threshold during Project construction activities. The temporary construction noise level increase analysis shows that the noise impacts due to Project construction noise are considered less than significant.

Operational Noise

Operational noise impacts can occur from stationary sources and mobile sources. The operation of a residential neighborhood is not considered a significant noise generator. The Noise Impact Analysis (Urban Crossroads 2025a; Appendix K) identified the Project's primary source of noise is parking lot vehicle movements, and ground mounted air conditioning units. Daytime Project operational noise levels at offsite sensitive receptors are expected to range from 19.3 to 36.6 dBA L_{eq}, and nighttime Project operational noise levels at sensitive receptors are expected to range from 16.5 to 33.8 dBA L_{eq}. As such, the noise levels associated with Project Operations would satisfy the City of Highland's day and nighttime exterior noise level standards at all nearest sensitive receptor locations. Therefore, operational noise impacts are considered less than significant at the nearest noise-sensitive receivers.

The addition of vehicle trips on surrounding roadways can also be an operational noise source. The Noise Impact Analysis (Urban Crossroads 2025a; Appendix K) includes an analysis of the change in noise levels on surrounding roadways with and without the Project. The threshold of significance is an increase in noise levels 3 dB and greater, which is the typical noise level perceptible by the human ear. The Project would result in a small increase in regional and local traffic volumes. The Project is located along Greenspot Road and is anticipated to result in a maximum of 1,066 two-way trip-ends per day, or a 5.3-percent increase in traffic volumes. This increase in traffic volumes is anticipated to result in less than a 1 dBA CNEL increase, which is not expected to generate a perceptible noise level increase at nearby sensitive receptors. Therefore, offsite traffic noise generated by the Project is considered less than significant.

The Proposed Project would be consistent with the noise policies and land use compatibility standards contained in the City of Highland General Plan. The Project includes 6-foot-high walls along Greenspot Road at Lots 103 through 109, and Lot 8. The Noise Impact Study demonstrates with the inclusion of this Project design feature, the exterior noise levels at these lots will range from 47.3 to 64.8 dBA CNEL, which would be considered conditionally acceptable, and below the 65 dBA CNEL threshold.

The Noise Impact Study further demonstrates that the future interior noise levels for first and second-floor receptors will range from 46.5 to 72 dBA CNEL, and that the 45 dBA CNEL interior noise standard can be satisfied at all first-floor locations with the implementation of NOI-1. The Noise Impact Study found that the 45 dBA CNEL interior noise threshold can be satisfied at all second-floor receptors with standard construction, except for Lot 8. With the implementation of mitigation Measure NOI-2, Lot 8 would comply with the State interior noise level standard.

Impacts to ambient noise levels in the Project vicinity would be reduced to a less than significant threshold with the implementation of interior mitigation measure NOI-1, NOI-2, and the Project would satisfy the City of Highland's 45 dBA CNEL interior noise level standard for residential developments.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☑	☐

Less Than Significant Impact

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Project would be primarily associated with short-term construction-related activities. Construction on the Project Site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is noted that pile drivers would not be necessary during Project construction. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project Site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment at 25 feet distant are summarized in Table 4.13-4.

Table 4.13-4. Representative Vibration Source Levels for Construction Equipment

Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Source: Federal Transit Administration (FTA) 2018; California Department of Transportation (Caltrans) 2020a

The City does not regulate vibrations associated with construction. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020b) recommended standard of 0.2 inches per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-4 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

[PPVequip = PPVref x (25/D)1.5].

Table 4.13-5presents the expected Project-related vibration levels at the nearest receiver locations. At distances ranging from 118 to 2,036 feet from Project construction activities, construction vibration velocity levels are estimated to range from less than 0.01 to 0.01 PPV (in/sec). Based on the maximum acceptable continuous vibration threshold of 0.30 PPV (in/sec) for older residential buildings, the typical Project construction vibration levels will satisfy the building damage thresholds at all receiver locations. In addition, the typical construction vibration levels at the nearest sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project Site boundaries.

Table 4.13-5. Construction Equipment Vibration Levels

Receiver[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds	
		Small bulldozer	Jackhammer	Loaded Trucks	Large bulldozer	Highest Vibration Level	PPV (in/sec)[4]	Exceeded?[5]
R1	2,036	0.00	0.00	0.00	0.00	0.00	0.30	No
R2	118	0.00	0.00	0.01	0.01	0.01	0.30	No
R3	334	0.00	0.00	0.00	0.00	0.00	0.30	No
R4	652	0.00	0.00	0.00	0.00	0.00	0.30	No

[1] Receiver locations are shown in Figure 6.
[2] Distance from receiver location to Project construction boundary.
[3] Based on the Vibration Source Levels of Construction Equipment (Appendix K: Table 11-4).
[4] Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, Tables 19, p. 38.
[5] Does the peak vibration exceed the acceptable vibration thresholds? "PPV" = Peak Particle Velocity

Project operations would not include the use of any stationary equipment that would result in excessive vibration levels. Therefore, the Project would not result in groundborne vibration impacts during operations. This impact is less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☑	☐

Less than Significant Impact.

The Redlands Municipal Airport and San Bernardino International Airport (SBD) are the two closest Airports to the Project Site. SBD does not have an adopted Airport Land Use Compatibility Plan (ALUCP) and is located approximately 3.5-miles west of the Project Site, beyond I-210. The closest airport is Redlands Municipal, located approximately 1.7-miles south of the Project Site. As depicted on the Redlands Municipal ALUCP Noise Contour Figure, the Project Site is located outside of the 60 dBA CNEL noise contour, and outside of common flight tracks (Redlands 2003). Additionally, as noted in the City of Highland's General Plan Public Health, Safety and Environment Section, the Project Site is located outside of the Redlands Municipal Airport and SBD influence areas, and Redlands Municipal Airport Area of Special Compatibility Concern.

Although the Project Site is located within the vicinity of two airports, it is not located within a special hazard or high noise zone. Due to its distance from either airport, it can be assumed that those working or residing on the Project Site could be exposed to occasional overflights from small single engine private aircrafts, and distant noise from southbound flights departing SBD, Project occupants and those working within the Project Site would not be exposed to excessive noise levels. A less than significant impact would occur, and no mitigation is required.

4.13.3 Mitigation Measures

NOI-1: **Project Noise Abatement Measures.** To ensure interior noise levels at all residences comply with the City of Highland's interior noise reduction standards, all residential structures shall incorporate the following noise control measures:

- Building Construction
    - Walls:
        - All penetrations in exterior walls for pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal and minimize sound transmission.
- Roof Construction:
        - Roof sheathing of wood construction shall be per manufacturer specifications or consist of caulked plywood of at least ½ inch thickness.
        - Ceilings shall be well-sealed gypsum board of at least ½ inch thickness.
        - Attic insulation with a minimum R-19 rating shall be used to enhance noise attenuation.
- Ventilation & Mechanical Systems
    - While keeping windows closed for noise reduction, all habitable rooms shall be equipped with:

- A forced air circulation system (e.g., HVAC system or air conditioning unit), or
- An active ventilation system (e.g., fresh air supply system) that meets Uniform Building Code requirements. Population and Housing

NOI-2: **Additional Noise Abatement Measures for Lot 8.** To mitigate interior and exterior noise impacts at Lot 8, the following measures shall be implemented:

- Interior Noise Reduction Measures
  - The second floor of the residence on Lot 8 shall be constructed with well-fitted, well-weather-stripped upgraded windows and glass doors with a minimum Sound Transmission Class rating of 30 to ensure compliance with the City of Highland's 45 dBA CNEL interior noise standard.
  - All penetrations in exterior walls (e.g., for pipes, ducts, conduits) shall be caulked or filled with mortar to form an airtight seal and prevent sound leakage.

4.14 Population and Housing (XIV) Environmental Checklist and Discussion

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)?	☐	☐	☑	☐

Less than Significant Impact.

The Proposed Project would involve the construction of 113 single-family dwellings. The Project Site consists of vacant land south of existing residential development. The January 1, 2024, population in the City of Highland was 55,676 residents (DOF 2024). The SCAG 2016-2040 RTP/SCS Growth Forecasts for the City of Highland estimates a 2035 population of 65,700 (SCAG 2016). However, the City of Highland experienced a 0.1-percent increase in population growth from January 1, 2023, through January 1, 2024, with an increase of 64 residents (DOF 2024). During 2019-2023, the City of Highland had an average household size of 3.44 persons per household (U.S. Census Bureau 2025). The anticipated population growth from the Proposed Project is less than 389 new residents [113 x 3.44 = 388.72], or a 0.7-percent increase in population growth. As such, the Proposed Project would not exceed SCAG growth Projections for the region, and as stated previously, the Project is requesting a zone change and general plan amendment to PD (Planned Development) to allow for the proposed housing density. With approval of the request of zone change, the Project would not induce substantial unplanned population growth. Population growth as a result of Project implementation would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

No Impact.

The Project Site consists of vacant land. No persons or housing would be displaced as a result of Project development. Therefore, no impact would occur.

4.14.1 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.15 Public Services

4.15.1 Public Services (XV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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:	☐	☐	☑	☐
Fire Protection?	☐	☐	☑	☐
Police Protection?	☐	☐	☑	☐
Schools?	☐	☐	☑	☐
Parks?	☐	☐	☑	☐
Other Public Facilities?	☐	☐	☑	☐

4.15.1.1 Fire Protection

Less than Significant Impact.

The Project Site is served by the City of Highland Fire Department (HFD). HFD provides fire protection and emergency medical services within the City of Highland's planning area through a cooperative agreement

that provides City owned facilities and apparatus for Cal Fire employees to staff. The City also has fire protection service agreements with other agencies, including CalFire, the U.S. Forest Service, the San Manuel Band of Mission Indians, and the Cities of Redlands and Yucaipa.

HFD operates three fire stations within the City's planning area: Station 541 located at 26974 Base Line; Station 542 located at 29507 Base Line; and Station 543 located at 7649 Sterling Avenue. Station 542 is the closest Fire Station to the Project Site, located approximately 0.7-miles northwest at the southeast corner of Base Line and Weaver Street.

Implementation of the Proposed Project would not affect the City's ability to provide fire protection services. An additional 113 units and approximately 389 residents would change the demand on fire protection services. However, as part of the development review process, Cal Fire would review the Project Site Plans for defensible space, site access, turn arounds, fire hosing pull lengths, fire hydrant placement, and response times to determine if the Project meets all fire safety requirements.

Due to the small increase in population (approximately 389-residents) anticipated by from the Proposed Project, it is not anticipated that the Project would result in the need for additional new or altered fire protection facilities, and the Project would not alter acceptable service ratios or response times. Pending approval of Project design by Cal Fire, the Project would result in a less than significant impact.

4.15.1.2 Police Services

Less than Significant Impact.

The City of Highland contracts with the San Bernardino County Sheriff's Department for its law enforcement and police protection services. The Sheriff's department has one patrol station in the City of Highland, located at 26985 East Base Line near City Hall. The City also operates under a mutual aid agreement with the City of San Bernardino and San Bernardino County for law enforcement services (Highland 2006).

The additional 41 residential units and approximately 141 residents above General Plan projections would place additional demands on the Sherrif Department not previously planned.

[Proposed 113-du x 3.44-residents/du = 388.72-residents; Maximum under R-1: 6-du x 3.44-residents/du = 247.68-residents; difference 388.72 - 247.68 = 141.04]

Due to the small increase in population (approximately 389residents) anticipated by from the Proposed Project, it is not anticipated that the Project would result in the need for additional new or altered law enforcement facilities, and the Project would not alter acceptable service ratios or response times for police services. Pending approval of Project design by the City, the Project would result in a less than significant impact.

4.15.1.3 Schools

Less than Significant Impact.

The Project Site is located within the boundaries of the Redlands Unified School District (RUSD). RUSD provides sixteen elementary schools, four middle schools, and three comprehensive high schools (RUSD 2025).

The additional 41 residential units and approximately 141 residents above General Plan projections would place additional demands on the public school system not previously planned. However, the additional number of students generated by the Proposed Project would be a small fraction of the overall student population of RUSD.

In compliance with standard conditions of approval, the Project Proponent would be required to pay development impact fees to RUSD per Senate Bill 50 (SB 50). The fees would be collected by the school district at the time of building permit issuance, as stated in Government Code Section 65995(h):

> *"The payment or satisfaction of a fee, charge, or other requirement levied or imposed … are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization …on the provision of adequate school facilities."*

Payment of applicable developer impact fees would offset potential impacts resulting from an increase in demand for school services associated with the Project. Therefore, payment of development impact fees would ensure that impacts would be less than significant.

4.15.1.4 Parks

Less than Significant Impact.

The Project would construct 113 single-family residences with small, enclosed backyards, the Project would also include two private open space areas for Project residents. As the Proposed Project would result in an additional 41 residential units and approximately 141 residents above General Plan projections the Project would place additional demands on public recreational facilities. This unplanned population growth represents 0.25-percent of the City's current population.

The City of Highland General Plan Conservation and Open Space Element states the City's park objective is 2.5-acres per 1,000 residents (Highland 2006).

The open space ratio established for the Highland is 2.5 acres per 1,000 residents, which includes a ratio of 2.0 acres of developed park acreage and 0.5 acre of undeveloped natural parkland. Although the Project would provide private open space, additional park obligations would be met through payment of developer impact fees. Therefore, impacts would be less than significant.

4.15.1.5 Other Public Facilities

Less than Significant Impact.

The scale of the Proposed Project (which is anticipated to result in a population increase of 389 residents) is not anticipated to result in a significant increase in demand for Public Facilities within the City of Highland. However, the Project would result in an increase in demand for City facilities, including streets, storm drains, the Highland Branch library, and other public infrastructure. To offset the impact of new residential development on public facilities, City of Highland collects the following development impact fees (Highland 2019):

- Law Enforcement Facilities
- Fire Suppression Facilities, Vehicles and Equipment
- Local Circulation System
- Regional Circulation System
- Regional Flood Control Facilities
- General Facilities, Vehicles, and Equipment
- Library Facilities and Collection
- Public Use (Community Center Facilities)
- Park Land Acquisition and Park Facilities Development

Through payment of the applicable developer fees, potential impacts to library services and other government services would be less than significant.

4.15.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.16 Recreation

4.16.1 Environmental Setting

Aurantia Park is a 10-acre passive park located approximately 0.12-mile west of the Project Site at 29700 Greenspot Road (Google Earth 2025). The City maintains a joint-use agreement with the San Bernardino City Unified School District and Redlands Unified School District for park use outside of school hours. Highland Grove Middle School and Beattie Middle School located approximately 1.7-mile north of the Project Site are public schools with recreation facilities open to the public (Highland 2006).

4.16.2 Recreation (XVI) Materials Checklist

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such	☐	☐	☑	☐

that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact.

The Proposed Project would include two primary open space amenities, one on either side of Alta Vista. The total area of planned private open space is approximately 35,000-sf. Although the Project would include the provision of private open space areas, the Project would also be required to contribute its fair share in contribution towards the City's open space goals, as they relate to new development and service standards. As stated previously, the City of Highland General Plan Conservation and Open Space Element states the City's park objective is 2.5-acres per 1,000 residents (Highland 2006).

The open space ratio established for the City of Highland is 2.5 acres per 1,000 residents, which includes a ratio of 2.0 acres of developed park acreage and 0.5 acre of undeveloped natural parkland. Although the Project would provide private open space, additional park obligations would be met through payment of developer impact fees. Therefore, impacts would be less than significant.

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

Less than Significant Impact.

As discussed previously, the Project Proponent would be required to pay all applicable fees for parks. The City of Highland uses these fees to maintain, acquire, and develop new parkland by residents of the City. The Project would provide private open space to its residents, and additional park obligations would be met through payment of developer impact fees. Therefore, impacts would be less than significant.

4.16.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.17 Transportation

4.17.1 Transportation (XVII) Environmental Checklist and Discussion

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?

Less than Significant Impact.

A Project-specific traffic analysis was prepared by Urban Crossroads (Urban Crossroads 2025b; Appendix L) to evaluate potential circulation system deficiencies that may result from the development of the proposed Project and, where necessary, recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies (Urban Crossroads 2025b). The Traffic Analysis was based on a scoping agreement with the City of Highland, and was prepared in accordance with San Bernardino County Congestion Management Program (CMP) Guidelines for CMP Traffic Impact Analysis Reports, and focused on the following study scenarios:

- Existing: Year 2024
- Opening: Year 2027 Without Project
- Opening: Year 2027 With Project
- Cumulative: Year 2050 Without Project
- Cumulative: Year 2050 With Project

Along with the five study scenarios, the scoping agreement includes the following intersections:

- Boulder Avenue and Greenspot Road
- Church Street and Greenspot Road
- Weaver Street and Greenspot Road
- Street B and Santa Ana Canyon Road
- Alta Vista and Santa Ana Canyon Road
- Alta Vista and Street A/F
- Alta Vista and Greenspot Road

All study intersections currently operate at a Level of Service "(LOS) D or better for AM, Mid-Day, and PM peak hours. The City of Highland General Plan states LOS D is the minimum acceptable condition that should be maintained during the peak commute hours. The City's General Plan defines the quality of LOS D traffic flow as "High-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience (Highland 2006). Small increases in traffic flow will generally cause operational problems at this level.

Trip Generation Rates for passenger vehicle trips related to the Proposed Project were estimated using rates and methodologies outlined in Trip Generation 11th Edition, Published by the Institute of Transportation Engineers (ITE). Trip Generation rates are shown in Table 4.17-1.

Table 4.17-1. Trip Generation Rate									
Land Use[1]	Units[2]	ITE Land Use Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43

Source: Urban Crossroads 2025b, Appendix L.
Notes: [1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).
[2] DU = dwelling units

The projected trips associated with the Proposed Project are shown in Table 4.17-2. The Proposed Project has a net trip generation of 21 inbound and 59 outbound trips in the AM peak hour, 67 inbound and 39 outbound trips in the PM peak hour, and 1,066 daily trips.

Table 4.17-2. Project Trip Generation									
Land Use	Quantity Units[1]	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single Family Detached Residential	113 DU	21	59	80	67	39	106	1,066

Source: Urban Crossroads 2025b, Appendix L.
Notes: [1] DU = dwelling units

As shown in Table 4.17-3 all study intersections will maintain a LOS of "D" or better for the year 2027 Without-Project Scenario.

Table 4.17-3. Opening: Year 2027 Without Project							
Study Intersection	Traffic Control[2]	Opening: Year 2027 Without Project					
		Delay[1] (Seconds)			Level of Service		
		AM	MD	PM	AM	MD	PM
1. Boulder Ave & Greenspot Road	TS	33.9	52.5	54.7	C	D	D
2. Church Street & Greenspot Road	TS	16.7	14.2	13.8	B	B	B

Table 4.17-3. Opening: Year 2027 Without Project							
Study Intersection	**Traffic Control[2]**	**Opening: Year 2027 Without Project**					
		Delay[1] (Seconds)			**Level of Service**		
		AM	**MD**	**PM**	**AM**	**MD**	**PM**
3. Weaver Street & Greenspot Road	TS	8.0	7.2	6.8	A	A	A
4. Street B & Santa Ana Canyon Road	**CSS**	Future Intersection					
5. Alta Vista & Santa Ana Canyon Road	CSS	14.6	10.7	10.7	B	B	B
6. Alta Vista & Street A/Street F	**CSS**	Future Intersection					
7. Alta Vista & Greenspot Road	CSS	21.2	12.8	12.2	C	B	B

Source: Urban Crossroads 2025b, Appendix L.
Notes: * **BOLD** = Level of Service does not meet the applicable jurisdictional requirements.
1 Per the Highway Capacity Manual (7th Edition), overall average Intersection Delay and LOS are shown for intersections with a traffic signal, or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.
2 TS = Traffic Signal; CSS = Cross-street Stop

As shown in Table 4.17-4, all study intersections will maintain a LOS of "D" or better for the year 2027 conditions plus Project Scenario. Therefore, the Proposed Project's combined traffic impacts for the year 2027 would have a less than significant impact. No mitigation is required.

Table 4.17-4. Opening: Year 2027 With Project							
Study Intersection	**Traffic Control[2]**	**Opening: Year 2027 With Project**					
		Delay[1] (Seconds)			**Level of Service**		
		AM	**MD**	**PM**	**AM**	**MD**	**PM**
1. Boulder Ave & Greenspot Road	TS	34.5	54.0	55.0	C	D	D
2. Church Street & Greenspot Road	TS	20.9	14.3	14.5	C	B	B

Table 4.17-4. Opening: Year 2027 With Project							
Study Intersection	**Traffic Control[2]**	**Opening: Year 2027 With Project**					
		Delay[1] (Seconds)			**Level of Service**		
		AM	**MD**	**PM**	**AM**	**MD**	**PM**
3. Weaver Street & Greenspot Road	TS	8.1	7.2	6.8	A	A	A
4. Street B & Santa Ana Canyon Road	**CSS**	9.5	9.1	8.9	A	A	A
5. Alta Vista & Santa Ana Canyon Road	CSS	14.8	10.8	10.8	B	B	B
6. Alta Vista & Street A/Street F	**CSS**	11.3	10.9	11.0	B	B	B
7. Alta Vista & Greenspot Road	CSS	25.7	14.1	13.1	D	B	B

Source: Urban Crossroads 2025b, Appendix L.
Notes: * **BOLD** = Level of Service does not meet the applicable jurisdictional requirements.
1Per the Highway Capacity Manual (7th Edition), overall average Intersection Delay and LOS are shown for intersections with a traffic signal, or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.
[2] TS = Traffic Signal; CSS = Cross-street Stop

As shown in table 4.17-5 below, all study intersections would maintain a LOS D or better for the Cumulative Year 2050 Without-Project scenario, except the following intersections:

- Intersection 1. Boulder Avenue and Greenspot Road (LOS E Mid-Day and PM Peak Hours)
- Intersection 7. Alta Vista and Greenspot Road (LOS F AM Peak Hour)

Table 4.17-5. Cumulative: Year 2050 Without Project							
Study Intersection	**Traffic Control[2]**	**Cumulative (2050) Without Project**					
		Delay[1] (Seconds)			**Level of Service**		
		AM	**MD**	**PM**	**AM**	**MD**	**PM**
1. Boulder Ave & Greenspot Road	TS	38.0	**59.3**	**60.9**	D	**E**	**E**

Table 4.17-5. Cumulative: Year 2050 Without Project							
Study Intersection	**Traffic Control[2]**	**Cumulative (2050) Without Project**					
		Delay[1] (Seconds)			**Level of Service**		
		AM	**MD**	**PM**	**AM**	**MD**	**PM**
2. Church Street & Greenspot Road	TS	21.4	14.4	13.8	C	B	B
3. Weaver Street & Greenspot Road	TS	12.6	8.4	9.7	B	A	A
4. Street B & Santa Ana Canyon Road	**CSS**	Future Intersection					
5. Alta Vista & Santa Ana Canyon Road	CSS	19.4	11.3	11.3	C	B	B
6. Alta Vista & Street A/Street F	**CSS**	Future Intersection					
7. Alta Vista & Greenspot Road	CSS	**>100**	28.5	24.4	**F**	D	D

Source: Urban Crossroads 2025b, Appendix L.
Notes: * **BOLD** = Level of Service does not meet the applicable jurisdictional requirements.
[1]Per the Highway Capacity Manual (7th Edition), overall average Intersection Delay and LOS are shown for intersections with a traffic signal, or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.
[2]TS = Traffic Signal; CSS = Cross-street Stop

As shown in Table 4.17-6 below, all study intersections would maintain a LOS D or better for the Cumulative Year 2050 With Project scenario, except the following intersections:

- Intersection 1. Boulder Avenue and Greenspot Road (LOS E Mid-Day and PM Peak Hours)
- Intersection 7. Alta Vista and Greenspot Road (LOS F AM Peak Hours; LOS E Mid-Day Peak Hour)

Table 4.17-6. Cumulative: Year 2050 With Project							
Study Intersection	**Traffic Control[2]**	**Cumulative (2050) With Project**					
		Delay[1] (Seconds)			**Level of Service**		
		AM	**MD**	**PM**	**AM**	**MD**	**PM**
1. Boulder Ave & Greenspot Road	TS	39.0	**63.3**	**66.0**	D	**E**	**E**
2. Church Street & Greenspot Road	TS	33.2	14.6	15.0	C	B	B
3. Weaver Street & Greenspot Road	TS	16.5	8.4	9.7	B	A	A
4. Street B & Santa Ana Canyon Road	**CSS**	10.0	9.3	9.1	B	A	A
5. Alta Vista & Santa Ana Canyon Road	CSS	19.8	11.4	11.4	C	B	B
6. Alta Vista & Street A/Street F	**CSS**	11.8	11.4	11.4	B	B	B
7. Alta Vista & Greenspot Road	CSS	**>100**	**41.1**	31.7	**F**	**E**	D

Source: Urban Crossroads 2025b, Appendix L.
Notes: *__BOLD__ = Level of Service does not meet the applicable jurisdictional requirements.
[1] Per the Highway Capacity Manual (7th Edition), overall average Intersection Delay and LOS are shown for intersections with a traffic signal, or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.
[2] TS = Traffic Signal; CSS = Cross-street Stop

As shown in table 4.17-7, the LOS for study intersections are expected to worsen in the long-term, cumulative scenario, and two study intersections are predicted to operate at LOS E and F in the year 2050 plus Project conditions scenario.

Table 4.17-7. Year 2050 Project Impact Analysis							
Study Intersection	**Pre-Project Conditions**		**Post-Project Conditions**		**Below LOS D**	**Delay Increase**	**Significant Impact**
	LOS	**Delay**	**LOS**	**Delay**			
AM Peak							
1. Boulder Ave & Greenspot Road	D	38.0	D	39.0	No	1	No
2. Church Street & Greenspot Road	C	21.4	C	33.2	No	11.8	No
3. Weaver Street & Greenspot Road	B	12.6	B	16.5	No	3.9	No
4. Street B & Santa Ana Canyon Road	Future Intersection		B	10.0	No	10.0	No
5. Alta Vista & Santa Ana Canyon Road	C	19.4	C	19.8	No	0.4	No
6. Alta Vista & Street A/Street F	**Future Intersection**		B	11.8	No	11.8	No
7. Alta Vista & Greenspot Road	**F**	**>100**	**F**	**>100**	**Yes**		**Yes**
MD Peak							
1. Boulder Ave & Greenspot Road	**E**	**59.3**	**E**	**63.3**	**Yes**	4	**Yes**
2. Church Street & Greenspot Road	B	14.4	B	14.6	No	0.2	No
3. Weaver Street & Greenspot Road	A	8.4	A	8.4	No	0	No
4. Street B & Santa Ana Canyon Road	Future Intersection		A	9.3	No	9.3	No

Table 4.17-7. Year 2050 Project Impact Analysis							
Study Intersection	**Pre-Project Conditions**		**Post-Project Conditions**		**Below LOS D**	**Delay Increase**	**Significant Impact**
	LOS	**Delay**	**LOS**	**Delay**			
5. Alta Vista & Santa Ana Canyon Road	B	11.3	B	11.4	No	0.1	No
6. Alta Vista & Street A/Street F	Future Intersection		B	11.4	No	11.4	No
7. Alta Vista & Greenspot Road	D	28.5	**E**	**41.1**	**Yes**	**12.6**	**Yes**
PM Peak							
1. Boulder Ave & Greenspot Road	**E**	**60.9**	**E**	**66.0**	**Yes**	**5.1**	**Yes**
2. Church Street & Greenspot Road	B	13.8	B	15.0	No	1.2	No
3. Weaver Street & Greenspot Road	A	9.7	A	9.7	No	0	No
4. Street B & Santa Ana Canyon Road	Future Intersection		A	9.1	No	9.1	No
5. Alta Vista & Santa Ana Canyon Road	B	11.3	B	11.4	No	0.1	No
6. Alta Vista & Street A/Street F	Future Intersection		B	11.4	No	11.4	No
7. Alta Vista & Greenspot Road	D	24.4	D	31.7	No	9.9	No

Source: Urban Crossroads 2025b, Appendix L.

The Project Proponent would be subject to the City's Developer Impact Fee (DIF) program and would pay the requisite City DIF at the rates then in effect. The Project Proponent's payment of the requisite DIF at the rates then in effect pursuant to the DIF Program would mitigate its impacts to DIF-funded facilities, including study intersection 1 (Boulder Avenue and Greenspot Road) and intersection 7 (Alta Vista and

Greenspot Road). With payment of all applicable DIF, Study Intersections 1 and 7 would operate at LOS D or better for the year 2050 plus Project scenario, and Project impacts would be reduced to a less than significant.

Fair share contribution represents the percentage of construction cost that the Proposed Project is expected to contribute toward traffic improvements at intersections affected by the Project, through the payment of DIF. The fair share contribution is calculated based on the sum of Project trips during each of the peak hours at study intersections for the year 2050 plus Project as a percentage of total trips during the same period, as shown in Table 4.17-8.

Table 4.17-8. Calculation of Fair Share Contributions

Study Intersection	Peak Hour	Existing (2024)	Project	2050 With Project	Total New Traffic	Project % of New Traffic[1]
1. Boulder Aven & Greenspot Road	AM	2,858	60	4,114	1,256	**4.8%**
	MD	2,448	79	4,115	1,667	4.7%
	PM	2,789	79	4,513	1,724	4.6%
7. Alta Vista & Greenspot Road	AM	963	68	2,103	1,140	6.0%
	MD	787	90	1,899	1,112	**8.1%**
	PM	934	90	2,214	1,280	7.0%

Source: Urban Crossroads 2025b, Appendix L.
Notes: [1] **BOLD** = Highest fair share percentage is highlighted

Based on this calculation, the Proposed Project should contribute a fair share estimates at 4.8-percent for the future improvements at Boulder Avenue and Greenspot Road, and 8.1-percent for the future improvements at Alta Vista and Greenspot Road.

For the long-term Cumulative (Year 2050) scenario, the Proposed Project is anticipated to result in potential impacts to queue lengths at two of the study intersections. With the payment of all applicable DIF to the City, Project impacts would reduce to a less than significant impact threshold.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☑	☐

Less than Significant Impact.

CEQA Guidelines Section 15064.3 subdivision (b) addresses the criteria for analyzing transportation impacts and establishes the vehicle miles traveled (VMT) metric as the most appropriate measure of transportation impacts in a CEQA document.

Urban Crossroads prepared a vehicle miles travelled (VMT) analysis for the Proposed Project (Urban Crossroads 2024d; Appendix M). As the City has yet to formally adopt City VMT guidelines and impact thresholds. As such the VMT analysis was conducted in accordance with San Bernardino County Transportation Authority (SBCTA) Guidelines.

As required by the SBCTA Guidelines, the Project has been analyzed using the San Bernardino Transportation Analysis Model (SBTAM) screening tool. The following threshold was used to determine if the Project would result in a significant VMT impact: The baseline and cumulative Project-generated VMT per service population exceeds the City of Highland future General plan buildout VMT per service population (Urban Crossroads 2024d; Appendix M). As shown in Table 4.17-9, City of Highland General Plan Buildout VMT per service population value of 33.5 VMT per service population.

Table 4.17-9. City of Highland Buildout VMT per Service Population

City of Highland	
Service Population	78,248
VMT	2,618,828
VMT per Service Population	33.5

Source: Urban Crossroads 2024d (Appendix M)

Table 4.17-10 presents the Project's population (Service Population), Project-generated VMT, and the resulting VMT per service population under baseline and cumulative conditions.

Table 4.17-10. Project Generated VMT

	Baseline	Cumulative
Households	113	113
Service Population	362	309
VMT	10,956	9,807
VMT per Service Population	30.3	31.7
City Threshold	33.5	33.5
Does Project Exceed Threshold?	No	No

Source: Urban Crossroads 2024d (Appendix M)

As shown in Table 4.17-10, the results of the screening tool found the Project is estimated to generate origin/destination VMT per service population below the City's threshold of 33.5 VMT per service population for baseline and cumulative conditions (Urban Crossroads 2024d; Appendix M).

Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Although the Project would generate new VMT, the Project would not exceed the City's VMT threshold, as such, the Project would result in a less than significant impact.

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

Less than Significant Impact.

The Proposed Project includes multiple access points to the Project Site from Santa Ana Canyon Road via "Street B," and Alta Vista via "Street A" and "Street F." Project improvements have been designed by a registered civil engineer to meet the City of Highland's development standards. Therefore, the Project would not substantially increase hazards due to a geometric design feature or incompatible uses. The Project would have a less than significant impact in this regard.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☐	☑	☐

Less than Significant Impact.

The Project Site is located on both sides of Alta Vista, between Greenspot Road, and Santa Ana Canyon Road. As stated previously, Greenspot Road is identified as an emergency access route in the City of Highland General Plan (Highland 2006). The Proposed Project would require construction within the Greenspot Road right-of-way ROW and require temporary lane closures for the construction of a new 48-inch storm drain within the Greenspot Road ROW (Figure 3). As the Proposed Project would require improvements within an emergency evacuation route identified by the City of Highland, the Project would require the preparation and implementation of a Traffic Control Plan (TCP) prior to any lane closures to ensure proper access to residences by emergency vehicles during construction and to maintain traffic flow on Greenspot Road. With the implementation of a TCP, Project construction impacts to emergency access would be reduced to a less than significant level.

The Proposed Project would not modify the alignment of Greenspot Road, or adjacent roadways that connect with Greenspot Road that could be used for evacuation in the event of an emergency. While the Project would construct interior roadways, the alignments of Alta Vista, Santa Ana Canyon and Greenspot Road would remain unchanged by the Proposed Project. Additionally, Station 542 is the closest Fire Station to the Project Site, located approximately 0.7-miles northwest at the southeast corner of Base Line and Weaver Street. As the Proposed Project would include the construction of habitable structures, and new private roadways, the City of Highland and the Highland Fire department would determine if the Proposed Project would provide sufficient on-site emergency access as part of site plan review. Upon approval, and a determination that the Project provides sufficient on-site emergency access, impacts would be less than significant.

4.17.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

Elevations within the Project Area range from 1,440 to 1,480 feet above mean sea level. North Fork Canal is located 0.26 mile north of the Project Area; Plunge Creek is located immediately to the south and intersects with the southeastern corner of the Project Area. The Project Area is also approximately 0.7 mile southwest of the foothills of the San Bernardino Mountains and 13 miles southwest of Big Bear Lake (ECORP 2025c).

The geology throughout most of the Project Area consists of Quaternary young axial-valley deposits of Unit 5 (Qya5) from the mid-Holocene, with channels of Quaternary very young wash deposits (Qvyw) from the very latest Holocene in washes near Plunge Creek (ECORP 2025c). The main portions of the Project Area, therefore, are in a geological context that is contemporaneous with Native American occupation of the area. (ECORP 2025c).

Assembly Bill 52

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include tribal cultural resources, the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as "a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." This includes both federally and non-federally recognized tribes.

Section 21074(a) of the Public Resource Code defines tribal cultural resources for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or

    b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or

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

Because criteria a) and b) also meet the definition of a historical resource under CEQA, a tribal cultural resources may also require additional consideration as a historical resource. Tribal cultural resources may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

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 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:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☑	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

On September 5, 2024, the City of Highland formally initiated consultation and notified all the tribes on the contact list of California Native American Tribes which have requested formal notification from the City. The City received a response from the Gabrieleno Band of Mission Indians - Kizh Nation on September 5, 2024, indicating the desire to consult, but later deferred the Project on October 16, 2024. San Manuel Band of Mission Indians on September 16, 2024, indicating the desire to consult regarding potential impacts to Tribal Cultural Resources, that the Project Site is located within their ancestral territory, and requesting additional information regarding the Proposed Project. As of the date of this IS/MND AB 52 consultation is ongoing, the final conclusions and recommendations provided by San Manuel Band of Mission Indians will be included in the Final IS/MND and MMRP.

As stated previously in Section 4.5.2, ECORP evaluated EH-04, and concludes this resource has sufficient integrity given the presence of in situ subsurface resources to yield important information. Potential impacts to resource EH-04 would be less than significant with the implementation of TCR-1.

Significant impacts may occur from the discovery of unknown Tribal Cultural Resources (TCRs) during ground disturbing activities from Project construction. Additionally, the Sacred Lands File search by the NAHC was positive, indicating the presence of Native American resources within the Project Area. Due to the presence of alluvium along Plunge Creek and the likelihood of pre-contact archaeological sites located along perennial waterways, combined with the positive results from a search of the NAHC Sacred Lands File, and the presence of subsurface resources determined by the testing program, the Project Area has a moderate-to-high potential for buried pre-contact archaeological sites (ECORP 2025c; Appendix D). Potential impacts to previously undiscovered tribal cultural resources would be less than significant with the implementation of TCR-1 and TCR-2.

Furthermore, due to the presence of alluvium along Plunge Creek and the likelihood of pre-contact archaeological sites located along perennial waterways, combined with the positive results from a search of the NAHC Sacred Lands File, and the presence of subsurface resources determined by the testing program, the Project Area has a moderate-to-high potential for buried pre-contact archaeological sites (ECORP 2025c; Appendix D). As such, implementation of TCR-3 would reduce potential impacts related to the inadvertent discovery of human remains to a less than significant threshold.

In summary, Project impacts to TCRs would be reduced to a less than significant threshold with the implementation of Mitigation Measures TCR-1, TCR-2, and TCR-3.

4.18.3 Mitigation Measures

TCR-1 **Tribal Monitoring.** Due to the heightened cultural sensitivity of the proposed project area, at the discretion of the consulting tribe(s), Tribal monitor(s) authorized to represent YSMN shall be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, 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). At the discretion of the consulting tribes, a sufficient number of Tribal monitors shall be present each work day 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, as detailed within CUL-1, and submitted to the Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN). Once all parties review and agree to the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings will be subject to the protocol detailed within the Monitoring and Treatment Plan.

TCR-2: **Treatment of Cultural Resources During Project Implementation.** If a pre-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.

The Project Archaeologist shall develop a research design that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from YSMN, the Archaeologist, and the Lead Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the resource's archaeological significance, its potential as a Tribal Cultural Resource (TCR), and avoidance (or other appropriate treatment) of the discovered resource. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by YSMN. All plans for analysis shall be reviewed and approved by the applicant and YSMN prior to implementation, and all removed material shall be temporarily curated on-site.

It is the preference of YSMN that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by YSMN, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, 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 YSMN. All reburials are subject to a reburial agreement that shall be developed between the landowner and YSMN outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts.

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with YSMN to identify an American Association of Museums (AAM)-accredited facility within the 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 records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and YSMN for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the local CHRIS Information Center, the Lead Agency, and YSMN.

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

4.19 Utilities and Service Systems

4.19.1 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

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 treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☑	☐

Less than Significant Impact.

The Proposed Project would result in the development of 113 residential lots, which would require connections to the City's water and wastewater systems. Due to the scale of the Proposed Project, it is not anticipated that 113 new connections for single-family homes would require the construction or expansion of water or wastewater treatment facilities. Additionally, a Will Serve Letter for both water and sewer was issued by EVWD on September 17, 2024, offering water and sewer service to the Project Site through existing EVWD water and sewer systems adjacent to the site (EVWD 2024; Appendix N).

The Proposed Project also includes stormwater drainage improvements. Improvements include the construction of two water detention basins. Runoff from the Proposed Project would be conveyed to the basin, through curb and gutter and storm drain improvements, and have been designed to capture the volume of a post development 100-year flood event (Kimley-Horn; Appendix I).

The Proposed Project would require connections to electric power, natural gas, and telecommunication utilities. Electric power would be provided by Southern California Edison (Edison). Natural gas service

would be provided by the Southern California Gas Company (SoCalGas). Telecommunications service would be provided by Verizon. The Proposed Project is located adjacent to existing streets and existing development of residential land uses. As such, utilities are available in the immediate Project area to serve the Project Site. Therefore, impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☑	☐

Less than Significant Impact.

EVWD provides water to the City of Highland, including the Project Site. Highland's water supply sources include local groundwater, surface runoff from natural watershed and drainage areas, and imported water from the State Water Project (SWP). The most cost-effective and main source of water for Highland is the Bunker Hill Groundwater Basin located under the San Bernardino Valley. Another water source is the Santa Ana River, originating in the San Bernardino Mountains. During dry years or times of limited supply, the EVWD obtains a supplemental supply of water from the State Water Project (SWP) through the San Bernardino Valley Municipal Water District.

As stated previously, potable water would be supplied by EVWD. The EVWD issued a Will Serve letter on September 17, 2024, offering water services from existing infrastructure adjacent to the Project Site (EVWD 2024; Appendix N). EVWD's commitment to serve the Project is consistent with the City's Urban Water Management Plan (UMWP), including normal, dry, and multiple dry years. Therefore, impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☑	☐

Less than Significant Impact.

The EVWD maintains Highland's sewer system and has a joint powers agreement with the City of San Bernardino to accept all sewage generated within the City's boundaries. As such, wastewater generated by the Proposed Project would be treated by EVWD. Sewage generated within the City of Highland is conveyed through the City's sanitary sewer system towards the Sterling Natural Resource Center (SNRC),

located at 25318 5th Street in the City of San Bernardino. The SNRC has a maximum processing capacity of 8-million-gallons/day (MGD) the SNRC recharges the local Bunker Hill Groundwater Basin.

EVWD issued a Will-Serve letter on September 17, 2024, offering sewage services from existing infrastructure adjacent to the Project Site. As such, the Project's anticipated demand for wastewater service would not exceed the permitted capacity of the SNRC. A less than significant impact would occur, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☑	☐

Less than Significant Impact.

The City of Highland contracts with Burrtec Waste Industries for solid waste and recycling services. Waste is transferred primarily to the Mid-Valley Landfill in Rialto, CA. However, the City's trash haulers may also access other landfills in the area, including the San Timoteo Canyon Landfill. All landfills used by the City of Highland are permitted to accept both construction and residential waste that would be generated by the Project. Burrtec operates the East Valley Recycling and Transfer center, a large volume transfer and processing facility in San Bernardino, CA (CalRecycle 2025a). The Mid-Valley Landfill has a maximum permitted capacity of 101,300,000 cubic yards, and a remaining capacity of 54,219,377 cubic yards as of December 31, 2023. The landfill's anticipated ceased operation date is April 1, 2045 (CalRecycle 2025b).

Construction Waste Generation

Waste would be temporarily generated during Project construction, primarily from discarded construction materials and packaging. Utilizing the proposed building area of 305,316-SF and a construction waste generation factor of 4.39 pounds per square foot (USEPA 2003), it is anticipated that the Project would generate approximately 670-tons of waste during the construction phase [(305,316-SF x 4.39-lbs/SF) ÷2,000-lbs/ton = 670.16862-tons]. AB 939 requires a minimum of 50% of all solid waste be diverted from landfills in compliance with California's solid waste reduction goals. Thus, based on the Project's compliance with AB 939, the Proposed Project would generate an estimated 335-tons of waste during the construction phase.

Operational Waste Generation

According to CalRecycle, the generation rate of solid waste in the residential sector (detached single-family) is 12.23-pounds per household unit per day (Cal Recycle 2023). The Proposed Project would construct 113 units, therefore estimated solid waste generated by the Project would be approximately 1,382-pounds per day, or 0.69-tons per day. Based on the current permitted daily throughput of 7,500-tons per day at the Mid Valley Landfill, the waste generated by the Proposed Project would make up a

fraction (approximately 0.0001-percent) of the Mid-Valley Sanitary Landfill's daily capacity. Based on their current and future capacities, landfills serving the City could accommodate the incremental solid waste demands of the Proposed Project. Therefore, the Project would have a less than significant impact in this regard.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☑	☐

Less than Significant Impact.

The California Integrated Solid Waste Management Act requires that local jurisdictions divert at least 50 percent of all solid waste from landfills through waste reductions and/or recycling programs. Additionally, compliance with SB 1383 would greatly reduce the amount of organic waste generated by the Proposed Project. Residential uses proposed by the Project would abide by these regulations, in addition to Citywide source reduction and recycling programs. Therefore, a less than significant impact to federal, state, and local statutes and regulations related to solid waste would occur.

4.19.2 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.20 Wildfire

4.20.1 Environmental Setting

The Office of the State Fire Marshall (OSFM/CAL FIRE), and the City of Highland General Plan identifies the Project Site as being within a Very High Fire Hazard Severity Zones (VHFHSZ) in a Local Responsibility Area (Highland 2006; CAL FIRE 2008).

4.20.2 Wildfire (XX) Environmental Checklist and Discussion

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?	☐	☐	☑	☐

Less than Significant Impact.

The Project Site is located within a Very High Fire Hazard Severity Zone (VHFHSZ), and Local Responsibility Area (LRA). The City of Highland requires development review for projects located within a VHFHSZ. The Proposed Project's site plan has been reviewed by the City's Fire Marshall, Craig Sanchez. The Proposed

Project would be developed in compliance with the requirements of the City of Highland's Municipal Code, California Fire Code, and California Building Code. These standards include building requirements that increase wildfire resilience, including requirements for home hardening and defensible space in accordance with state standards within Very High Fire Hazard Severity Zones. Therefore, the Proposed Project would comply with the City's requirements for the provision of adequate site access for fire and emergency response vehicles and would allow for evacuation in the event of an emergency.

Construction Impacts

During Construction, the Project is required to comply with all applicable local, state, and federal regulations governing emergency access and internal circulation. The Project is required to comply with the Municipal Code Chapter 16, Section 16.08.050.e Conditional Use Permits, Findings, which assures conformance to the City's General Plan,, that there are adequate provisions for water, sanitation, and public utilities and services to ensure public health and safety and the use will not be detrimental to the public health, safety, or welfare, or materially injurious to properties and improvements in the vicinity. Furthermore, Project construction would comply with the requirements of Municipal Code Section 15.06, California Fire Code, which governs the minimum conditions and standards for fire safety within the City.

Operational Impacts

The Project is not anticipated to impair an adopted emergency response plan or emergency evacuation plan. Access to the proposed Project Site is planned along Alta Vista, and Santa Ana Canyon Road, which provide access to Greenspot Road, an east-west traversing emergency evacuation route identified by the City of Highland, thereby facilitating emergency response and access. As stated previously, the City's Fire Marshall has reviewed the Project Site plans to assess emergency response capabilities. As the Project would be developed in compliance with the City's regulations, a less than significant impact would occur.

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
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?	☐	☐	☑	☐

Less than Significant Impact

Implementation of the Proposed Project would not heighten wildfire risks because the Project would incorporate fire prevention measures outlined in the City of Highland General Plan and Safety Element, California Building Standards Code, and California Fire Code. Therefore, the Proposed Project would not exacerbate wildfire risks due to slope, prevailing winds, and other factors, and impacts related to exposing Project occupants to pollutant concentrations from a wildfire or uncontrolled spread of wildfire would be less than significant.

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
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?	☐	☐	☑	☐

Less than Significant Impact.

The Project includes new roads on site to facilitate circulation of vehicles as well as utility hookups for the proposed residences. The Project would be required to comply with the California Fire Code, and City of Highland Municipal Code Section 15.06, California Fire Code which stipulates the standards for access, fire hydrants, water pressure, and fire lanes. The Project would remove exiting fire hazards such as overgrown brush and vegetation and debris piles. Therefore, impacts associated with the installation or maintenance of Project-related infrastructure are considered less than significant.

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
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?	☐	☐	☑	☐

Less than Significant Impact.

As stated previously, the Project Site is located outside of a general landslide susceptibility zone (SB County 2025). The City of Highland General Plan identified the Project Site as being located within Landslide Zone 1, the Lowest Susceptibility zone (Highland 2006). As such, the Project Site is not located in an area that would be highly susceptible to landslides. However, the northern, and eastern portions of the City of Highland which abut the San Bernardino Mountains, and its foothills are located within areas of general landslide susceptibility (SB County 2025). Furthermore, the City was recently affected by the Line Fire which consumed nearly 44,000-acres of land in San Bernardino County including areas near the City of Highland (CAL FIRE 2025). That following winter, in February 2025 San Bernardino County Sheriff issued an evacuation warning for communities in the City of Highland downslope of the Line Fire burn scar for potential mud and debris flow (CBS News 2025; SB County Sheriff 2025). The Project Site is located approximately 0.5-mile south of the Line Fire burn scar (CAL FIRE), separated by contiguous residential development.

The Project Site is relatively flat, and is bordered by residential development to the north, radio towers to the west, San Bernardino Flood Control District facilities and Oak Creek to the east, and undeveloped land to the south beyond Greenspot Road. Furthermore, the Project Site is separated from the Line Fire burn

scar by approximately 0.5-miles of residential development. As such, the Project Site is not located adjacent to any large hillsides that could cause flooding, mudflows, landslides, or significant erosion after a fire. Impacts would be less than significant.

4.20.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.21 Mandatory Findings of Significance

4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

Project related impacts to Biological Resources, Cultural Resources, Geology and Soils (including Paleontological Resources), Noise, and Tribal Cultural Resources are discussed in the respective sections of this Initial Study. Impacts would be less than significant with implementation of Mitigation Measures BIO-1 through BIO-6, CUL-1 through CUL-4, GEO-1, NOI-1, NOI-2, and TCR-1 through TCR-3.

Impacts from the Proposed Project on Hydrology, Hazardous Materials, and Wildfire are discussed in the corresponding sections of this Initial Study. No significant impacts associated with hydrology, hazardous materials, and wildfire have been identified. Impacts from the Proposed Project would not be cumulatively considerable with the implementation of the mitigation measures listed in this Initial Study.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☑	☐	☐

Less than Significant with Mitigation incorporated.

The analysis within this Initial Study demonstrates that the Project would not have any individually limited, but cumulatively considerable impacts. As presented in the analysis provided in this Initial Study, the Project has no impact, a less than significant impact, or a less than significant impact with implementation of mitigation with respect to all environmental issues. Due to the limited scope of direct physical impacts to the environment associated with this development Project, the Project's impacts are Project-specific in nature. With implementation of the proposed mitigation measures found throughout this document, the Project would not result in significant, unavoidable, adverse environmental impacts. Impacts from the Proposed Project would not be cumulatively considerable.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☑	☐	☐

Less than Significant with Mitigation Incorporated.

As identified within this Initial Study, the only potential adverse impact to human beings associated with the Proposed Project is the noise impact generated during Project construction, and onsite noise from traffic on Greenspot Road. These impacts would be reduced to a less than significant level with implementation of Mitigation Measures NOI-1, and NOI-2.

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