



SALEM
engineering group, inc.

8711 Monroe Court, Suite A
Rancho Cucamonga, California 91730
(909) 980-6455 Office
(909) 980-6435 Fax

September 2019

Job No. 3-418-0249

Ms. Judy Eguez
Associate Planner
City of Riverside
3900 Main Street
Riverside, CA 92522

Subject: **INITIAL STUDY- MITIGATED NEGATIVE DECLARATION**
Proposed Magnolia Crossings Development
Van Buren Avenue and State Route 91
Riverside, California

Dear Ms. Eguez:

On behalf of our client, an Initial Study – Mitigated Negative Declaration for the above-referenced project located on the northeast corner of Van Buren Boulevard and State Route 91 in Riverside, California has been conducted, and is therefore submitted for the City's review.

We appreciate the opportunity to assist with this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455. Additionally, please do not hesitate to return any report comments via email at Maria@Salem.net. Thank you,

Respectfully submitted,

SALEM Engineering Group, Inc.

A handwritten signature in dark ink, appearing to read 'Maria G. Ruvalcaba', is written over the printed name.

Maria G. Ruvalcaba, EP
Project Manager



Magnolia Crossings

Initial Study – Mitigated Negative Declaration

prepared for

Salem Engineering Group, Inc.

13355 Noel Road, Suite 1100

Dallas, Texas 75240

Contact: Maria Ruvalcaba

prepared by

Rincon Consultants, Inc.

250 East 1st Street, Suite 301

Los Angeles, California 90012

October 2019



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

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Acronyms and Abbreviations

AB	(California) Assembly Bill
ACM	asbestos-containing material
ADT	Average daily traffic
afy	acre feet per year
amsl	above mean sea level
AQ	air quality
AST	aboveground storage tank
Basin Plan	Santa Ana River Water Quality Control Plan
bgs	below ground surface
BMP	best management practices
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish & Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CH ₄	Methane
CHL	California Historical Landmark
CHRIS	California Historic Resources Information System
CMP	Congestion Management Program

CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalents
COG	Council of Governments
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUPA	Certified Unified Program Agencies
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report
DOC	(California) Department of Conservation
DOF	(California) Department of Finance
DOF	(California) Department of Finance
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EIC	Eastern Information Center
EIR	environmental impact report
EISA	Energy Independence and Security Act
EO	(California) Executive Order
ESA	(federal) Endangered Species Act
ESA	environmentally sensitive area
FAA	Federal Aviation Administration

FEIR	final environmental impact report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
ft	feet
GHG	greenhouse gas
GHG	greenhouse gas
GIS	geographic information system
GP 2025	Riverside General Plan 2025
gpd	gallons per day
gpm	gallons per minute
GPS	global position system
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HHMB	Health Hazardous Materials Branch
HUD	(United States Department of) Housing and Urban Development
HVAC	Heating, ventilation, and cooling
lbs	pounds (weight)
Ldn	Day-night average sound level
Leq	Equivalent noise level
LID	low-impact development
Lmax	Maximum sound level
Lmin	Minimum sound level
LOS	level of service
LSA	LSA Associates, Inc.
LST	localized significance thresholds

LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MCL	Maximum Contaminant Levels
MGD	million gallons per day
MGD	million gallons per day
MRF	Material Recovery Facility
MSHCP	Multiple Species Habitat Conservation Plan
MT	metric tons
NCCP	Natural Community Conservation Plan
NFIP	National Flood Insurance Plan
NMFS	National Marine Fisheries Service
NO	Nitric oxides
NO ₂	Nitrogen dioxide
NOP	Notice of Preparation
NO _x	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O ₃	Ozone
PM	Particulate Matter
PM ₁₀	Particulate matter between 2.5 and 10 micrometers diameter
PM _{2.5}	Particulate matter less than 2.5 micrometers diameter
POTW	publicly owned treatment works
ppm	parts per million
PRC	(California) Public Resources Code
RCDEH	Riverside County Department of Environmental Health
REC	recognized environmental condition

RFD	Riverside Fire Department
RMC	Riverside Municipal Code
ROG	Reactive organic gas
ROW	right-of-way
RPD	Riverside Police Department
RPU	Riverside Public Utilities
RRG-CAP	Riverside Restorative Growthprint-Climate Action Plan
RWQCB	Regional Water Quality Control Board
RWQCP	Riverside Regional Water Quality Control Plant
SARWQCB	Santa Ana Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	square foot/feet
SKR	Stephens' Kangaroo Rat
SO _x	Sulfur oxide
SQMP	Stormwater Quality Management Program
SR	State Route
SRA	source receptor area
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
the Basin	South Coast Air Basin
TIA	Traffic Impact Analysis
TMDL	Total Maximum Daily Loads
USEPA	United States Environmental Protection Agency

USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGBC	United States Green Building Code
USGS	United States Geologic Service
UWMP	Urban Water Management Plan
VMT	vehicle miles travelled
VOC	Volatile Organic Compound
WDR	Waste Discharge Requirements
WQS	Water Quality Standards
WRCOG	Western Riverside Council of Governments

Initial Study

1. Case Numbers

P18-0571 (Specific Plan Amendment), P18-0612 (Rezone), P18-0432 (Conditional Use Permit), P18-0433 (Conditional Use Permit), P18-0434 (Conditional Use Permit), P18-0435 (Parcel Map), P18-0436 (Design Review), P18-0437 (Variance)

2. Project Title

Magnolia Crossings

3. Lead Agency Name and Address

City of Riverside
Community & Economic Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, California 92522

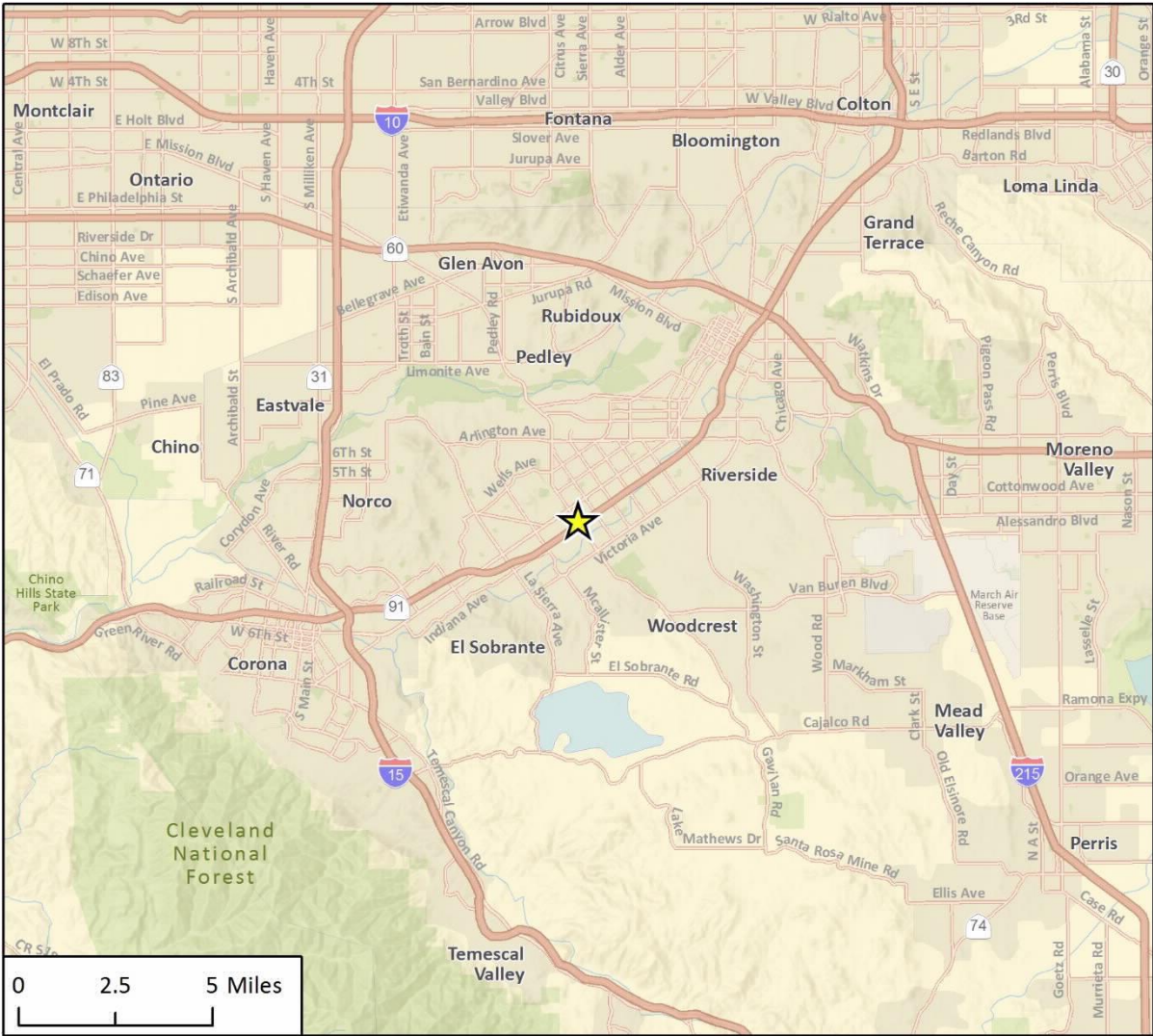
4. Contact Person and Phone Number

Judy Egüez
Planning Division
3900 Main Street, 3rd Floor
Riverside, California 92522
(951) 826-5371

5. Project Location

The project site is located at 3505 Van Buren Boulevard at the northeast corner of Van Buren Boulevard and State Route (SR) 91 in Riverside, California (Assessor Parcel Numbers 233-062-040 and 233-062-039). The 3.9-acre site is currently undeveloped and contains annual grasses. The only structure on the site is a telephone pole. The project site is bound by a concrete masonry unit sound wall to the south, a chain-link fence to the west and north, and a variety of walls and fences associated with the rear yards of single-family residences to the east. Figure 1 shows the location of the site in the region, and Figure 2 shows the project site in its neighborhood context.

Figure 1 Regional Location



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★ Project Location

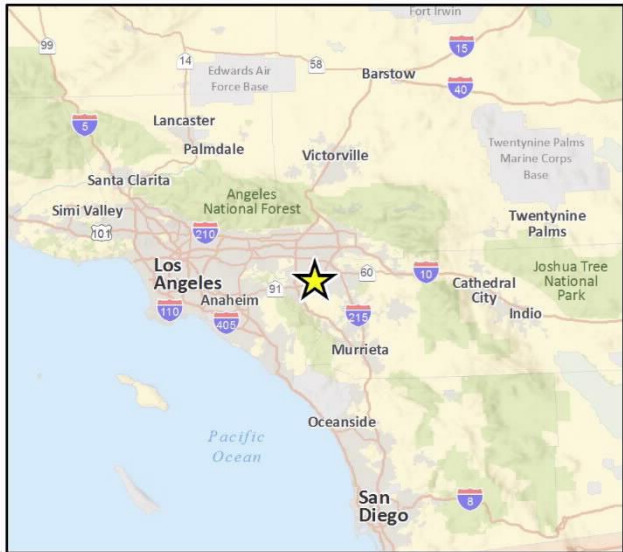
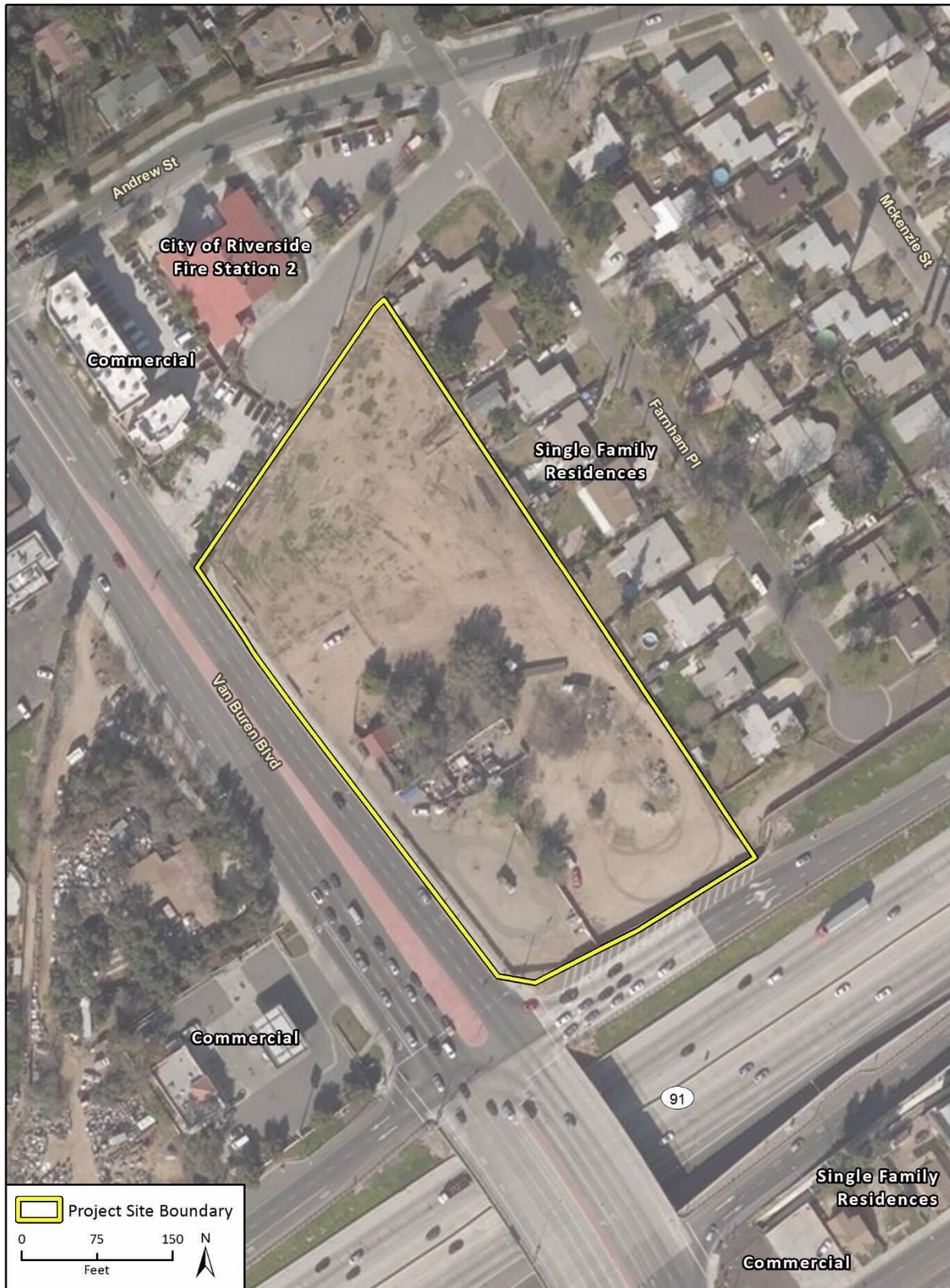


Fig 1 Regional Location

Figure 2 Project Site Location



6. Project Sponsor's Name and Address

Applicant and Owner

Ash Etemadajin
Magnolia Crossings, LLC
10995 Indiana Avenue
Riverside, California 92503

7. General Plan Designation

Mixed Use – Village (MU-V)

8. Zoning

CR-SP – Commercial Retail and Specific Plan (Magnolia Avenue) Overlay Zones and the CR-NC-SP – Commercial Retail, Neighborhood Commercial and Specific Plan (Magnolia Avenue) Overlay Zone

9. Description of Project

The project proposes the construction of a fueling station with a 4,395 square foot canopy containing 16 fueling stations, a 1,200 square foot drive through car wash, and a 3,800-square foot convenience store with an attached 1,300-square foot quick service restaurant on the northern side of the project site. The southern portion of the project site proposes a 9,250 square foot retail building and a 3,812-square foot drive-through restaurant (In-N-Out) with a 28 vehicle queueing lane.

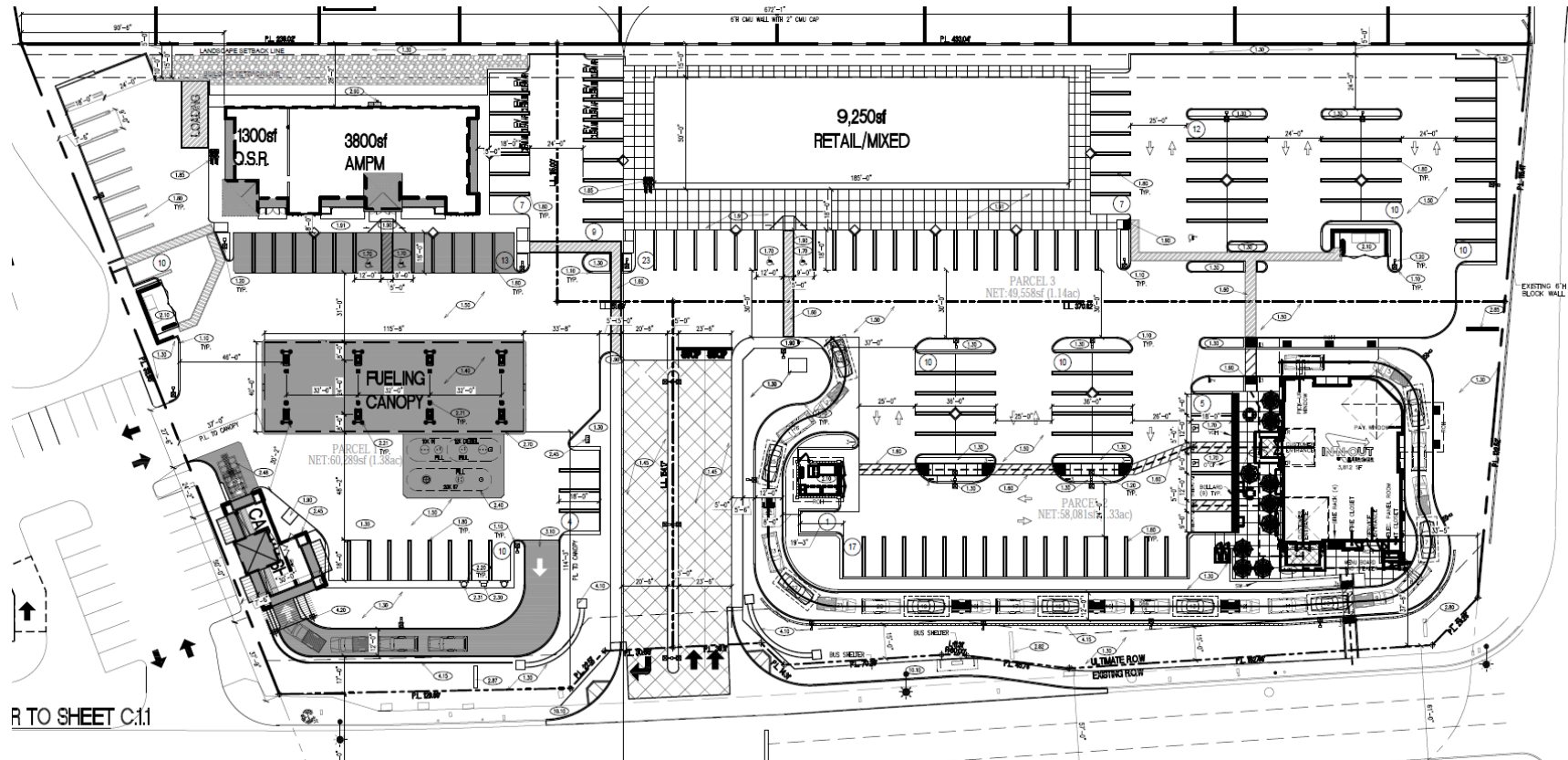
Access to the project site would be provided via an ingress/egress driveway off Van Buren Boulevard and through the adjacent parking lot to the north. The project includes 159 standard parking spaces and seven ADA-accessible parking spaces. The project would also include the construction of a signalized left turn lane on southbound Van Buren Boulevard to provide access to the project site. Figure 3 shows the project site plan.

The project will require an amendment to the Magnolia Avenue Specific Plan to permit a Community Entry Sign (Freeway Oriented Sign), a Zoning Code Amendment to adjust the boundaries of the Neighborhood Commercial Overlay Zone to allow for the fueling station, a Conditional Use Permit to permit a vehicle fueling station with off-sale of beer and wine, a Conditional Use Permit to allow a car wash, a Conditional Use Permit to permit a drive-through restaurant, Design Review of project plans, a Variance to allow the off-sale of beer and wine within 100 feet of residential properties and a Public Convenience or Necessity determination to allow the off-sale of alcohol in an over-concentrated census tract.

10. Surrounding Land Uses and Setting

The project site is surrounded by single-family homes to the east and commercial development and City of Riverside Fire Station 2 to the north. The project site is adjacent to Van Buren Boulevard to the west and SR 91 to the south. Commercial development to the west is separated from the project site by Van Buren Boulevard, and residential and commercial development to the south is separated

Figure 3 Project Site Plan



Source: CJC Design, Inc. 2018

from the project site by SR 91. Land use designations and zoning for surrounding land uses are shown in Table 1. Figure 2 shows the project site and surrounding land uses.

Table 1 Surrounding Land Use and Zoning

Surrounding Land Use Description	Land Use Designation	Zoning
North – Arlington Fire Station 2 and commercial development	MU-V - Mixed Use-Village	CR- SP -Commercial Retail and Specific Plan (Magnolia Avenue) Overlay Zone and R-1-7000-SP – Single Family Residential and Specific Plan (Magnolia Avenue) Overlay Zone
South – State Route 91 and	B/OP - Business/Office Park	CR- Commercial Retail and R-1-7000 Single Family Residential
East – single family residences	MDR - Medium Density Residential	R-1-7000 - Single Family Residential
West – Van Buren Boulevard and commercial development	MU-V - Mixed Use-Village	CR- SP -Commercial Retail and Specific Plan (Magnolia Avenue) Overlay Zone and MU-V – SP – Mixed Use – Village and Specific Plan (Magnolia Avenue) Overlay Zone.

11. Other Public Agencies Whose Approval Is Required

The City of Riverside is the lead agency with responsibility for approving the project. Approval from other public agencies includes:

- California Department of Transportation
- Regional Water Quality Control Board
- Santa Ana Region – National Pollutant Discharge Elimination System Construction General Permit
- Santa Ana Region Storm Water Pollution Prevention Plan
- South Coast Air Quality Management District Dust Control Plan

12. Other Environmental Review Incorporated by Reference in this Review

- a. City of Riverside General Plan 2025 (GP 2025)
- b. City of Riverside GP 2025 Final Program Environmental Impact Report(FPEIR)
- c. Title 19, Zoning Code
- d. Title 20, Cultural Resources

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

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

Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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

Signature

Date

Printed Name

Title

Environmental Checklist

1 Aesthetics	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--------------	--------------------------------	--	------------------------------	-----------

Would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project have a substantial adverse effect on a scenic vista? (Source: GP 2025 – Open Space and Conservation Element)*

Vista points are located throughout the City, specifically in the La Sierra/Norco Hills area, Sycamore Canyon Wilderness Park, and Box Springs Park. Additionally, the Riverside General Plan identifies the peaks of Box Springs Mountain, Mount Rubidoux, Arlington Mountain, Alessandro Heights, and the La Sierra/Norco Hills as providing scenic view points of the City and region (City of Riverside 2007a). The project site is not located in any of the areas identified as having scenic viewpoints or vistas. Arlington Mountain is visible from the project site to the south, and the San Gabriel Mountains are visible to the north and northwest. However, these views are partially obstructed by surrounding development. Views of Arlington Mountain are partially obstructed by traffic signals and signage associated with the Van Buren Boulevard and southbound SR 91 off- and on-ramp intersection, as well as the existing fuel station canopy across Van Buren Boulevard to the southwest. The San Gabriel Mountains to the north and northwest of the project site have limited visibility because views are blocked by residential development directly north of the site and commercial development along Van Buren Boulevard.

Currently, the site is a vacant undeveloped lot. The project would involve construction of one-story commercial buildings similar in scale to existing commercial building and fueling station to the west/southwest and adjacent commercial building to the north. The existing views are limited and

the project would not place a structure on the project site that would substantially exceed existing building heights in the surrounding area and block existing views. The project would not have a substantial effect on scenic vistas. Therefore, potential impacts related to scenic vistas would be **less than significant. No mitigation is required.**

- b. *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Sources: California Department of Transportation – Scenic Highways; GP 2025 Figure CCM-4 – Master Plan of Roadways)*

According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, the project site is not located on or near any state scenic highway corridors (Caltrans 2018). The City's General Plan Circulation and Community Mobility Element designates Van Buren Boulevard as a scenic boulevard, potentially requiring special landscaping and/or additional right-of-way (City of Riverside 2007a). However, Van Buren Boulevard is neither officially designated nor eligible for listing as a state-designated scenic highway and the project would add approximately 31,332 square feet of landscaped area to the project site. The project site currently consists of vacant, disturbed land, with minimal low-lying vegetation and no trees. The surrounding areas are generally developed and lack scenic resources such as trees and rock outcroppings. Figure 4 shows images of the site and surrounding vicinity. There are no scenic biological resources on site, and the project site does not contain any buildings. Therefore, the project would have **no impact** on scenic resources along a state scenic highway. **No mitigation is required.**

- c. *Would the project substantially degrade the existing visual character or quality of the site and its surroundings? (Sources: Existing site photographs and site plans, Citywide Design and Sign Guidelines, General Plan 2025)*

As shown in Figure 4, the current visual character of the project site consists of a vacant lot covered in ruderal vegetation, exposed disturbed soil, and fragments of concrete foundations from previously demolished structures. The proposed project would alter the existing visual character of the site with the construction of commercial development consisting of a restaurant with a drive-thru, fueling station, convenience store, quick service restaurant, a car wash tunnel, a commercial retail building, and a Community Entry Sign (Freeway Oriented Sign) on a vacant site. The proposed commercial structures would be compatible with surrounding commercial development and consistent with established Citywide Design and Sign Guidelines. Additionally, the project will further the General Plan 2025 policy for the Arlington Neighborhood (LU-36.4) by enhancing the appearance of the Arlington gateway at the intersection of Van Buren Boulevard and the 91 freeway.

Although the project would alter the existing visual character and quality of the site, it would not substantially degrade the site or its surroundings. Due to all the factors mentioned above, indirect, and cumulative impacts on the visual character and quality of the area are **less than significant. No mitigation is required.**

Figure 4 Site Photographs



Photo 1: Looking northwest from the project site, along Van Buren Boulevard. Provides partially obstructed views of the San Gabriel Mountains ridgeline



Photo 2: Looking south from the project site toward SR 91/Van Buren Boulevard interchange. Arlington Mountain is visible approximately 3.5 miles in the distance.



Photo 3: Existing utility pole on the project site.



Photo 4: Looking east from the project site toward SR 91.

- d. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Sources: Riverside Municipal Code, Chapter 19.556 – Outdoor Lighting; Chapter 19.590 – Performance Standards; Chapter 19.620 – General Sign Provisions)*

The project would include lighting, which would contribute to existing sources of light and glare in the surrounding residential and commercial area. However, the project would be required to comply with applicable lighting requirements, including Chapter 19.556 of the Riverside Municipal Code (RMC) contains the City's outdoor lighting ordinance, which outlines site design standards for lighting and glare in the City. According to the RMC, the project site would be located in Lighting Zone 3, which is suitable for medium to high levels of exterior nighttime lighting. Landscape lighting would be limited to downlights and/or shielded uplights, not to exceed 600 lumens per luminaire or 18,000 lumens per acre. Furthermore, in accordance with Chapter 19.590 of the RMC, freestanding pole lights shall not exceed a maximum height of 14 feet within 50 feet of the adjacent residential properties to reduce lighting impacts on residences. All lights would be directed, oriented, and shielded to prevent light from shining onto adjacent properties, public rights-of-way, and driveway areas in a manner that would obstruct drivers' vision.

The project would involve construction of a Community Entry Sign (Freeway Oriented Sign). Signage lighting would be subject to Chapter 19.620, *General Sign Provisions*, which restricts the type and intensity of sign lighting and requires external light sources for signs to be directed, shielded, and filtered to limit direct illumination of any object other than the sign. Compliance with the RMC would ensure that lighting would not create lighting or glare inconsistent with adjacent uses or that would adversely affect day or nighttime views in the area. Therefore, impacts associated with light and glare would be **less than significant. No mitigation is required.**

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project convert Prime Farmland, Unique Farmland, 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? (Sources: GP 2025 Figure OS-2 – Agricultural Suitability; Farmland Mapping and Monitoring Program - 2016 Riverside County Important Farmland Map)*

The project site is currently undeveloped and identified as Urban and Built-up Land in the City's General Plan Open Space and Conservation Element. In addition, the 2016 Riverside County Important Farmland Map created by the Farmland Mapping and Monitoring Program also identifies the project site as Urban and Built-up Land (California Department of Conservation 2017). There is no Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local

Importance on or adjacent to the project site. The project would result in **no impact. No mitigation is required.**

- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? (Source: GP 2025 Figure LU-10 – Land Use Policy Map; GP 2025 Figure OS-3 – Williamson Act Preserves; City of Riverside – Zoning Map of the City of Riverside)*

The project site has a General Plan land use designation of Mixed Use – Village and is zoned CR-SP Commercial Retail and Specific Plan (Magnolia Avenue) Overlay Zone and CR-NC-SP Commercial Retail, Neighborhood Commercial and Specific Plan (Magnolia Avenue) Overlay Zone. Therefore, the project would not conflict with existing zoning for agricultural use. Additionally, a review of Figure OS-3 – Williamson Act Preserves of the General Plan 2025 reveals that the project site is not located within an area that is affected by a Williamson Act Preserve or under a Williamson Act Contract. Therefore, the project would result in **no impact** directly, indirectly or cumulatively. **No mitigation is required.**

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? (Sources: GP 2025 Figure LU-10 – Land Use Policy Map; City of Riverside – Zoning Map of the City of Riverside)*

The City of Riverside has no forest land that can support 10-percent native tree cover nor does it have timberland. Therefore, **no impact** will occur from this project directly, indirectly or cumulatively. **No mitigation is required.**

- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use? (Source: GP 2025 Figure OS-5 – Habitat Areas and Vegetation Communities)*

The project site is vacant with no trees. No forested habitat or vegetation communities are identified on the project site (City of Riverside 2007a). The project would not result in the loss or conversion of forest land to non-forest use. **No impact** will occur from this project directly, indirectly or cumulatively. **No mitigation is required.**

- e. *Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? (Source: GP 2025 Figure LU-2 – Urban Design Framework; GP 2025 Figure OS-2 – Agricultural Suitability; GP 2025 Figure OS-3 – Williamson Act Preserves)*

The project is located in an urbanized area of the City. Additionally, the site is identified as urban/built out land and therefore does not support agricultural resources or operations. The project will not result in the conversion of designated farmland to non-agricultural uses. In addition, there are no agricultural resources or operations, including farmlands within proximity of the subject site. The City of Riverside has no forest land that can support 10-percent native tree cover. Therefore, **no impacts** will occur from this project directly, indirectly or cumulatively to conversion of Farmland, to non-agricultural use or to the loss of forest land. **No mitigation is required.**

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

An Air Quality and Greenhouse Gas Assessment (AQ/GHG Assessment) was prepared for the project by Salem Engineering Group, Inc. (Salem) in July 2018. The analysis in this section is based on the AQ/GHG Assessment, which is included as Appendix A. The AQ/GHG Assessment modelled emissions from a slightly different project, which included 2,750 more square feet of retail/mixed use space and 442 fewer square feet of fast food restaurant space. Despite these differences, the AQ/GHG Assessment is applicable to the project, given that total square footage was overestimated by 2,308 square feet, thereby providing a conservative estimate of air quality impacts.¹

Air Quality Standards and Attainment

The six criteria pollutants regulated by the federal Clean Air Act and California Clean Air Act are ozone (created by a reaction between reactive organic compounds [ROG] and nitrogen oxides [NO_x]), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter with a diameter of 10 microns or less (PM₁₀), particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), and lead. The project site lies within the South Coast Air Basin (the Basin), which is under

¹ Although the AQ/GHG Assessment analyzed 442 less square feet of fast food restaurant space, the difference in square footage is incremental. The project would generate incrementally greater air emissions than the project analyzed by the AQ/GHG Assessment; however, the significance of the project's air quality impacts would not change given that emissions are already substantially below thresholds (see discussion below).

the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the Basin is classified as being in “attainment” or “nonattainment.” The health effects associated with criteria pollutants upon which attainment of state and federal air quality standards is measured are described in Table 2.

Table 2 Health Effects Associated with Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: pulmonary function decrements and localized lung edema in humans and animals, risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Carbon monoxide (CO)	Reduces oxygen delivery leading to: (1) aggravation of chest pain (angina pectoris) and other aspects of coronary heart disease; (2) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (3) impairment of central nervous system functions; and (4) possible increased risk to fetuses.
Nitrogen dioxide (NO ₂)	(1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (2) risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (3) contribution to atmospheric discoloration.
Sulfur dioxide (SO ₂)	(1) Bronchoconstriction accompanied by symptoms that may include wheezing, shortness of breath, and chest tightness during exercise or physical activity in persons with asthma.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ¹
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ¹

¹ More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: Office of Environmental Health Hazard Assessment, Particulate Matter Health Effects and Standard Recommendations, www.oehha.ca.gov/air/toxic_contaminants/PM10notice.html#may, May 9, 2002; and United States Environmental Protection Agency, Air Quality Criteria for Particulate Matter, October 2004.

Source: United States Environmental Protection Agency 2018a

The Basin is designated nonattainment for the state ozone, PM_{2.5}, and PM₁₀ standards, and the federal ozone and PM_{2.5} standards. The Los Angeles County portion of the Basin is also designated as nonattainment for the federal standard for lead (California Air Resources Board [CARB] 2017a, United States Environmental Protection Agency 2018b). The Basin is in attainment of all other federal and state standards. Nonattainment status is a result of several factors, the primary ones being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate air pollutants, and the number, type, and density of emission sources within the Basin. Because the Basin currently exceeds several state and federal ambient air quality standards, the SCAQMD is required to implement strategies to reduce pollutant levels to recognized acceptable standards.

Air Quality Management

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards. The SCAQMD updates the AQMP every three years. Each iteration of the AQMP is an update of the previous plan and has a 20-year horizon. The latest AQMP, the 2016 AQMP, was adopted on March 3, 2017. The 2016 AQMP incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal 8-hour ozone standard of 0.070 parts per million (ppm) that was finalized in 2015.

The 2016 AQMP addresses several state and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and updated meteorological air quality models (SCAQMD 2017). The 2016 AQMP builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM and ozone standards and highlights the significant amount of reductions to be achieved. It emphasizes the need for interagency planning to identify additional strategies to achieve reductions within the timeframes allowed under the federal Clean Air Act, especially in the area of mobile sources. The 2016 AQMP also includes a discussion of emerging issues and opportunities, such as fugitive toxic particulate emissions, zero-emission mobile source control strategies, and the interacting dynamics among climate, energy, and air pollution. The 2016 AQMP also includes attainment demonstrations of the new federal 8-hour ozone standard and vehicle miles travelled (VMT) emissions offsets, as per recent US EPA requirements.

Air Pollutant Emission Thresholds

The 2016 AQMP provides a strategy for the attainment of state and federal air quality standards. The SCAQMD recommends the use of quantitative thresholds to determine the significance of temporary construction-related pollutant emissions and emissions from project operations. These thresholds are designed such that a project consistent with the thresholds would not have an individually or cumulatively significant impact to the Basin's air quality. These thresholds are shown in Table 3.

Table 3 SCAQMD Air Quality Significance Thresholds

Pollutant	Mass Daily Thresholds (lbs/day)	
	Construction	Operation
NO _x	100	55
ROG	75	55
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
CO	550	550
Lead	3	3

Source: SCAQMD 2015

The SCAQMD has also developed Localized Significance Thresholds (LSTs) in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, and distance to the sensitive receptor. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NO_x, CO, PM₁₀ and PM_{2.5}. LSTs do not apply to mobile sources such as cars on a roadway (SCAQMD 2008). As such, LSTs for operational emissions do not apply to on-site development since the majority of emissions would be generated by cars on the roadways.

The project site is located in SRA 23, Metropolitan Riverside County. LSTs have been developed for emissions from construction areas up to five acres in size. The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. The project involves an approximately 3.85-acre disturbance area; therefore, linear regression was used to estimate LSTs using the values for two-acre and five-acre project sites in SRA 23, as shown in Table 4. LSTs are provided for receptors at a distance of 25 to 500 meters from the project site boundary. According to the SCAQMD's *Final Localized Significance Threshold Methodology*, projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters (SCAQMD 2008). The sensitive receptors closest to the project site are the single-family residences located adjacent to the project site's eastern boundary; therefore, as shown in Table 4, LSTs for a receptor distance of 25 meters are used.

Table 4 SCAQMD LSTs for Construction (SRA 23)

Pollutant	Allowable Emissions (lbs/day) from a 3.85-acre Site in SRA 23 for a Receptor 25 meters away
Gradual conversion of NO _x to NO ₂	233
CO	1,323
PM ₁₀	11
PM _{2.5}	6

See Appendix A for linear regression calculations.
Source: SCAQMD 2009

- a. *Would the project conflict with or obstruct implementation of the applicable air quality plan? (Sources: California Department of Finance – Population and Housing Estimates; SCAG – 2016 RTP/SCS; SCAQMD – Final 2016 Air Quality Management Plan; United States Green Building Council – Building Area per Employee by Business Type)*

As discussed above, the project site is located in the South Coast Air Basin, which is under the jurisdiction of the SCAQMD. The latest air quality plan adopted by the SCAQMD is the 2016 AQMP, which addresses attainment of federal PM and ozone standards. Project consistency with the AQMP is generally determined based on whether the project would generate population, housing, or employment growth that exceeds the forecasts used in the development of the AQMP. The 2016 AQMP relies on local city general plans' and the Southern California Association of Government's (SCAG) Regional Transportation Plans' (RTP) forecasts of regional population, housing, and employment growth in its own projections for managing Basin air quality.

The project involves the construction of a commercial development. The project does not include residential units that would cause a direct increase in the city's population. While the project may provide new employment opportunities in the city of Riverside that could contribute to population growth, this contribution would be nominal. According to an employee density study prepared by the United States Green Building Council (USGBC) in 2008, fast food restaurants employ approximately 1 employee per 92 square feet; neighborhood retail uses (a proxy for the convenience store) employ approximately 1 employee per 588 square feet; and community retail uses employ approximately 1 employee per 383 square feet. Based on these averages, the project is expected to employ approximately 88 persons.² According to data provided by the California Department of Finance (DOF), the estimated population for the city of Riverside in 2018 was 325,860 (DOF 2018). In its 2016 RTP/Sustainable Community Strategy (SCS), SCAG projects that the city of Riverside's population will increase to 386,600 by 2040, an increase of 60,740 persons relative to the 2018 population (SCAG 2016). Assuming that all project employees relocate to the city, which is a conservative assumption given the connected nature of the region and the nature of the employment opportunities, project-related population growth would constitute less than one percent of projected city growth. Thus, the level of population growth associated with the project was anticipated in SCAG's long-term population forecasts and would not exceed official regional population projections. As such, the project would be consistent with the growth forecasts that

² 1 employee per 92 square feet multiplied by 5,112 square feet + 1 employee per 588 square feet multiplied by 3,800 square feet + 1 employee per 383 square feet multiplied by 9,250 square feet = 88 employees

underlie the air pollutant emissions forecasts of the 2016 AQMP. As such, the project would not conflict with the 2016 AQMP. **No impact** would occur. **No mitigation is required.**

- b. *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Sources: Appendix A – Air Quality and Greenhouse Gas Assessment; California Air Resources Board – Top 4 Summary; SCAQMD – Final Localized Significance Threshold Methodology; SCAQMD – Appendix C – Mass Rate LST Look-up Table; SCAQMD – Air Quality Significance Thresholds)*

The monitoring station located closest to the project site is the Riverside-Rubidoux monitoring station, located at 5888 Mission Boulevard in the unincorporated community of Rubidoux in Riverside County, approximately six miles northeast of the project site. Table 5 indicates the number of days that each of the standards has been exceeded at the Riverside-Rubidoux station in each of the last three years for which data is available.

Table 5 Ambient Air Quality Data

Pollutant	2015	2016	2017
8 Hour Ozone (ppm), 8-Hour Maximum	0.105	0.104	0.118
Number of days of State exceedances (>0.070)	55	69	81
Number of days of Federal exceedances (>0.070)	55	69	81
Ozone (ppm), Worst Hour	0.132	0.142	0.145
Number of days of State exceedances (>0.09 ppm)	31	33	47
Number of days of Federal exceedances (>0.112 ppm)	1	1	2
Nitrogen Dioxide (ppm) - Worst Hour	0.0574	0.0731	0.0630
Number of days of State exceedances (>0.18 ppm)	0	0	0
Number of days of Federal exceedances (0.10 ppm)	0	0	0
PM ₁₀ , µg/m ³ , Worst 24 Hours	69.0	84.0	92.0
Number of days above Federal standard (>150 µg/m ³)	0	0	0
Number of days above the California standard (>50 µg/m ³)	87	60	98
PM _{2.5} , µg/m ³ , Worst 24 Hours	54.7	51.5	50.3
Number of days above Federal standard (>35 µg/m ³)	9	5	7

* = insufficient data available, PM₁₀ = particulate matter measuring between 2.5 and 10 microns in diameter, PM_{2.5} = particulate matter measuring 2.5 microns or less in diameter

Source: CARB 2018

As shown in Table 5, the ozone concentration exceeded state and federal eight-hour and one-hour standards every year from 2015 through 2017. The PM₁₀ concentration exceeded the state standard every year from 2015 through 2017, and the PM_{2.5} concentration exceeded the federal standard every year from 2015 to 2017. No exceedances of either state or federal standards for NO₂ or the federal standard for PM₁₀ have occurred at the designated monitoring station in the last three years.

Construction Emissions

Project construction activities would generate temporary diesel emissions and dust. Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. It is assumed that heavy construction equipment would be operating at the site for eight hours per day, five days per week during project construction. In addition, it was assumed the project would comply with all applicable regulatory standards, which includes SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

Air pollutant emissions modelling was performed using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (Appendix A). To account for compliance with SCAQMD Rule 403 and Rule 1113, air pollutant emissions modelling included the assumptions that the construction site would be watered three times daily and that low VOC architectural coatings would be used (Appendix A). As shown in Table 6, estimated maximum daily construction emissions would not exceed SCAQMD regional thresholds or LSTs. Therefore, project construction would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and construction-related air quality impacts would be **less than significant. No mitigation is required.**

Table 6 Construction Emissions

	Maximum Daily Emissions ¹ (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum Emissions (lbs/day)	21.14	20.98	15.18	0.03	3.17	1.93
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
SCAQMD Localized Significance Thresholds (LSTs) ²	N/A	233	1,323	N/A	11	6
Threshold Exceeded?	N/A	No	No	N/A	No	No

¹ Air emissions modeling assumed compliance with SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coating).

² LSTs are for a 3.85-acre project in SRA 23 within a distance of 25 meters from the site boundary.

Notes: All emissions modeling was done using CalEEMod. Emissions presented are the highest of the winter and summer modeled emissions.

Source: Appendix A

Operational Emissions

Operational emissions associated with project operation would include emissions associated with mobile sources (vehicle trips), energy sources (electricity and natural gas use), and area sources (landscape maintenance equipment, consumer products, and architectural coating associated with on-site operational activities). As shown in Table 7, operational emissions would not exceed SCAQMD thresholds for any criteria pollutant. Therefore, project operation would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and impacts would be **less than significant. No mitigation is required.**

Table 7 Operational Emissions

	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Total Emissions	11.16	38.97	50.31	0.08	2.48	0.75
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Notes: All emissions modeling was done using CalEEMod. Emissions presented are the highest of the winter and summer modeled emissions.

Source: Appendix A

- c. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? (Source: SCAQMD – CEQA Air Quality Handbook)*

The Basin is classified as a non-attainment area for the federal standards for ozone, PM_{2.5}, and lead and the State standards for ozone, PM_{2.5}, and PM₁₀. Any growth within the Basin would contribute to existing exceedances of ambient air quality standards. SCAQMD's approach to determining cumulative air quality impacts for criteria air pollutants is to first determine whether the proposed project would result in a significant project-level impact to regional air quality based on SCAQMD significance thresholds. If the project would not generate emissions exceeding SCAQMD thresholds, then the lead agency needs to consider the additive effects of related projects only if the proposed project is part of an ongoing regulatory program, such as a market program for reducing air pollution, or is contemplated in a Program EIR and the related projects are located within approximately one mile of the project site (SCAQMD 1993).

The proposed project is not part of an ongoing regulatory program or is not contemplated in a Program EIR. SCAQMD therefore recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As noted under Item b above, air pollutant emissions generated by project construction and operation would not exceed SCAQMD thresholds for any criteria pollutant. In addition, as noted under Item a, the project would be consistent with the AQMP. In accordance with SCAQMD guidance on determining cumulative impacts, the project would not 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. Therefore, impacts would be **less than significant. No mitigation is required.**

- d. *Would the project expose sensitive receptors to substantial pollutant concentrations? (Source: California Air Resources Board – Air Quality and Land Use Handbook)*

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups and include healthcare facilities, retirement homes, school and playground facilities, and residential areas. The sensitive receptors nearest to the project site are residences located adjacent to the project site's eastern boundary.

As shown in Table 6, the project's construction emissions would not exceed SCAQMD LSTs and therefore would not expose local sensitive receptors to substantial levels of criteria pollutant emissions due to on-site construction activities.

Refueling activities at the proposed gas station would potentially release benzene into the air; however, benzene emissions can be reduced by more than 90 percent by the vapor recovery systems required at fuel pumps. Nevertheless, benzene emissions may result in near source health risk (CARB 2005). CARB recommends siting sensitive land uses, such as residences, at least 50 feet from typical gasoline dispensing facilities and at least 300 feet from large gasoline dispensing facilities (i.e., facilities with a throughput of 3.6 million gallons per year or greater; CARB 2005). The proposed gas station would be classified as a typical gasoline dispensing facility. Fuel pumps would be located at least 140 feet away from the nearest residence, and underground storage tanks and the associated Healy clean air separator would be located west of the fuel pumps approximately 180 feet away from the nearest residence. Therefore, the proposed fuel pumps would be located outside the recommended buffer of 50 feet, which would meet CARB-recommended setbacks of gasoline dispensing facilities from nearby sensitive receptors. Furthermore, SCAQMD has specific requirements for the control of gasoline vapor emissions from gasoline dispensing facilities as set forth in SCAQMD Rule 461 (Gasoline Transfer and Dispensing), which requires compliance with equipment and operation standards as well as maintenance and inspection protocol. Compliance with SCAQMD Rule 461 would protect nearby residents from exposure to emissions related to the proposed fueling station.

Project-generated traffic could contribute to the creation of CO hotspots, i.e., localized concentrations of CO that exceed the state one-hour or eight-hour CO ambient air standards. A project's localized air quality impact is considered significant if CO emissions create a hotspot where either the California one-hour standard of 20 ppm or the federal and state eight-hour standard of 9.0 ppm is exceeded. This typically occurs at severely congested intersections (level of service [LOS] E or worse) and where the project may add substantial traffic and associated emissions.

The entire Basin is in conformance with federal and state CO standards, and most air quality monitoring stations no longer report CO levels. No stations in the vicinity of the project site have monitored CO in the last five years. The project is expected to add approximately 3,862 daily trips to area roadways (Appendix H). As discussed in Section 16, *Transportation/Traffic*, under cumulative conditions, the Van Buren Boulevard/Magnolia Avenue intersection would operate at LOS E during the PM peak hour, which is the typical threshold for severely congested intersections. Project-related traffic would have a potentially cumulatively considerable contribution to the impact at this intersection because the project would contribute additional traffic to a forecast deficiency. Therefore, the project would potentially expose sensitive receptors to substantial localized concentrations of CO. However, as discussed in Section 16, *Transportation/Traffic*, implementation of Mitigation Measure T-1 would require the payment of fair share contribution fees toward implementation of signal re-timing that would improve the intersection operating conditions at the Van Buren Boulevard/Magnolia Avenue intersection to LOS D. Therefore, with implementation of Mitigation Measure T-1, the project would not contribute significant traffic to this severely congested intersection and thus would not significantly exacerbate the potential CO hotspot at this intersection. As a result, the project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be **less than significant with mitigation incorporated**.

- e. *Would the project create objectionable odors affecting a substantial number of people?*
(Sources: Appendix A – Air Quality and Greenhouse Gas Assessment; California Air Resources Board – Air Quality and Land Use Handbook)

As discussed in the project's AQ/GHG Assessment, diesel equipment operating at the site during construction may generate some nuisance odors. However, due to the temporary nature of construction, construction-related odor impacts would be less than significant (Appendix A).

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) identifies land uses associated with odor complaints. Land uses and industrial operations known to emit objectionable odors include wastewater treatment facilities, food processing facilities, coffee roasters, fiberglass operations, refineries, feed lots/dairies, and composting facilities. The project would involve commercial development consisting of a drive-through fast food restaurant, a quick serve restaurant, a 16-pump gas station with a convenience market and drive-through car wash, and retail/mixed use space. As discussed in the AQ/GHG Assessment, none of these uses are identified as land uses associated with odor complaints by CARB (Appendix A; CARB 2005). Although gasoline fumes from the fueling station may be considered a nuisance odor, this use is not identified by CARB as a significant odor-generating use, and fuel pumps would be located approximately 140 feet away from the nearest residences. CARB recommends siting sensitive land uses, such as residences, at least 50 feet from typical gasoline dispensing facilities, and the proposed fuel pumps would be located outside the recommended buffer of 50 feet, which would meet CARB-recommended setbacks of gasoline dispensing facilities from nearby sensitive receptors (CARB 2005). Therefore, the project would not generate objectionable odors affecting a substantial number of people, and impacts would be **less than significant. No mitigation is required.**

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service? (Source: Appendix B – Biological Habitat Assessment and Burrowing Owl Survey)*

Special-status species are plants and animals that are 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) under the federal Endangered Species Act (ESA); 2) listed or proposed for listing as Rare, Threatened, or Endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); 3) recognized as Species of Special Concern (SSC) by the CDFW; 4) afforded protection under Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code (CFGF); or 5) identified on lists 1 and 2 of the CDFW California Rare Plant Rank (CRPR) system.

Burrowing owls, a state species of special concern, are known to occur in the region. VHBC, Inc. (VHBC) completed protocol burrowing owl surveys of the project site in August 2018, the results of which are included as Appendix B. From August 5, 2018 to August 9, 2018, VHBC performed surveys along linear transects that spanned the entire site in accordance with Section 6.3.2 of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). No signs of burrowing owls were observed on-site during the protocol surveys. VHBC concluded that burrowing owls do not use the project site for burrowing or nesting and that the project site does not include viable burrowing owl habitat (Appendix B). In addition, the project site consists of bare, graded ground and low-lying vegetation. No trees are present on-site. Therefore, the project site does not support nesting birds protected by the MBTA or other sensitive species and the project will have **no impact** directly, indirectly and cumulatively on habitat modifications, species identified as a candidate, sensitive, or special status species in local or regional plans, and policies or regulation of the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. **No mitigation is required.**

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (Source: GP 2025 Figure OS-5 – Habitat Areas and Vegetation Communities)*

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. The project site is currently a vacant, flat lot consisting primarily of bare, graded ground with sparse low-lying vegetation. According to Figure OS-5 of the City of Riverside General Plan 2025 Open Space and Conservation Element, the project site is located within an area of “residential/urban/exotic” habitat, and no sensitive natural communities or riparian habitat are present on the project site (City of Riverside 2007a). As such, the project does not have the potential to result in direct or indirect adverse effects to riparian habitat or other sensitive natural communities. Therefore, **no impact** to any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service with implementation of the proposed project will occur directly, indirectly and cumulatively. **No mitigation is required.**

- c. *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Sources: Appendix F – Preliminary WQMP; United States Fish and Wildlife – Wetlands Data Mapper; United States Geological Survey – National Hydrography Dataset)*

The project site does not contain any surface water bodies or potentially jurisdictional water features (USFWS 2018). As described in the Preliminary Water Quality Management Plan prepared for the project, the project site does not contain any natural hydrologic features (Appendix F). The nearest potentially jurisdictional feature is a canal/ditch located approximately 300 feet south of the project site across SR 91. The canal/ditch runs parallel to SR 91 and may support intermittent riverine habitat (United State Geological Survey 2018; USFWS 2018). The project would not require substantial grading and SR 91 separates the project site from this water features. Therefore, the project would not have a substantial adverse impact on federally protected wetlands or waterways. **No impact** would occur. **No mitigation is required.**

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Source: GP 2025 Figure OS-7 – MSHCP Core and Linkages)*

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. No native resident or migratory fish or wildlife species or native wildlife nursery sites exist on the project site. The surrounding land uses are urban, which restricts regional wildlife movement. According to Figure OS-7 of the City of Riverside General Plan 2025 Open Space and Conservation Element, the project site is not located within an existing or proposed wildlife linkage as designated by the Western Riverside MSHCP (City of Riverside 2007a). Therefore, the project would have **no impact** on wildlife movement or native wildlife nursery sites. **No mitigation is required.**

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Sources: GP 2025 Open Space and Conservation Element; Appendix B – Biological Habitat Assessment and Burrowing Owl Survey)*

The project site is subject to the requirements of the City of Riverside General Plan 2025. The City's General Plan Open Space and Conservation Element contains policies to protect biological resources (City of Riverside 2007a). These policies include protecting native biotic communities and critical habitats for endangered species, participating in the Western Riverside MSHCP, preserving and maintaining wildlife movement corridors, and protecting arroyos and riparian habitat areas. The City of Riverside does not have a tree preservation policy or ordinance.

As discussed under Items a and d above, the project would not have a significant impact on endangered species, critical habitat, environmentally sensitive areas, or native plant communities because no native habitat or special status species are present on-site. In addition, due to the urbanized nature of the city and project site vicinity, the project would not affect important wildlife movement corridors. Therefore, the project would not conflict with any local policies protecting biological resources, and **no impact** would occur. **No mitigation is required.**

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Source: Appendix B – Biological Habitat Assessment and Burrowing Owl Survey; MSHCP, General Plan 2025 – Figure OS-6 – Stephen’s Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plan (HCP))*

The City of Riverside adopted the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) in October 2003. The MSHCP covers 146 species in a 1.26 million-acre area spanning from the San Jacinto Mountains to the Orange County line. The project site is located in the MSHCP’s Riverside/Norco Plan Area. The MSHCP designates Core Areas, Linkages, and Non-contiguous Habitat Blocks, all of which are intended to preserve and support protected species.³ The MSHCP also identifies Criteria Areas, which are habitat adjoining Core Areas, Linkages, and non-contiguous Habitat Blocks. Criteria Areas are broken down into smaller units, called cells and cell groups, which are used to monitor development and facilitate habitat acquisition by the Western Riverside Regional Conservation Authority.

The project site is not within an MSHCP cell group; therefore, no specific sensitive species surveys are required because the site is not part of a protected Criteria Area (Appendix B). Additionally, the project site is not located within the Stephens’ Kangaroo Rat core reserves or Stephens’ Kangaroo Rat habitat conservation plan (HCP). Therefore, the project would not conflict with the provisions of the Western Riverside MSHCP, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and **no impact** would occur. **No mitigation is required.**

³ Core Areas are lands with suitable live-in habitat and resources that support protected species. Linkages are wildlife movement corridors/pathways that link Core Areas. Non-contiguous Habitat Blocks are separate preserves where specific protected species live.

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Archaeological Associates conducted a Phase I Cultural Resources Assessment for the project to identify prehistoric and/or historic-period resources in the project vicinity. The assessment consisted of: (1) a records search conducted to determine whether any previously recorded historic or prehistoric material was present on the project site, (2) literature and archival review, and (3) a field reconnaissance survey intended to identify any previously unrecorded cultural resources on the project site. The information below is derived from the assessment and letter provided by Archaeological Associates in September 2018, which is included as Appendix C.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (Source: Appendix C – Phase I Cultural Resources Assessment)*

The project site is generally flat and heavily disturbed, with native and introduced ruderal vegetation species and fragmented concrete remnants of demolished building foundations present. The results of a records search conducted at the Eastern Information Center (EIC) at the University of California, Riverside indicated that the project site had been previously surveyed in conjunction with the 1,100-acre Arlington Redevelopment Plan in 1998/1999. According to the Cultural Resources Assessment, the records search revealed one historic structure previously recorded on the project site. The Giachetti House (Designated Primary #33-9046) was a single-story, wood-frame, California Ranch-style house constructed on the project site in 1941. The structure was evaluated but found ineligible for listing on the National Register of Historic Places (NRHP) in 1998 and 2003. The building and all associated features were completely demolished in early 2018. A field survey conducted by Archaeological Associates on September 20, 2018 did not identify any remaining historic resources on the project site. No additional historic resources of any kind were discovered during the course of the field survey.

While no NRHP, California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), or California Points of Historical Interest (CPHI) listed properties have been recorded on the project site, one NRHP listed property has been recorded within the search radius. The NRHP listed property (NRHP No. 00001267), Primary # 33-11361, comprises a 6.1-mile section of Victoria Avenue between Arlington Street and Boundary Lane in the city of Riverside (inclusive of the landscaped center median). It is located approximately one mile southeast of the project site and was listed in October 2000. Given the distance from the project site, this listed property would not be affected by the project.

The historic structure previously located on the project site has been demolished and, aside from a few pieces of fragmented concrete, no longer remains. The Cultural Resources Assessment prepared for the project recommends no additional work in conjunction with historic resources. Therefore, impacts to historical resources would be **less than significant. No mitigation is required.**

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? (Source: **Appendix C – Phase I Cultural Resources Assessment**)*

The results of the records search conducted by Salem indicated that no prehistoric or historic archaeological sites have been previously recorded on the project site. The results of the field survey conducted on September 20, 2018 were also negative. No prehistoric resources of any kind were identified during the course of the investigation. One prehistoric archaeological site has been recorded within a one-mile radius. The site, designated CA-RIV-107, lies approximately 0.6 mile to the west. Nothing is known about the character of the site other than it measures approximately 40 by 50 meters and a road passes through it. Recorded in 1951, the mapped location of the site is considered suspect. Given the distance from the project site and the nature of the project, this prehistoric archaeological site would not be affected by project construction or operation. The Cultural Resources Assessment recommends no additional work in conjunction with archaeological resources. Therefore, this impact would be **less than significant. No mitigation is required.**

- c. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature? (Source: **Riverside County Information Technology – Paleontological Sensitivity Layer**)*

The project site is heavily disturbed due to previous construction and demolition of structures, tree removals, and weed abatement activities. Given the disturbed nature of the site, it is unlikely to contain intact paleontological resources. Nevertheless, the project site is designated as having high paleontological sensitivity, according to the Riverside County Information Technology Paleontological Sensitivity layer (Riverside County Information Technology 2018). Site preparation, grading, and excavation, as well as other construction activities involving heavy equipment would have the potential to damage or destroy previously unidentified paleontological resources on the project site. Implementation of Mitigation Measure CUL-1 would reduce this impact to a less than significant level by ensuring that any previously unidentified paleontological resources discovered during project construction are properly preserved under the direction of a qualified paleontologist. This impact would be **less than significant with mitigation incorporated.**

Mitigation Measure

CR-1 Unanticipated Discovery of Paleontological Resources

In the inadvertent discovery of paleontological resources during ground disturbing activities, all work shall halt in the vicinity of the discovery until a qualified paleontologist inspects the find and evaluates it for significance. The City Planning and Historic Preservation Divisions shall be informed of the discovery immediately. If the paleontological resource is determined to be significant, the paleontologist shall have the authority to quickly and efficiently salvage and remove the fossil from its locality, as appropriate, before ground-disturbing activities resume in the area. Any fossils recovered during the development, along with their contextual stratigraphic data, shall be offered to the City of Riverside or other appropriate institution with an educational and research interest in the materials. The paleontologist shall prepare a report of the results of any findings as part of a testing or mitigation plan following accepted professional practice.

- d. *Would the project disturb any human remains, including those interred outside of formal cemeteries? (Sources: State Health and Safety Code Section 7050.5; Public Resources Code Section 5097.98)*

No known human remains are present on the project site and the potential to encounter human remains is low. In the unlikely event that human remains are encountered during excavation and grading the proper authorities would be notified, and standard procedures for the respectful handling of human remains during the earthmoving activities would be followed. Standard Conditions of Approval will be included in the project findings to address the unforeseen discovery of human remains. As a result, impacts would be **less than significant. No mitigation is required.**

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6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This section is based, in part, on the Preliminary Soil Investigation and Infiltration Tests Report ("Soils Report") for the project site, prepared by Soil Exploration Company, Inc. and included as Appendix D.

- a.1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Sources: California Department of Conservation – Earthquake Zones of Required Investigation; GP 2025 FEIR Figure 5.6-2 – Faults and Fault Zones)*

Based on fault maps from the California Department of Conservation (DOC), the project site is not located in or adjacent to an Alquist-Priolo Fault Zone, and there are no known active or potentially active faults trending toward or through the site (DOC 2018; City of Riverside 2007b). The nearest potentially active fault is the Chino-Central Avenue Fault in the Elsinore Fault Zone, approximately 9.4 miles west of the site (Soil Exploration Company, Inc. 2016). The Soils Report recommends using proper engineering design and construction in conformance with the California Building Code (CBC) standards, seismic data presented in Appendix D of the Soils Report, and the latest requirements of the Structural Engineers Association of Southern California to select design parameters for the site. Project-specific geotechnical recommendations contained in the Soils Report would be incorporated as conditions of approval for the project and would ensure that seismic ground shaking would be reduced to **less than significant** levels. **No mitigation is required.**

- a.2. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking? (Sources: Appendix D – Soils Report; Riverside Municipal Code – Chapter 16.08, Building Code)*

The project site is located in the highly seismic Southern California region, influenced by several active or potentially active fault systems. An active fault is defined by the State of California as a “sufficiently active and well defined fault that has exhibited surface displacement in the Holocene time (the last 11,000 years).” A potentially active fault is defined by the State as a “fault with a history of movement in the Pleistocene time (between 11,000 and 1.6 million years ago)”. No faults have been mapped across the project site. However, as with the entire seismically active southern California region, the project site is susceptible to ground shaking during a seismic event. Table 8 presents the 10 nearest fault zones and their associated maximum earthquake magnitudes.

Table 8 Regional Faults

Fault Name	Approximate Distance from Site (miles)	Maximum Earthquake Magnitude ¹
Chino – Central Avenue (Elsinore)	9.4	6.7
Elsinore – Glen Ivy	10.6	6.8
Whittier	12.0	6.8
San Jacinto – San Bernardino	12.8	6.7
San Jacinto – San Jacinto Valley	13.7	6.9
Cucamonga	18.2	7.0
Elsinore – Temecula	19.6	6.8
San Jose	19.7	6.5
San Andreas – Southern	21.3	7.4
San Andreas – San Bernardino	21.3	7.3

¹Earthquake magnitude refers to the size of the earthquake as recorded on the Richter scale based on seismometer-measured wave amplitude and distance to earthquake center. Earthquakes ranging from 6-6.9 are generally classified as “Strong”, while those ranging from 7-7.9 are classified as “Major.”

Source: Soils Report (Appendix D)

Due to the distance of the project site to nearby faults, moderate to strong ground shaking can be expected and there is a two percent probability that the peak ground acceleration at the site will exceed 0.5 g (where g is the acceleration due to gravity) in the next 50 years (Soil Exploration Company, Inc. 2016).

The City of Riverside regulates development (and reduced geologic and seismic impacts) through the requirements of the CBC, as adopted in Chapter 16.08 of the RMC. The CBC requires various measures of all construction in California to account for hazards from seismic shaking. These measures include standards for structural design, necessary tests and inspections, provisions addressing building foundations, and standards for the use of certain materials. In addition, all construction is required to be consistent with seismic resistant design and materials requirements in the RMC. Conformance with the CBC and RMC, as recommended in the Soils Report, would result in **less than significant** impacts related to seismically-induced ground shaking from nearby faults. **No mitigation is required.**

a.3. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction? (Sources: GP 2025 Figure PS-2 – Liquefaction Zones; Appendix D – Soils Report)

Liquefaction is a phenomenon in which saturated silty to cohesion-less soils above the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic stresses induced by an earthquake. These soils may acquire a high degree of mobility and lead to structurally damaging deformations. Liquefaction begins below the water table, but after liquefaction has developed, the groundwater table will rise and cause the overlying soil to mobilize. Liquefaction typically occurs in areas where groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine- to medium-grained sand. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to initiate liquefaction.

The project site is located in an area of high to very high liquefaction susceptibility (City of Riverside 2007a). However, groundwater was not encountered during collection of any soil boring samples in July 2016 up to 25 feet below ground surface, and monitoring wells within one mile of the project site indicate groundwater levels are between approximately 70 to 120 feet below ground surface. Liquefaction would not typically be expected to occur on the project site given the depth to groundwater, as liquefaction generally occurs in areas where groundwater is less than 30 feet from the surface. Nevertheless, because groundwater conditions can change over time and the site has high liquefaction susceptibility, liquefaction could occur on the site during a seismic event. Adherence to applicable CBC requirements regarding site preparation, grading, and foundation design as required under the RMC would further reduce any potential impacts associated with liquefaction or other seismic-related ground failure. In addition, site-specific recommendations for overexcavation of building areas and foundation design would further protect structures from liquefaction, as recommended by the Soils Report. Adherence to the recommendations in the Soils Report, including those pertaining to grading, site preparation, and foundation design, would be required by the City's Building Division during plan check review and construction. Therefore, this impact would be **less than significant. No mitigation is required.**

a.4. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides? (Sources: GP 2025 FEIR Figure 5.6-1 – Areas Underlain by Steep Slope; GP 2025 Public Safety Element)

The geologic character of an area determines its potential for landslides. Steep slopes, the extent of erosion, and the rock composition of a hillside all contribute to the potential for slope failure and landslide events. In order to fail, unstable slopes need to be disturbed. Common triggering mechanisms of slope failure include undercutting slopes by erosion or grading, saturation of marginally stable slopes by rainfall or irrigation, and shaking of marginally stable slopes during earthquakes. The topography of the project site and the surrounding area consists of generally level land and the site does not contain steep slopes. According to the City of Riverside General Plan Final Environmental Impact Report (FEIR), the project site is not located in an area underlain by steep slope that would be susceptible to slope instability. The City of Riverside General Plan Public Safety Element notes that areas of the city susceptible to landslides and rockfalls include portions of western and northeastern Riverside (City of Riverside 2007). The project site is located in central Riverside, outside of these areas. The project would not be subject to landslides and **no impact** would occur. **No mitigation is required.**

b. Would the project result in substantial soil erosion or the loss of topsoil? (Sources: Natural Resources Conservation Service – Web Soil Survey; State Water Resources Control Board – Order No. 2012-0006-DWQ; Riverside Municipal Code – Chapter 17.16.010, Grading Permit Application Requirements)

Construction activities would disturb soil on the project site, resulting in potential for soil erosion and loss of topsoil. The project site is predominantly underlain by Hanford coarse sandy loam soils with a K factor of 0.20 and Wind Erodibility Group Classification of 3, indicating moderate potential for sheet and rill erosion by water and moderate to high susceptibility to wind erosion (Natural Resources Conservation Service 2017).

As noted in Section 3, *Air Quality*, the project would be required to comply with SCAQMD Rule 403 regarding incorporation of measures to reduce fugitive dust, which would reduce the potential for construction-related wind erosion (SCAQMD Rule 403(d)(2)). SCAQMD Rule 403 includes requirements for the application of water or stabilizing agents to prevent generation of dust

plumes, pre-watering materials prior to the use of tarps to enclose haul trucks, stabilizing sloping surfaces using soil binders until vegetation or ground cover efficiently stabilize slopes, hydroseeding prior to rain, and washing mud and soils from equipment at the conclusion of trenching activities. Because the project site is generally flat (reducing the potential for high-speed stormwater flows during construction) and would comply with SCAQMD Rule 403, project construction would not result in substantial wind erosion or loss of topsoil.

Because the project would disturb more than one acre of land it would be subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. Compliance with the permit requires the project applicant to file a Notice of Intent with the SWRCB. Permit conditions require preparation of a Stormwater Pollution Prevention Plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the terms of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities is also required as a condition of receiving a grading permit from the City of Riverside, pursuant to RMC Chapter 17.16.010. Compliance with existing regulatory requirements, including implementation of applicable Best Management Practices (BMPs) related to wind and water erosion control, would reduce potential soil loss and erosion from the site. Impacts related to erosion and loss of topsoil would be **less than significant. No mitigation is required.**

- c. *Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse? (Sources: Riverside County Information Technology – Subsidence Layer; Appendix D – Soils Report)*

Lateral spreading is the horizontal movement or spreading of soil toward an open face. Lateral spreading may occur when soils liquefy during an earthquake event, and the liquefied soils with overlying soils move laterally to unconfined spaces. Due to the relatively flat site topography, the likelihood of lateral spreading on the site is low. Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydrocompaction. As with most of the city of Riverside, the project site is located in an area susceptible to subsidence; however, the project site is not located in a documented area of active subsidence (Riverside County Information Technology 2018). In addition, the project would not include activities known to cause subsidence. As discussed under items a.3 and a.4 above, the project site would not be subject to impacts from landslides and liquefaction.

The project would comply with CBC requirements, thus limiting impacts related to unstable soils. Additionally, the Soils Report prepared for the project concluded that on-site soils, exclusive of oversized materials, debris, or deleterious materials, are sufficient for use as compacted fill material (Appendix D). Development of the project would be consistent with the recommendations included in the project specific Soils Report will reduce potential impacts related to landslide, lateral spreading, subsidence, liquefaction, and collapse to a less than significant level. Therefore, impacts would be **less than significant. No mitigation is required.**

- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Source: Appendix D – Soils Report)*

Expansive soils are soils that have the ability to shrink or swell as water content changes. Based on soil observation and classification conducted as part of the soil investigation documented in the Soils Report, the expansion potential of near-surface sandy soils on the project site is expected to be very low, with an expansion index (EI) of less than 20 (Soil Exploration Company, Inc. 2016). Fill material, if imported from off-site, would have distinct physical properties, with potentially higher expansion potential. Development of the project would be consistent with the recommendations included in the Soils Report and would reduce potential impacts from expansive soils/high shrink-swell potential to a **less than significant level** directly, indirectly, and cumulatively, and **no mitigation is required**.

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

The project would be connected to the City's existing sewer system for wastewater disposal and would not require a septic system. Therefore, the project would not result in impacts associated with soils that are incapable of supporting septic tanks and alternative wastewater disposal systems. **No impact would occur. No mitigation is required.**

7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

An Air Quality and Greenhouse Gas Assessment (AQ/GHG Assessment) was prepared for the project by Salem Engineering Group, Inc. (Salem) in July 2018. The analysis in this section is based on the AQ/GHG Assessment, which is included as Appendix A. The AQ/GHG Assessment modelled emissions from a slightly different project, which included 2,750 more square feet of retail/mixed use space and 442 fewer square feet of fast food restaurant space. Despite these differences, the AQ/GHG Assessment is applicable to the proposed project, given that total square footage was overestimated by 2,308 square feet, thereby providing a conservative estimate of GHG emission impacts.⁴

Background

Project implementation would generate GHG emissions through the burning of fossil fuels and other sources, thus potentially contributing to cumulative impacts related to climate change. In response to an increase in manmade GHG concentrations over the past 150 years, California has implemented Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006." AB 32 codifies the statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. On September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, which extends AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030.

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target established by SB 32. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalent (CO₂e) by 2030 and two MT of CO₂e by 2050

⁴ Although the AQ/GHG Assessment analyzed 442 less square feet of fast food restaurant space, the difference in square footage is incremental. The proposed project would generate incrementally greater GHG emissions than the project analyzed by the AQ/GHG Assessment; however, the significance of the project's GHG emissions impacts would not change given that emissions are already substantially below thresholds (see discussion below).

(CARB 2017b). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State (CARB 2017b).

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Local Regulations

On January 5, 2016, the City of Riverside adopted the Riverside Restorative Growthprint-Climate Action Plan (RRG-CAP) and certified its accompanying Mitigated Negative Declaration prepared pursuant to the requirements of CEQA. The RRG-CAP sets targets to reduce communitywide GHG emissions by 26.4 percent below baseline levels by 2020, which would achieve the target established by AB 32, and by 49 percent below baseline levels by 2035. The RRG-CAP acknowledges that implementation of the RRG-CAP along with state and regional GHG reduction measures will achieve the 2020 target but not the 2035 target (City of Riverside 2016). As a result, the RRG-CAP meets the requirements of CEQA Guidelines Section 15183.5 and is a qualified GHG reduction plan for the purposes of streamlining CEQA analyses of GHG emissions from land use projects constructed through 2020 but not through 2035.

Significance Thresholds

The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The SCAQMD considers emissions of over 10,000 MT of CO₂e per year to be significant. However, SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when SCAQMD is the CEQA lead agency.

In the latest guidance provided by SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determining the significance of residential and commercial projects. The draft tiered approach is outlined in the meeting minutes, dated September 29, 2010 (SCAQMD 2010).

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Sections 15064(h)(3), 15125(d), 15152(a), and 15183.5. Under this Tier, if the proposed project is consistent with the qualified local GHG reduction plan, the project's impacts related to GHG emissions are not significant. If there is not an adopted plan, then the Tier 3 approach would be appropriate.

- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,000 MT of CO₂e per year for all land use projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO₂e per year for land use projects.

The project is not categorically exempt from environmental analysis; therefore, the Tier 1 approach is not applicable. The City of Riverside RRG-CAP is a qualified GHG reduction plan per Sections 15064(h)(3), 15125(d), and 15183.5 of the CEQA Guidelines because the RRG-CAP quantifies GHG emissions, establishes a target GHG level, and has been adopted by the public process. Therefore, Tier 2 would be the most applicable approach, and this analysis evaluates the project's GHG emissions in light of the City's RRG-CAP. Although the RRG-CAP does not demonstrate achievement of its 2035 target, the RRG-CAP demonstrates achievement of the GHG reduction target set by AB 32 for 2020 and is therefore applicable to the project, which would be operational by the end of 2020.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? (Sources: 2016 CALGreen Sections 5.106.4.1 and 5.106.5.3; Appendix A – Air Quality and Greenhouse Gas Assessment and Mobile Source N₂O Emissions Modeling; California Air Resources Board – Mobile Source Emission Inventory; California Air Resources Board – EMFAC 2014 Web Database; City of Riverside – Riverside Restorative Growthprint Economic Prosperity Action Plan and Climate Action Plan; Intergovernmental Panel on Climate Change – Summary for Policymakers; Riverside Municipal Code Section 19.580.090)*

Consistency with City of Riverside RRG-CAP

As described above under *Local Regulations*, the City of Riverside has adopted a number of local GHG emission reduction measures in its RRG-CAP. Table 9 shows local reduction measures from the RRG-CAP that apply to the project (i.e., those that are applicable to new commercial development). As shown in Table 9, the project would be consistent with all applicable local reduction measures. Therefore, because the project would be consistent with the City's RRG-CAP, which is a qualified GHG reduction plan per the CEQA Guidelines, project-related GHG emissions would be **less than significant. No mitigation is required.**

Table 9 Consistency with Applicable Policies from the City of Riverside RRG-CAP

Local Reduction Measure	Project Consistency
Measure T-1: Bicycle Infrastructure Improvements Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	Consistent A Class II (on-street) bicycle lane runs along the northbound side of Van Buren Boulevard along the project frontage. As discussed in Section 16, <i>Transportation/Traffic</i> , the project would not adversely impact this bicycle lane. Therefore, the project would be consistent with Measure T-1.
Measure T-2: Bicycle Parking Provide additional options for bicycle parking.	Consistent In accordance with the requirements of Section 5.106.4.1 of the 2016 CALGreen Standards, the proposed project would be required to include approximately nine short-term bicycle parking spaces.
Measure T-19: Alternative Fuel & Vehicle Technology and Infrastructure Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.	Consistent The project would be required to comply with Section 5.106.5.3 of the 2016 CALGreen standards related to alternative fuel and vehicle infrastructure. In accordance with 2016 CALGreen standards the project would be required to have a minimum ten parking spaces be EV ready with pre-wiring to prepare for future charging station installation.
Measure SW-2: Food Scrap and Compostable Paper Diversion Divert food and paper waste from landfills by implementing commercial and residential collection program.	Consistent In accordance with the provisions of AB 1826, future tenants of the project that generate four or more cubic yards of solid waste per week would be required to recycle their organic waste.
Measure E-2: Urban Forest Augment City's Urban and Community Forest Program to include an Urban Forest Management Plan.	Consistent Per RMC Section 19.580.090, the project would be required to plant and maintain shade trees in the parking lot at a ratio of one tree for every four parking spaces that must be placed throughout the parking lot in a manner that would ensure that all portions of the parking receive shade.

Source: City of Riverside 2016

Project-Related GHG Emissions

As described above, consistency with the City's RRG-CAP indicates that project-related GHG emission impacts are less than significant. Quantitative calculations are provided below for informational purposes only and are not used to determine the significance of project emissions. The analysis focuses on CO₂, CH₄, and N₂O because these make up 98.9 percent of all GHG emissions by volume and are the GHG emissions that the project would emit in the largest quantities (Intergovernmental Panel on Climate Change [IPCC] 2007). Fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, were also considered for the analysis. However, since fluorinated gases are primarily associated with industrial processes, and the proposed project involves commercial uses, the quantity of fluorinated gases would not be significant. Emissions of all GHGs are converted into their equivalent Global Warming Potential in MT of CO₂e. GHG emissions from construction and operation of the project were estimated as part of the AQ/GHG Assessment (see Appendix A for a detailed discussion of methodology and assumptions). Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using guidance from CARB and the EMFAC2014 Emissions Inventory (CARB 2013 and 2019; see Appendix A for calculations).

Project construction would emit approximately 280 of CO₂e (Appendix A). Following the SCAQMD's recommended methodology for amortizing construction emissions over a 30-year period (the assumed life of the project), construction of the proposed project would generate an estimated 9.3 MT of CO₂e per year. Table 10 summarizes the long-term GHG emissions generated by the project from area sources, energy use, solid waste, water use, and mobile sources and combines construction and operational GHG emissions. As shown therein, the project would generate approximately 1,242 MT of CO₂e per year. As discussed above, because the project would be consistent with the City's RRG-CAP, which is a qualified GHG reduction plan per the CEQA Guidelines, project-related GHG emissions would be **less than significant**. **No mitigation is required**.

Table 10 Combined Annual Emissions of Greenhouse Gases

Emission Source	Project Emissions (MT of CO ₂ e)
Construction	9.3
Operational	
Area	< 0.1
Energy	221.4
Solid Waste	41.3
Water	17.7
Mobile	
CO ₂ and CH ₄	896.9
N ₂ O	54.9
Total Project Emissions	1,241.5
Source: Appendix A	

- b. *Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Source: City of Riverside – Riverside Restorative Growthprint Economic Prosperity Action Plan and Climate Action Plan)*

The City of Riverside adopted the RRG-CAP in 2016. The RRG-CAP sets targets to reduce communitywide GHG emissions by 26.4 percent below baseline levels by 2020, which would achieve the target established by AB 32, and by 49 percent below baseline levels by 2035. The RRG-CAP acknowledges that implementation of the RRG-CAP along with state and regional GHG reduction measures will achieve the 2020 target established by AB 32 (City of Riverside 2016). As shown in Table 9 under Item a above, the project would be consistent with the applicable local reduction measures contained in the City's RRG-CAP. Therefore, the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and **no impact** would occur. **No mitigation is required**.

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8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (California Air Resources Board – Air Quality and Land Use Handbook; County of Riverside – Underground Storage Tanks)

The transport, use, and storage of hazardous materials during the construction of the project would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22.

During operation, the gas station would require the routine transport of petroleum fuels to the project site to refuel the underground storage tanks (USTs) that would supply the fuel pumps. Fuel tanker trucks would utilize SR 91 and Van Buren Boulevard to access the project site, both of which are suitable for truck travel. Truck drivers would be subject to federal and state requirements that regulate the transport of hazardous materials and the operation of fuel tanker trucks. On the project site, tanker trucks would transfer fuels to USTs, which would be permitted by the County of Riverside Department of Environmental Health’s Hazardous Materials Management Branch (HMMB), which is the County’s Certified Unified Program Agency (CUPA). Permitting requires the submission of UST plans to the HMMB prior to installations, modifications, repairs, or removals. Although inadequate maintenance of USTs may result in leaks, CCR Title 23, Chapter 16 and Riverside County Ordinance 617 mandate regular monitoring, maintenance, and inspection of USTs, which would ensure the safe and appropriate operation of these facilities (County of Riverside 2018).

Gas station patrons would regularly use hazardous materials while dispensing gasoline from fuel pumps. Refueling activities release benzene into the air; however, benzene emissions are reduced by more than 90 percent by the vapor recovery systems required at fuel pumps. Nevertheless, benzene emissions may result in near source health risk (CARB 2005). CARB recommends siting sensitive land uses, such as residences, at least 50 feet from typical gasoline dispensing facilities and at least 300 feet from large gasoline dispensing facilities (i.e., facilities with a throughput of 3.6 million gallons per year or greater) (CARB 2005). The proposed gas station would be characterized as a typical gasoline dispensing facility, and fuel pumps would be located approximately 140 feet away from the nearest residence. Therefore, the proposed fuel pumps would be located outside the recommended buffer of 50 feet.

Given the above analysis, the project would not create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials. Impacts would be **less than significant**. **No mitigation is required.**

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Riverside County Code Chapter 8.60)*

Improper handling of gasoline and other auto-related chemicals on-site may result in spills. However, the transport, use and storage of hazardous materials would be required to comply with all applicable state and County regulations, including the Hazardous Waste Control Law (California Health and Safety Code, Chapter 6.5, Division 20, Sections 25100, et seq.), which is adopted in Chapter 8.60 of the Riverside County Code. Therefore, the project would not 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. Impacts would be **less than significant**. **No mitigation is required.**

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Sherman High School, the school closest to the project site, is located approximately 0.5 mile northeast. Therefore, the project would not emit hazardous emissions or handle hazardous materials within 0.25 mile of an existing or proposed school. **No impact** would occur. **No mitigation is required.**

- d. *Would the project be located on a site included on a list of hazardous material 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? (Sources: Appendix E - Phase I and II Environmental Site Assessment Reports)*

Phase I and Phase II Environmental Site Assessments (ESA) were prepared for the project site by Partner Engineering and Science, Inc. and are included as Appendix E. The Phase I ESA determined that a former Texaco Service Station was located on the southeastern portion of the property from at least 1961 to at least 2001. This facility was formerly equipped with two generations of USTs. The first generation consisted of four 4,000-gallon USTs that were installed in 1961 and removed in 1986. The second generation consisted of five USTs, including one 12,000-gallon gasoline, one 10,000 gallon gasoline, one 8,000-gallon gasoline, one 10,000-gallon diesel, and one 550-gallon waste oil UST, which were installed in 1985 and removed in 2001 (Appendix E). The Phase I ESA identified two recognized environmental conditions (RECs) related to the two generations of USTs formerly located on-site. RECs are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to (1) a known release to the environment, (2) conditions indicative of a release to the environment, or (3) conditions that pose a material threat of a future release to the environment. At the project site the following two RECs were observed:

1. The possibility exists that the project site may still be contaminated due to gasoline that may have been released into the soil or groundwater from the first generation of USTs (Appendix E). Accordingly, the possible contamination associated with the first generation of USTs is considered a REC that requires further investigation.

2. The former presence of a waste oil UST (part of the second generation of USTs) indicates that automotive/repair service operations may have occurred on-site. These operations may have utilized hazardous substances, petroleum products, and underground or aboveground hydraulic lifts. As a result, it is possible that hazardous materials were released on-site over the course of operation, particularly in light of the fact that the former Texaco Service Station operated at a time of little to no regulatory oversight. However, a full closure report for the former waste oil UST was not available because the physical file related to the Texaco Service Station was destroyed in 2015 per the State Retention Schedule, and the Riverside County Department of Environmental Health (RCDEH) indicated that no records for the project site were on file. Therefore, the possibility exists that soil and groundwater on the project site may be contaminated by hazardous materials released in connection with the former waste oil UST and presumed former auto repair/service operations (Appendix E). Accordingly, the possible on-site contamination associated with the former waste oil UST and auto repair/service operations is considered a REC that requires further investigation.

A historical REC was also identified that was associated with a release of gasoline from the second generation of USTs.⁵ This release of gasoline, which impacted soil only, was reported in 2001 and remediated following the removal of the second generation of USTs by overexcavating 70 cubic yards of impacted soils where the second generation of USTs was formerly located on-site. A No Further Action letter was issued by the RCDEH to Texaco in 2003. Therefore, the gasoline release associated with the second generation of USTs is considered a historical REC, and no further action is necessary (Appendix E).

Because two existing RECs were identified on the project site over the course of the Phase I ESA investigation, a Phase II ESA was prepared to evaluate the potential impact of petroleum hydrocarbons and/or volatile organic compounds (VOCs) to soil gas, soil, and/or groundwater due to potential releases from the first generation of USTs, potential on-site waste oil UST, and former on-site automotive repair activities. The Phase II ESA included a geophysical survey and borings on the project site. Analysis of soil gas and soil samples indicated that none of the detected concentrations of petroleum hydrocarbons or VOCs exceeded the applicable screening thresholds. As a result, the Phase II ESA concluded that there is no evidence of a significant release of hazardous materials from the former use of the subject property at this time and did not recommend any further investigation of the RECs. Therefore, the project site not located on a hazardous materials site and would not create a significant hazard to the public or environment. Impacts would be **less than significant**, and **no mitigation is required**.

- 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? (Source: County of Riverside – Riverside County Airport Land Use Compatibility Plan)*

The project site is located approximately two miles from the nearest public airport, the Riverside Municipal Airport. However, the project site is outside the airport influence area for this airport (County of Riverside 2004). Therefore, the project would not result in a safety hazard for people

⁵ A historical REC is a past release of any hazardous substances or petroleum products that either (1) has been addressed to the satisfaction of the applicable regulatory authority or (2) meets unrestricted use criteria established by a regulatory authority without subjecting the property to any required controls.

residing or working in the project area and **no impact** related to airport safety hazards would occur. **No mitigation is required.**

- f. *For a project near a private airstrip, would it result in a safety hazard for people residing or working in the project area?*

No private airstrips are located in the project site vicinity. As a result, the project would not result in a safety hazard for people residing or working in the project area and **no impact** related to airport safety hazards would occur. **No mitigation is required.**

- g. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Source: Appendix H – Traffic Impact Analysis)*

The project would be required to comply with applicable City codes and regulations pertaining to emergency response and evacuation plans maintained by the Riverside police and fire departments. No roads would be permanently closed as a result of the construction or operation of the project, and no structures would be developed that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The project would be accessed via driveways along Van Buren Boulevard and Andrew Street. These driveways would provide sufficient ingress/egress for passenger vehicles and light- and heavy-duty trucks that would frequent the project site. The project site is located across the street from Riverside Fire Station No. 2, located at 9450 Andrew Street. As discussed in Section 16, *Transportation/Traffic*, the project would not have a significant impact on the Van Buren/Andrew Street-Primrose Drive intersection or on the Project Driveway 3/Andrew Street intersection that would be used for emergency vehicles to access the site. As such, implementation of the project would not interfere with existing emergency evacuation plans or emergency response plans in the area. Therefore, impacts would be **less than significant**. **No mitigation is required.**

- h. *Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Source: CAL FIRE – Fire Hazard Severity Zones in SRA)*

The project site is located in an urbanized area in the City of Riverside and, according to the California Department of Forestry and Fire Protection (CAL FIRE), the project site is not located within a fire hazard severity zone (CAL FIRE 2007). The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. **No impact** would occur. **No mitigation is required.**

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9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
h. Place structures in a 100-year flood hazard area that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	■	<input type="checkbox"/>
j. Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

This section is based, in part, on the Preliminary Water Quality Management Plan (WQMP) for the project, prepared by Adkan Engineers and included as Appendix F.

The project site is located in the South Coast Hydrologic Region, which covers approximately 10,600 square miles of southern California watersheds draining to the Pacific Ocean. The South Coast Hydrological Region includes all of Orange County, most of San Diego and Los Angeles Counties, and parts of Riverside, San Bernardino, and Ventura Counties. The Region is bound by the Transverse Ranges (including the San Gabriel and San Bernardino Mountains) to the north, the San Jacinto Mountains and low-lying Peninsular Range to the east, and the international boundary with Mexico to the south (California Department of Water Resources 2003).

The project site is located in the Santa Ana River Watershed, Reach 3 sub-watershed. The nearest National Hydrography Dataset-delineated flowline to the project site is the Riverside Canal, located approximately 0.25 mile to the south. The project site is approximately 3.4 miles southeast of the Santa Ana River. The project site is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). The SARWQCB sets water quality objectives and monitors surface water quality through the implementation of the Santa Ana River Water Quality Control Plan (Basin Plan).

The project site overlies the Upper Santa Ana Valley Groundwater Basin, Riverside Arlington Groundwater Sub-Basin. The Riverside-Arlington Sub-Basin is partially adjudicated under the 1969 Western-San Bernardino Judgment, with the northern portion of the sub-basin managed by two Court-appointed watermasters. The project site is situated over the non-adjudicated Arlington portion of the sub-basin. Due to high total dissolved solids (TDS) and nitrate levels, water extracted from the Arlington portion of the sub-basin is treated by the Arlington Desalter, a reverse-osmosis facility operated by the Western Municipal Water District (WMWD) since 1990, prior to distribution for potable use (WMWD 2016). WMWD oversees groundwater management in the basin, having adopted the Arlington Basin Groundwater Management Plan in 2012. In 2017, WMWD became the

Groundwater Sustainability Agency for the non-adjudicated portion of the Riverside-Arlington Sub-Basin for the purposes of implementing the planning requirements of the Sustainable Groundwater Management Act.

- a. *Would the project violate any water quality standards or waste discharge requirements? (Sources: Appendix F – Preliminary WQMP; Riverside Municipal Code – Chapter 14.12, Discharge of Wastes into the Public Sewer and Pollutants into the Storm Drain Systems; Santa Ana RWQCB – Order Number R8-2010-0033)*

The project site is currently an undeveloped, disturbed lot with ruderal vegetation surrounded by a mix of residential and commercial uses. As discussed under Section 6, *Geology and Soils*, project construction would be required to prepare a SWPPP pursuant to the requirements of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. BMPs and stormwater monitoring implemented under the SWPPP would minimize construction related water quality impacts.

Approximately 500 square feet of impervious surfaces cover the lot under existing conditions. The project would increase impervious surfaces over the project site to approximately 131,028 square feet as a result of construction of the commercial development. Under the NPDES Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and Incorporated Cities of Riverside County within the Santa Ana Region (Order Number R8-2010-0033) (“MS4 Permit”) issued by the SARWQCB, permittees, including the City of Riverside, must require BMPs, where feasible, to capture and treat stormwater prior to discharge to their stormwater facilities. Such BMPs include, where appropriate, low impact development (LID) techniques to be implemented at New Development and Significant Redevelopment project sites. Because the project would create 10,000 square feet or more of impervious surface on the project site, it constitutes “New Development” under the MS4 Permit and is required to implement BMPs.

The project would capture and treat all stormwater from the 85th percentile, 24-hour rainfall depth (0.58 inch) using infiltration-only BMPs. Such BMPs include StormTech chambers and isolator rows to trap sediment and debris on-site prior to discharge to the storm drain system (Appendix F). Additionally, as described in the Preliminary WQMP, the project would include various structural and operational source control BMPs, including signage on storm drain inlets, sweeping of parking lots, sidewalks, and fuel areas, and distribution of integrated pest management materials to owners/tenants to reduce pesticide application on-site.

Furthermore, the project would be required to comply with Chapter 14.12 of the RMC, which prohibits illicit connections to the storm drain system at commercial or industrial facilities and subjects such facilities to a regular program of inspection. Compliance with these existing regulatory requirements would ensure that the project would not violate any water quality standards or waste discharge requirements and would not create substantial runoff water or otherwise degrade water quality. Therefore, impacts would be **less than significant. No mitigation is required.**

- b. *Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? (Sources: Appendix F – Preliminary WQMP; Riverside Public Utilities – 2015 Urban Water Management Plan)*

As discussed above, the project site overlies the Arlington portion of the Riverside-Arlington Sub-Basin, which is managed by and serves as a supply for WMWD. However, the project site is located in the City of Riverside, which is served by Riverside Public Utilities (RPU). RPU obtains water almost exclusively from groundwater in the Bunker Hill, Rialto-Colton, and Riverside groundwater basins. These basins are adjudicated under the 1969 Western-San Bernardino Judgement, and RPU has defined extraction rights from each of these basins. Due to degraded water quality, RPU does not currently use water from the Arlington portion of the Riverside-Arlington Sub-Basin (RPU 2016). As described in Section 18, *Utilities and Service Systems*, the project would be served by RPU's existing and projected supplies and would not require groundwater pumping in excess of RPU's extraction rights. Therefore, project water demand would not substantially deplete groundwater supplies.

The project site is undeveloped, with approximately 500 square feet of impervious surfaces. Development of the project would result in a more intense use of the project site, as compared to currently vacant conditions, and would increase impermeable surface on site substantially. Consequently, the project may incrementally reduce groundwater recharge and increase the amount of surface runoff. However, the project includes landscaped areas with minimal fill to preserve infiltration capacity. Furthermore, the project would capture and treat stormwater on-site using infiltration-only BMPs, allowing for stormwater treatment and groundwater recharge. As a result, impacts related to groundwater would be **less than significant. No mitigation is required.**

- c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site? (Source: Appendix F – Preliminary WQMP)*

The topography of the project site is generally flat, with elevations ranging from approximately 809 feet above mean sea level (amsl) on the northwestern edge of the site to approximately 820 feet amsl in the center of the site. Water quality standards and requirements for the project are maintained by the SARWQCB. There are no natural hydrologic features on the project site (Appendix F). Therefore, the project would not alter the course of any stream or other drainage and would not increase the potential for flooding. As described in the Preliminary WQMP, the project would preserve natural site drainage and existing stormwater intake and outlet locations. Additionally, the site's post-development hydrograph would mimic the site's pre-development hydrograph as part of required Hydraulic Conditions of Concern measures discussed in the WQMP and demonstrated in Appendix 7 of the WQMP. As a result, the project would not substantially alter the existing drainage pattern of the site or area and would not result in erosion or siltation on- or off-site. Impacts would be **less than significant. No mitigation is required.**

- d. *Would the project substantially alter the existing drainage pattern of the site or area, including the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? (Source: Appendix F – Preliminary WQMP)*

As noted in the Preliminary WQMP and discussed in Item c, above, the project would preserve natural site drainage, existing stormwater intake and outlet locations, and the site's post-development hydrograph would mimic the site's pre-development hydrograph as part of required Hydraulic Conditions of Concern measures. The project would not substantially alter the existing drainage pattern of the site or area, and would not result in flooding on- or off-site. Impacts would be **less than significant. No mitigation is required.**

- e. *Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Source: Appendix F – Preliminary WQMP)*

The project would substantially increase impervious surface cover on the project site, which has the potential to result in increased runoff and accumulation of chemicals, sediment, and debris that can pollute runoff. However, as discussed under Item a, above, the project would capture and treat all stormwater from the 85th percentile, 24-hour rainfall depth using infiltration-only BMPs, including StormTech chambers and isolator rows to trap sediment and debris on-site prior to discharge to the storm drain system (Appendix F). Such BMPs would reduce runoff to the stormwater drainage system and provide water quality benefits by providing an opportunity for sediments and adsorbed pollutants to settle out of the water column. The project would preserve natural site drainage and existing stormwater intake and outlet locations, and the site's post-development hydrograph would mimic the site's pre-development hydrograph, as specified in the Preliminary WQMP. Therefore, the project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This impact would be **less than significant. No mitigation is required.**

- f. *Would the project otherwise substantially degrade water quality?*

As noted in Checklist Item a above, the project would incorporate construction and operational BMPs to reduce potential impacts to water quality, and such impacts would be **less than significant. No mitigation is required.**

- g. *Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map? (Source: Federal Emergency Management Agency – Map 06065C0715G)*

The project site is located in an area designated as Zone X (Map 06065C0715G, effective August 28, 2008) by the Federal Emergency Management Agency (FEMA), which is outside of the 0.2 percent annual chance floodplain (500-year flood) (FEMA 2008). Furthermore, the project does not involve construction of housing. **No impact would occur. No mitigation is necessary.**

- h. *Would the project place structures in a 100-year flood hazard area that would impede or redirect flood flows? (Source: Federal Emergency Management Agency – Map 06065C0715G)*

As noted under Item g, above, the project is not located in a floodplain area. The project would not expose people or structures to significant flood hazards and would not impede or redirect flood flows. **No impact would occur. No mitigation is required.**

- i. *Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam? (Source: GP 2025 Figure PS-4 – Flood Hazard Areas; City of Riverside– Local Hazard Mitigation Plan)*

According to the City of Riverside General Plan Public Safety Element, the project site is adjacent to the inundation area for the Mockingbird Canyon Dam (City of Riverside 2007a). While the inundation area is generally bound by SR 91 to the south, the southern corner of the project site may be located in the hazard zone. The southern corner of the project site would be developed with parking uses and a fast food drive-through. The project would not place habitable structures or critical facilities in this zone. According to the City of Riverside's Local Hazard Mitigation Plan, the Mockingbird Canyon Dam is operated and maintained by RPU and has a very low probability of failure (City of Riverside 2019). Furthermore, the City's Riverside Alert and County's Alert RivCo emergency notification systems would issue emergency alerts following an earthquake or flood event capable of causing dam failure. The project would not expose people or structures to significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam. This impact would be **less than significant. No mitigation is required.**

- j. *Would the project result in inundation by seiche, tsunami, or mudflow?*

A seiche is a standing wave in an enclosed or partially enclosed body of water. The project site is not located near any lakes or other major bodies of surface water. Therefore, there would be no impacts from seiches. The project site is located approximately 35 miles from the Pacific Ocean and would not be inundated by a tsunami. The project site is flat and is not subject to mudflows. **No impact would occur. No mitigation is required.**

10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with an applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project physically divide an established community? (Sources: Google Maps aerial imagery 2018)*

The project would be located on an infill site along Van Buren Boulevard in an existing urbanized area of the city of Riverside. The project would retain existing sidewalks along Van Buren Boulevard that would connect the project site to adjacent commercial development to the northwest. The project does not include any roadways or infrastructure that would physically divide an established community. **No impact would occur. No mitigation is required.**

- b. *Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (Sources: GP 2025 – Land Use and Urban Design Element; GP 2025 Figure LU-10 –Land Use Policy Map; Riverside Municipal Code – Title 19, Zoning)*

Senate Bill (SB) 1333, signed into law in September 2018, applies various provisions of existing California planning and zoning law to charter cities—including the City of Riverside—which had previously been exempt from such regulations. One such regulation is Government Code Section 65860, which requires a city or county’s zoning ordinance and authorized uses under the ordinance to be consistent with the jurisdiction’s general plan. However, because the project was submitted to the City prior to enactment of SB 1333, consistency between the City’s General Plan and project site zoning is not required. Nevertheless, the project’s consistency with both the site’s General Plan land use designation and zoning designation is discussed below to determine if the project would result in potential for conflicts with these policies and would thus result in an environmental impact.

The project site is currently designated Mixed Use – Village (MU-V) by the City’s General Plan (City of Riverside 2007a). The MU-V designation provides for medium- to high-density residential development with retail, office, and service uses primarily at the street level. The designation is intended to encourage new housing opportunities in proximity to commercial services. While the project does not include any proposed housing, it would provide commercial services in proximity to existing residential development immediately north of the project site, consistent with the intent of the MU-V designation.

The project site is zoned Commercial Retail (CR) by City of Riverside Zoning Code, which is intended for a broad range of indoor oriented retail sales and service, and office uses as either stand-alone businesses or as part of commercial centers or office developments (City of Riverside 2018). The project involves the construction of a convenience store and fueling station, a quick service restaurant, a drive-through restaurant, a car wash tunnel, a 9,250-sf retail building, and a Community Entry Sign (Freeway Oriented Sign). Figure 3 shows the proposed site plans. Sit-down/take-out restaurants and retail sales are permitted uses in the CR zone, and vehicle fuel stations, wash facilities, and drive-through restaurants are permitted in the CR zone under a Conditional Use Permit.

The entire project site is in the Magnolia Avenue Specific Plan Overlay Zone, with a portion of the project site located in the Neighborhood Commercial Overlay Zone. Vehicle fueling stations are not permitted in the Neighborhood Commercial Overlay Zone. As part of the project the applicant is proposing an amendment to the Neighborhood Commercial Overlay Zone boundary to allow the fueling station. In addition, a Specific Plan amendment to allow for construction of the Community Entry Sign is also proposed. The project would generally be consistent with applicable land use plans, policies, and regulations. Construction of the Community Entry Sign and fueling station would require a Specific Plan amendment and a modification to the Neighborhood Commercial Overlay Zone boundary, respectively and are proposed as part of the project. As discussed throughout this document, neither of these project components would result in significant environmental impacts that could not be mitigated below a level of significance. Therefore, this impact would be **less than significant. No mitigation is required.**

- c. *Would the project conflict with an applicable habitat conservation plan or natural community conservation plan? (Source: GP 2025 – Open Space and Conservation Element; Western Riverside County MSHCP Figure 3-34 – Cities of Riverside & Norco With Cells, Cell Groups, & Subunits Keyed to MSHCP Criteria)*

The City of Riverside adopted the Western Riverside County MSHCP in October 2003. The MSHCP covers 146 species in a 1.26 million-acre area spanning from the San Jacinto Mountains to the Orange County line. The project site is located in the MSHCP’s Riverside/Norco Plan Area.

The project site consists of undeveloped, disturbed land in an urbanized portion of the City of Riverside. Groundcover consists of exposed soil and low-lying grass vegetation. As discussed in Section 4, *Biological Resources*, the project site provides no suitable habitat for special status species and is not located in an existing conservation area under the MSHCP or a criteria cell for inclusion in the MSHCP Conservation Area. The project would not conflict with the provisions of the MSHCP, and **no impact would occur. No mitigation is required.**

11 Mineral Resources

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

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Source: GP 2025 Figure OS-1 – Mineral Resources)*

The project site is currently vacant and is not being used for extraction of mineral resources. According to Figure OS-1 of the Open Space and Conservation Element of the City's General Plan (2007a), the project site is not located in a State-designed Mineral Resource Zone. In addition, the project would not involve the use or mining of mineral resources. Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, and **no impact** would occur. **No mitigation is required.**

- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? (Source: GP 2025 Figure OS-1 – Mineral Resources)*

As discussed under Item a above, the project site is currently vacant and is not being used for extraction of mineral resources. According to Figure OS-1 of the Open Space and Conservation Element of the City's General Plan (2007a), the project site is not located in a State-designed Mineral Resource Zone. Furthermore, the project site is not located in an area identified to contain locally important resources, such as feldspar, silica, limestone, or rock products (City of Riverside 2007a). The project would not involve the use or mining of mineral resources. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site delineated in the City's General Plan, and **no impact** would occur. **No mitigation is required.**

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12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels above those existing prior to implementation of the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The analysis of the noise impacts is based on the Noise Study prepared by Rincon Consultants, Inc. (Rincon) for the project, which is included in its entirety as Appendix G.

Standard Unit of Noise Measurement

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). One of the most frequently used noise metrics that considers both duration and sound

power level is the equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, L_{eq} is summed over a one-hour period. L_{max} is the highest RMS (root mean squared) sound pressure level within the measurement period, and L_{min} is the lowest RMS sound pressure level within the measurement period. Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If a sound's noise energy is doubled, the sound level increases by 3 dBA, regardless of the initial sound level. Noise level increases of less than 3 dBA typically are not noticeable.

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Groundborne vibration related to human annoyance is generally related to root mean square (RMS) velocity levels expressed in vibration decibels (VdB). Based on the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* vibration levels decrease by 6 VdB with every doubling of distance (FTA 2018).

Noise Regulation

City of Riverside General Plan Noise Element

The City of Riverside General Plan Noise Element includes objectives and policies to protect public health and welfare from excessive noise. The Noise Element provides an approach to regulate noise through community planning. The City of Riverside Noise Element includes recommended noise compatibility standards for land uses within the City, shown in Figure N-10 of the Noise Element (reproduced herein as Table 11), per Policy N-1.2.

Table 11 Noise/Land Use Compatibility Criteria

Land Use Category	Day-Night Noise Level (dBA CNEL or Ldn)			
	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Conditionally Unacceptable ⁴
Single Family Residential	<60	60-65	65-70	>70
Infill Single Family Residential	<65	65-75	75-80	>80
Commercial – Motels, Hotels, Transient Lodging	<60	60-70	70-80	>80
Schools, Libraries, Churches, Hospitals, Nursing Homes	<60	60-70	70-80	>80
Amphitheaters, Concert Halls, Auditorium, Meeting Hall	N/A	<65	N/A	>65
Sports Arena, Outdoor Spectator Sports	N/A	<70	N/A	>70
Playgrounds, Neighborhood Parks	<70	N/A	70-75	>75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	<70	N/A	70-80	>80
Office Buildings, Businesses, Commercial, and Professional	<65	65-75	>75	N/A
Industrial, Manufacturing, Utilities, Agriculture	<70	70-80	>80	N/A
Freeway Adjacent Commercial, Office, and Industrial Uses	<65	65-80	>80	N/A

¹ Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special insulation requirements.

² New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

³ New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

⁴ New construction or development should generally not be undertaken, unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If construction does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Source: City of Riverside 2007a, Figure N-10

City of Riverside Code of Ordinances

The Noise Ordinance, codified in Title 7 of the RMC, states that noise control within the City must be consistent with Title 24 of the Health and Safety Code of California (Section 7.23.010 of the RMC). The City has incorporated the measures in its Municipal Code to control loud, unnecessary, and unusual nuisance noise. Section 7.25.010 of the RMC includes exterior sound level limits as for different land use categories, as shown in Table 12. As shown in Table 13, Section 7.30.015 of the RMC includes interior sound level limits for various land uses.

Table 12 Exterior Noise Standards

Land Use Category	Time Period	Noise Level (dBA)
Residential	10:00 p.m. to 7:00 a.m.	45
	7:00 a.m. to 10:00 p.m.	55
Office/Commercial	Any Time	65
Industrial	Any Time	70
Community Support	Any Time	60
Public Recreation Facility	Any Time	65
Nonurban	Any Time	70

Source: City of Riverside Municipal Code Table 7.25.010A

Table 13 Interior Noise Standards

Land Use Category	Time Period	Noise Level (dBA)
Residential	10:00 p.m. to 7:00 a.m.	35
	7:00 a.m. to 10:00 p.m.	45
School	7:00 a.m. to 10:00 p.m. (while school is in session)	45
Hospital	Any Time	45

Source: City of Riverside Municipal Code Table 7.30.015

For the Farnham Place single-family residences which are zoned residential, the exterior noise level limit for the project would be 55 dBA L_{eq} from 7:00 a.m. to 10:00 p.m. and 45 dBA L_{eq} from 10:00 p.m. to 7:00 a.m. and the interior noise level limit would be 45 dBA L_{eq} from 7:00 a.m. to 10:00 p.m. and 35 dBA L_{eq} from 10:00 p.m. to 7:00 a.m. The residence located across Van Buren Boulevard is zoned commercial; therefore, the applicable exterior noise level would be 65 dBA L_{eq} during all hours of the day.

Criteria for violation of City standards are related to both duration and intensity of the noise disturbance. Per Section 7.25.010(A) of the RMC, unless a variance has been granted, it is unlawful for any person to cause or allow the creation of any exterior noise that exceeds the following:

- The exterior noise standard of the applicable land use category (see Table 12), up to 5 dB, for a cumulative period of more than 30 minutes in an hour; or
- The exterior noise standard of the applicable land use category, plus 5 dB, for a cumulative period of more than 15 minutes in any hour; or
- The exterior noise standard of the applicable land use category, plus 10 dB, for a cumulative period of more than 5 minutes in any hour; or
- The exterior noise standard of the applicable land use category, plus 15 dB, for a cumulative period of more than 1 minute in any hour; or
- The exterior noise standard of the applicable land use category, plus 20 dB or the maximum measured ambient noise level, for any period of time

However, per RMC Section 7.25.010(B), if the measured ambient noise level exceeds that permissible within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to encompass the

ambient noise level. In the event that the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under the fifth noise limit category shall be increased to reflect the maximum ambient noise level.

Per Section 7.25.010 of the RMC, no person may operate or cause to be operated any source of sound indoors that causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

- The interior noise standard for the applicable noise category (see Table 13), up to 5 dBA, for a cumulative period of more than 5 minutes in any hour; or
- The interior noise standard for the applicable land use category, plus 5 dBA, for a cumulative period of more than 1 minute in any hour; or
- The interior noise standard for the applicable land use category, plus 10 dBA or the maximum measured ambient noise level, for any period of time

In addition, Section 7.35.020(G) of the RMC exempts construction noise provided that a permit has been obtained from the City and that construction occurs between 7:00 a.m. and 7:00 p.m. on weekdays, between 8:00 a.m. and 5:00 p.m. on Saturdays, and not on Sundays or federal holidays.

Existing Project Area Noise Levels

The most common and primary existing sources of noise in the project vicinity are motor vehicles (e.g., automobiles, buses, trucks, and motorcycles) along Highway 91 and Van Buren Boulevard. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level, and because of its proximity to noise sensitive uses. There are no existing sources of noise on the project site, which is currently vacant (Appendix G).

In order to determine existing noise levels, short-term (15-minute) and long-term (24-hour) measurements were taken at the project site. Four 15-minute noise measurements were recorded on and near the project site during a weekday morning peak hour using an ANSI Type II integrating sound level meter on June 20, 2018; June 27, 2018; and July 15, 2019. Noise Measurement (NM) 1 was taken at the western portion of the project site; measured noise levels are representative of existing ambient noise levels along Van Buren Boulevard. NM 2 was taken at the northeast corner of the project site; measured noise levels are representative of noise at adjacent single family residences. NM 3 was taken at the southwest portion of the project site; measured noise levels are representative of noise from Van Buren Boulevard and SR 91. NM 4 was taken at the eastern property boundary, in the approximate center of boundary. The long-term measurement, NM 5, was taken at the southwest corner of the site between April 29 and April 30, 2019. Figure 5 shows the noise measurement locations. Table 14 summarizes noise measurement activities and results for the short-term measurements, and Table 15 provides the information for the long-term measurement. Average noise levels for the 15-minute noise measurements are provided in L_{eq} for a 15-minute measurement period ($L_{eq}[15]$); L_{min} and L_{max} are also provided. The average noise level for the 24-hour noise measurement is provided in L_{eq} and CNEL.

Table 14 Project Site Noise Monitoring Results – Short Term

Measurement Location		Sample Times/Dates ¹	Primary Noise Source	Approximate Distance to Primary Noise Source (feet)	L _{eq} (dB[A]) ¹	L _{min} (dB[A])	L _{max} (dB[A])
NM 1	West side of project site, along Van Buren Boulevard	7:00 – 7:15 a.m.	Traffic on Van Buren Boulevard	50*	70.0	56.9	92.2
NM 2	North corner of project site	7:32 – 7:47 a.m.	Traffic on Andrew Street	200**	57.6	50.3	77.1
NM 3	South corner of project site	7:48 – 8:03 a.m.	Traffic on Van Buren Boulevard	150*	64.9	58.6	82.5
NM 4	Eastern property boundary, in approximate center of boundary	10:34-10:49 a.m.	Traffic on Van Buren Boulevard, SR 91	340*, 530***	54.5	49.9	72.1

¹ NM 1 and 2 were taken on June 20, 2018, NM 3 was taken on June 27, 2018, and NM 4 was taken on July 15, 2019.

* Distance to centerline of Van Buren Parkway.

** Distance to centerline of Andrew Street.

*** Distance to centerline of SR 91.

Source: Appendix G

Table 15 Project Site Noise Monitoring Results – Long Term

Measurement Location		Sample Date	Sample Time	L _{eq} (dB[A]) ¹	CNEL
NM 5	Southwest corner of the project site	April 29, 2019	12:00 p.m.	67	-
		April 29, 2019	1:00 p.m.	67	-
		April 29, 2019	2:00 p.m.	68	-
		April 29, 2019	3:00 p.m.	67	-
		April 29, 2019	4:00 p.m.	69	-
		April 29, 2019	5:00 p.m.	66	-
		April 29, 2019	6:00 p.m.	66	-
		April 29, 2019	7:00 p.m.	66	+5
		April 29, 2019	8:00 p.m.	66	+5
		April 29, 2019	9:00 p.m.	65	+5
		April 29, 2019	10:00 p.m.	62	+10
		April 29, 2019	11:00 p.m.	69	+10
		April 30, 2019	12:00 a.m.	61	+10
		April 30, 2019	1:00 a.m.	67	+10
		April 30, 2019	2:00 a.m.	67	+10
		April 30, 2019	3:00 a.m.	68	+10
		April 30, 2019	4:00 a.m.	68	+10
		April 30, 2019	5:00 a.m.	69	+10
		April 30, 2019	6:00 a.m.	71	+10
		April 30, 2019	7:00 a.m.	68	-
		April 30, 2019	8:00 a.m.	68	-
		April 30, 2019	9:00 a.m.	68	-
		April 30, 2019	10:00 a.m.	68	-
		April 30, 2019	11:00 a.m.	69	-
24-hour Noise Level				67	79

Source: Appendix G

Figure 5 Noise Measurement Locations



Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with each of these uses. The City of Riverside General Plan considers sensitive land uses as particularly sensitive to noise levels commonly found in an urban environment. These include residential uses, schools, hospitals, churches, outdoor spectator sports facilities, performing arts facilities, and hotels and motels (City of Riverside 2007a).

The project site is adjacent to single family residences to the east. Additional single family residences are located approximately 340 feet southwest of the project site across Van Buren Boulevard and approximately 615 feet north of the project site across Andrew Street. More single family residences are located approximately 415 feet south of the project site across SR 91. Because SR 91 separates the project site from sensitive receptors located to the southeast and acts as an intervening noise source, this analysis only evaluates noise impacts on the residences located on the northern side of SR 91.

- a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Source: **Appendix G – Noise Study prepared by Rincon Consultants, July 2019**)*

Temporary Construction Noise Impacts

Project construction would include grading, building construction, architectural coating, and paving. Peak noise levels associated with the use of individual pieces of heavy construction equipment can range from about 70 to 89 dBA Lmax at 50 feet from the source, depending on the types of equipment in operation at any given time and phase of construction (Appendix G).

Table 16 shows the maximum expected noise levels at the nearest sensitive receptors based on the combined construction equipment anticipated to be used concurrently during each phase of construction as modeled in RCNM. Additional factors to consider are that the estimated construction noise levels do not take into account the fact that equipment would be dispersed in various areas of the site in both time and space. Due to spatial and equipment limitations, only a limited amount of equipment can operate near a given location at a particular time. Therefore, the noise levels presented in Table 16 represent a conservative estimate of construction noise.

Table 16 Construction Noise Levels by Phase

Construction Phase	Equipment	Construction Noise Level (dBA L _{eq})		
		Residences 50 feet to the Northeast	Residences 340 feet to the Southwest	Residences 615 feet to the North
Demolition	Concrete Saw, Dozer Excavator,	86.4	69.8	64.6
Site Preparation	Backhoe, Dozer	84.3	67.6	62.5
Grading	Backhoe, Dozer, Excavator, Grader	84.8	68.1	63.0
Building Construction	Backhoe, Crane, Dozer, Forklift, Generator, Welder	82.4	65.7	60.6
Architectural Coating	Air compressor	73.7	57	51.9
Paving	Backhoe, Cement Mixer, Paver, Roller	83.1	66.4	58.2
Source: Appendix G				

As shown in Table 16, construction noise could be as high as approximately 86 dBA L_{eq} at the nearest residential receptors 50 feet to the northeast, which would exceed existing ambient noise levels at the eastern property line (measured at 54.5 dBA L_{eq}), and would therefore be audible periodically at the nearby residences. However, as stated in RMC Section 7.35.020, construction noise is exempt from the RMC noise thresholds as long as construction does not occur between 7:00 p.m. and 7:00 a.m. on weekdays, between 5:00 p.m. and 8:00 a.m. on Saturdays, and anytime on Sundays or federal holidays. The project would comply with these allowed hours. Therefore, construction noise would be compliant with the regulations in the RMC and impacts would be **less than significant. No mitigation is required.**

On-Site Operational Noise Impacts

The project would introduce sources of operational noise to the site including mechanical equipment, such as rooftop-mounted heating, ventilation, and air-conditioning (HVAC) equipment, a drive-through fast food restaurant (speaker noise), and car wash. Exterior noise levels at the nearest residences from each of these sources, and their combined noise levels during daytime and nighttime hours, are shown in Table 17. Interior noise levels at the nearest residences from combined operational noise generated by the project during daytime and nighttime hours are shown in Table 18. Receiver locations and daytime noise level contours are shown on Figure 6.

As shown in Table 17, combined operational activities on the project site would generate daytime exterior noise levels up to 54 dBA L_{eq} at nearby residences and an exterior nighttime noise level of up to 44 dBA L_{eq}. The combined exterior operational noise would not exceed the City's daytime and nighttime exterior noise standards for residential zones of 55 dBA L_{eq} and 45 dBA L_{eq}, respectively, which apply to the single-family residences located on Farnham Place. The combined exterior operational noise would also not exceed the City's daytime and nighttime exterior noise standard for commercial zones of 65 dBA L_{eq} at 3510 Van Buren Boulevard. In addition, as shown in Table 18, combined operational noise at the interior of nearby residences would also not exceed the City's daytime and nighttime interior noise standards of 45 dBA L_{eq} and 35 dBA L_{eq}, respectively. Therefore, impacts would be **less than significant. No mitigation is required.**

Table 17 Exterior Operational Noise Levels at Off-site Receivers

Receiver	Address	Exterior Noise Level (dBA L _{eq})			Combined Daytime Exterior Noise Level (dBA L _{eq})	Daytime Exterior Noise Threshold (dBA L _{eq})	Combined Nighttime Exterior Noise Level (dBA L _{eq}) ¹	Nighttime Exterior Noise Threshold (dBA L _{eq})	Thresholds Exceeded?
		HVAC	Car Wash	Drive-through					
R1	3482 Farnham Place	39.2	39.7	16.8	42.5	55	39.2	45	No
R2	3492 Farnham Place	42.2	42.3	12.5	45.3	55	42.2	45	No
R3	3508 Farnham Place	43.9	39.3	10.2	45.2	55	43.9	45	No
R4	3518 Farnham Place	43.4	39.1	12.3	44.8	55	43.4	45	No
R5	3530 Farnham Place	42.3	50.1	8.7	50.7	55	42.3	45	No
R6	3542 Farnham Place	42.1	45.1	7.8	46.9	55	42.1	45	No
R7	3554 Farnham Place	44.2	43.3	8.1	46.8	55	44.2	45	No
R8	3566 Farnham Place	43.0	44.9	6.7	47.1	55	43.0	45	No
R9	3580 Farnham Place	38.5	53.3	5.9	53.4	55	38.5	45	No
R10	3510 Van Buren Boulevard (property line near residential structure)	35.4	46.5	23.7	46.9	65	35.7	65	No
R11	3510 Van Buren Boulevard (property line near vacant area, closest to car wash)	33.6	53.9	14.8	53.9	65	33.7	65	No

¹ Nighttime exterior noise levels only include noise generated by the HVAC and drive-through restaurant because the car wash would not be operational during nighttime hours of 10:00 p.m. to 7:00 a.m.

Note: Receiver locations shown on Figure 6.

Table 18 Interior Operational Noise Levels at Off-site Receivers

Receiver	Address	Combined Daytime Interior Noise Level (dBA L _{eq}) ¹	Daytime Interior Noise Threshold (dBA L _{eq})	Combined Nighttime Interior Noise Level (dBA L _{eq}) ^{1, 2}	Nighttime Interior Noise Threshold (dBA L _{eq})	Thresholds Exceeded?
R1	3482 Farnham Place	17.5	45	14.2	35	No
R2	3492 Farnham Place	20.3	45	17.2	35	No
R3	3508 Farnham Place	20.2	45	18.9	35	No
R4	3518 Farnham Place	19.8	45	18.4	35	No
R5	3530 Farnham Place	25.7	45	17.3	35	No
R6	3542 Farnham Place	21.9	45	17.1	35	No
R7	3554 Farnham Place	21.8	45	19.2	35	No
R8	3566 Farnham Place	22.1	45	18.0	35	No
R9	3580 Farnham Place	28.4	45	13.5	35	No
R10	3510 Van Buren Boulevard (property line near residential structure)	21.9	45	10.7	35	No
R11	3510 Van Buren Boulevard (property line near vacant area, closest to car wash)	28.9	45	8.7	35	No

¹ Interior noise levels assumed a 25 dB reduction from the residential building facades (see Combined Daytime Exterior Noise Level and Combined Nighttime Exterior Noise Level in Table 17).

² Nighttime interior noise levels only include noise generated by the HVAC and drive-through restaurant because the car wash would not be operational during nighttime hours of 10:00 p.m. to 7:00 a.m.

Receiver locations shown on Figure 6.

Figure 6 Receiver Locations and Daytime Operational Noise Level Contours

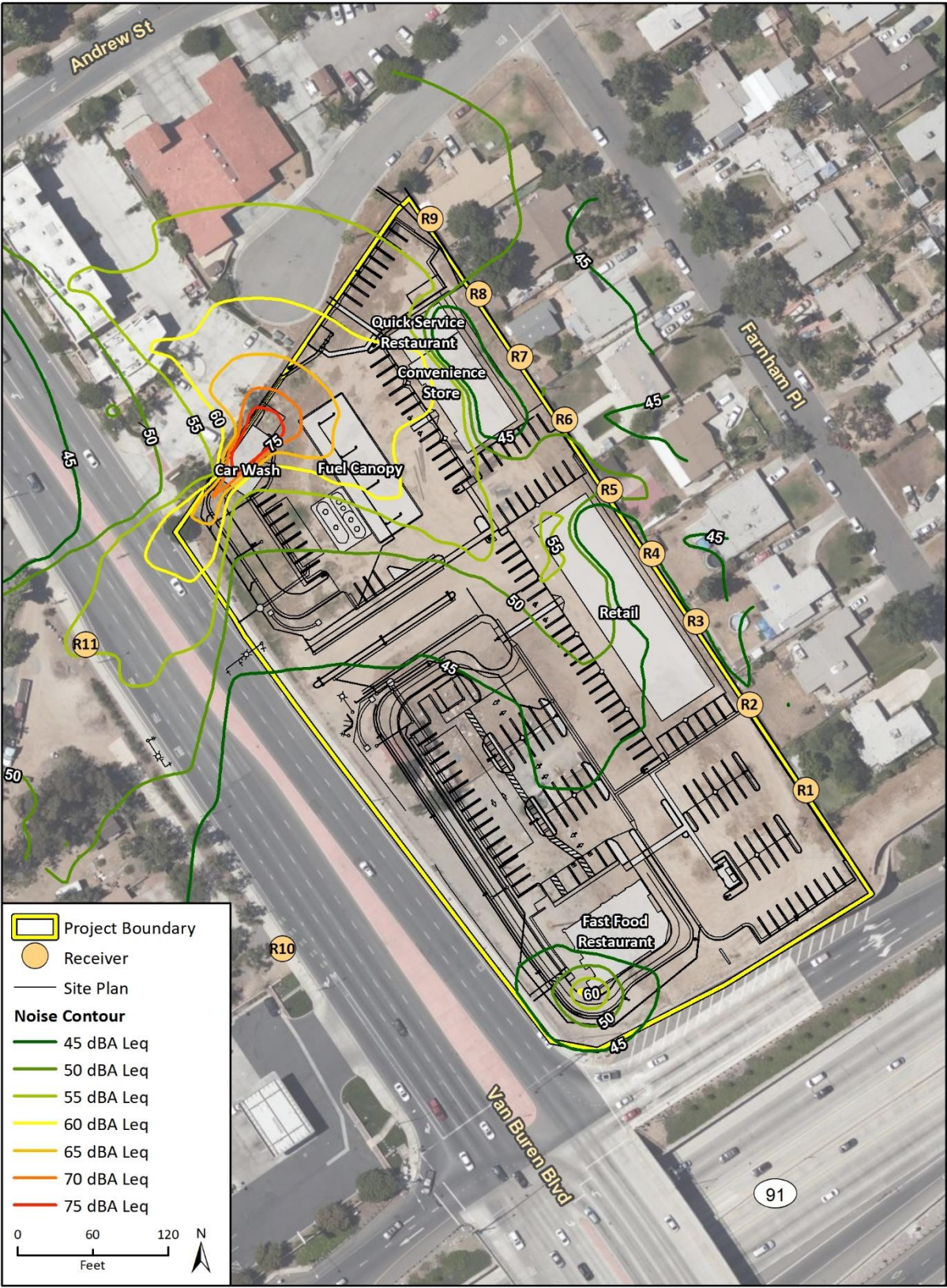


Fig 4 Receiver Locations and Noise Contours

Offsite Roadway Noise Impacts

The project would generate new vehicle trips that would use area roadways. Table 19 summarizes the roadway noise modeling results. Because existing roadway noise is approximately 61 dBA Ldn at the residential property line to the east of the project site, the allowable noise exposure increase is 2 dBA Ldn per FTA standards. The project would increase roadway noise by 0.6 dBA Ldn as compared to existing conditions. Therefore, project impacts to roadway noise would be imperceptible to the human ear and would not exceed the FTA thresholds for allowable increase in noise exposure. Impacts would be **less than significant. No mitigation is required.**

Table 19 Roadway Traffic Noise

Modeled Location	Roadway Noise (dBA Ldn)				
	Existing [1]	Existing + Project [2]	Noise Level Increase [2]-[1]	Threshold (dBA)	Exceed Threshold
Residences west of project site across Van Buren Boulevard	62.4	62.7	0.3	2	No

Source: Appendix G

Conclusion

As discussed above, construction noise would be compliant with the regulations in the RMC; on-site operational noise would not exceed the City's daytime and nighttime noise standards; and project impacts to roadway noise would be imperceptible to the human ear and would not exceed the FTA thresholds for allowable increase in noise exposure. Therefore, the proposed project would not result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and impacts would be **less than significant. No mitigation is required.**

- b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (Source: Appendix G – Noise Study prepared by Rincon Consultants, May 2019)*

Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted by the project. The greatest anticipated source of vibration during general project construction activities would be from a vibratory roller, which would be used during paving activities and may be used as close as 15 feet to the nearest off-site habitable residential structure (see Table 20 for distances to the nearest residences). This analysis utilizes a significance threshold of 0.4 PPV in/sec to determine construction-related vibration impacts to residential structures because this is the level below which structural damage would be prevented at the nearest single-family residences (Appendix G). Furthermore, this analysis utilizes the Caltrans vibration level threshold of 0.9 in/sec PPV to determine vibration impacts relative to human annoyance levels because this is the level at which transient vibration sources (such as construction equipment that is mobile) are considered to be strongly perceptible (Appendix G).

As shown in Table 20, vibration levels would not exceed the 0.9 in/sec PPV human annoyance threshold or the 0.4 in/sec PPV structural damage threshold. In addition, vibration would not occur

during nighttime hours (i.e., when people would be sleeping), and vibration from a vibratory roller from the project near these residences would be transient source, moving throughout the day (i.e., it would not be located 15 feet nearest the residence during an entire day), and it would be anticipated to spend only several days in the vicinity of each individual residence. Therefore, impacts would be **less than significant. No mitigation is required.**

Table 20 Vibration Noise Levels at Off-site Residences

Address	Distance from Paving Activities to Nearest Habitable Structure	Vibration Level (in/sec PPV)	Exceed Structural Damage Threshold (0.4 in/sec PPV)?	Exceed Human Annoyance Threshold (0.9 in/sec PPV)?
3482 Farnham Place	50	0.10	No	No
3492 Farnham Place	45	0.11	No	No
3508 Farnham Place	70	0.07	No	No
3518 Farnham Place	80	0.06	No	No
3530 Farnham Place	80	0.06	No	No
3542 Farnham Place	60	0.08	No	No
3554 Farnham Place	35	0.15	No	No
3566 Farnham Place	50	0.10	No	No
3580 Farnham Place	15	0.37	No	No

Source: Appendix G

- c. *Would the project result in a substantial permanent increase in ambient noise levels above levels existing without the project? (Source: Appendix G – Noise Study)*

Refer to Item a above for a discussion of the project's permanent impacts to ambient noise levels. As discussed therein, on-site operational noise would not exceed the City's daytime and nighttime noise standards, and project impacts to roadway noise would be imperceptible to the human ear and would not exceed the FTA thresholds for allowable increase in noise exposure. Therefore, the project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Impacts would be **less than significant. No mitigation is required.**

- d. *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Source: Appendix G – Noise Study)*

Refer to Item a above for a discussion of the project's temporary/periodic impacts to ambient noise levels. As discussed therein, construction noise would be compliant with the regulations in the RMC; therefore, the project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Impacts would be **less than significant. No mitigation is required.**

- e. *For a project located in 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? (Source: County of Riverside – Riverside County Airport Land Use Compatibility Plan)*

The project site is located approximately two miles from the nearest public airport, the Riverside Municipal Airport. However, the project site is outside the airport influence area for this airport (County of Riverside 2004). As a result, the project would not expose people working in the project area to excessive noise levels from airport operations. **No impact** would occur. **No mitigation is required.**

- f. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise? (Source: County of Riverside – Riverside County Airport Land Use Compatibility Plan)*

No private airstrips are in the vicinity of the project site. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from airport operations. **No impact** would occur. **No mitigation is required.**

13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial 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)? (Sources: California Department of Finance – Population and Housing Estimates, SCAG – 2016 RTP/SCS, SCAG Local Profiles Report for the City of Riverside)*

The project would not include any residential development and would therefore not directly induce population growth. The proposed commercial development would provide new job opportunities in Riverside, which may indirectly induce indirect population growth should employees relocate to the city. The estimated number of employment opportunities in the city of Riverside in 2012 was 120,000 jobs, and SCAG forecasts an increase of 80,500 jobs in the city of Riverside from 2012 to 2040 (SCAG 2017). The estimated population for the city of Riverside in 2018 was 325,860 residents, and SCAG projects that the city of Riverside's population will increase to 386,600 by 2040, an increase of 60,740 persons relative to the 2018 population (DOF 2018, SCAG 2016). As discussed in Section 3, *Air Quality*, the proposed commercial development would employ approximately 88 persons, which would be well within SCAG employment forecasts. Due to the nature of these employment opportunities and the connected nature of the region, employees would likely be drawn from the local workforce and would not result in the relocation of any new residents to the City of Riverside. Nevertheless, assuming conservatively that all project employees move to the city, project-related population growth would constitute less than one percent of projected city growth. Therefore, the project would not indirectly induce substantial population growth and impacts would be **less than significant. No mitigation is required.**

- b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (Source: project site plans)*

The project involves the construction of a commercial development on a vacant lot that does not contain existing housing. As such, the project would not displace substantial numbers of existing housing, and **no impact** would occur. **No mitigation is required.**

- c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (Source: project site plans)*

The project involves the construction of a commercial development on a vacant lot and would not displace existing people. As such, the project would not displace substantial numbers of existing people, and **no impact** would occur. **No mitigation is required.**

14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the 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? (Sources: GP 2025 – Public Safety Element; Riverside Fire Department – 2017 Standard of Cover; Riverside Municipal Code – Chapter 16.32, Fire Prevention; Deputy Fire Marshal Lisa Munoz, personal communication)

The project site is currently an undeveloped vacant lot. Construction and operation of the proposed commercial facilities would incrementally increase the demand for fire protection, prevention, and emergency medical services in the city. Efficient response times are critical in addressing fire and medical emergencies. The project site is served by the Riverside Fire Department (RFD), which includes 14 fire stations, emergency response personnel, firefighters/paramedics, a hazardous materials response team, and a water rescue team. According to the City of Riverside General Plan Public Safety Element, the RFD responds to over 25,000 calls annually, with an average response time of six minutes (City of Riverside 2007a). The nearest station to the project site is Station 2 - Andrew, which is located at 9450 Andrew Street, approximately 100 feet northwest of the project site across Teran Court.

The project would incrementally increase demand for fire protection in the City, but would not cause Station 2 - Arlington to have an unacceptable response time due to its close proximity to the

station. Furthermore, Station 2 is not identified as a station with high workload or approaching maximum capacity in RFD's 2017 Standard of Cover (City of Riverside 2017).

The project would be designed, constructed, and operated per the applicable standards outlined in the 2016 California Fire Code, as adopted in Section 16.32 of the RMC. Such requirements include, but are not limited to, provisions for smoke alarms; sprinklers; building and emergency access; adequate emergency notification; and means of egress. Prior to project approval, RFD would formally review all project plans to ensure compliance with applicable fire safety requirements, minimizing fire hazards on the site (Munoz 2018). The design, construction and operation of the project would be in accordance with City standards, thus reducing fire hazards and demand on fire protection services during project operation. With these provisions, the project would not require the construction of new firefighting facilities. Therefore, the project's potential impacts to fire services and facilities would be **less than significant. No mitigation is required.**

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives? (Source: Police Service Representative Laura Monteleone, personal communication)

The project site is served by the Riverside Police Department (RPD), with the nearest station located at 10540 Magnolia Avenue, approximately 1.9 miles (driving distance) southwest of the project site. The project site is surrounded by existing development that is served by police protection services, and the project would not decrease police service ratios or increase response times for RPD. RPD has confirmed that the project would be served by existing police facilities (Monteleone 2019). As a result, no new construction or physical alteration of police protection facilities would be required, and this impact would be **less than significant. No mitigation is required.**

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The proposed commercial project would not directly increase the population of school-aged children or directly result in an increase in school enrollment because the project does not include residential development. Therefore, because the project is a non-residential development, the project would not result in new physical impacts associated with school facility expansion or new school facility construction and **no impact would occur. No mitigation is required.**

- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives? (Sources: GP 2025 – Parks and Recreation Element; Riverside Municipal Code - Chapter 16.60, Local Park Development Fees and Chapter 16.76, Trails Development Fee)*

According to the Parks and Recreation Element of the City of Riverside General Plan, the City currently owns and maintains 52 public parks and additional open space areas covering more than 2,800 acres (City of Riverside 2007a). Arlington Park is the closest City-operated park facility to the project site, located approximately 0.4 mile northwest of the project site. Amenities at Arlington Park include a swimming pool, playground equipment, tennis courts, restrooms, and open turf areas.

The project involves the development of commercial facilities and would not directly lead to an increase in population. Because the project is a non-residential development, the project would not create the need for new or expanded park facilities. As a non-residential development, the project would still be subject to payment of Local Park Development and Trails Development Fees, pursuant to Sections 16.60 and 16.76 of the RMC, respectively. Payment of these fees would enable improvement or expansion of community parks and trail systems to offset any impact associated with the project. Therefore, impacts would be **less than significant. No mitigation is required.**

- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 other public facilities? (Sources: California Department of Finance – Population and Housing Estimates, SCAG – 2016 RTP/SCS, SCAG Local Profiles Report for the City of Riverside)*

As described in Section 13, *Population and Housing*, the project would not result in a substantial influx of new residents to the city, as employment opportunities created by the project would likely be filled by the existing workforce and would not require relocation of prospective employees to the city. The project would not result in a substantial increase in the use of other governmental facilities that would lead to the physical deterioration of such facilities or require additional facilities. This impact would be **less than significant. No mitigation is required.**

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15 Recreation

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

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Sources: GP 2025 – Parks and Recreation Element; Riverside Municipal Code - Chapter 16.60, Local Park Development Fees and Chapter 16.76, Trails Development Fee)*

The City of Riverside currently has 2,806 acres of City-owned parks and recreational facilities, with other parks and recreational facilities not owned by the City totaling 12,939 acres (City of Riverside 2007a). Parks in the vicinity of the project site include Arlington Park (approximately 0.4 mile northwest), Harrison Park (approximately 0.8 mile south), the Arlington Heights Sports Complex (approximately 0.9 mile southeast), and the California Citrus State Historic Park (approximately 1.4 mile southeast). In addition, the City maintains a comprehensive trail and bikeway network, with Van Buren Boulevard in front of the project site serving as a designated Class II bikeway (City of Riverside 2007a).

The project would not result in a significant growth in population and thus would not result in substantial increased usage of nearby recreational facilities. Nevertheless, as discussed under Section 14, *Public Services*, the project would be required to pay Local Park Development and Trails Development Fees pursuant to Sections 16.60 and 16.76 of the RMC, respectively. These fees would offset any potential impact to parks, trails, or recreational facilities that may result from construction of the project. This impact would be **less than significant. No mitigation is required.**

- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The project does not include any new recreational facilities and would not require construction or expansion of recreational facilities. **No impact would occur. No mitigation is required.**

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16 Transportation/Traffic

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following analysis is partially based on a Traffic Impact Analysis (TIA) prepared for the project by LSA Associates, Inc. in June 2019. The report is included in full as Appendix H. The TIA modelled a slightly different project, which included 2,750 more square feet of retail/mixed use space and 112

fewer square feet of fast food restaurant space. Despite these differences, the TIA is applicable to the project because the proposed project would generate 273 fewer vehicle trips than the project analyzed as in the TIA.⁶ Therefore, the TIA provides a conservative estimate of traffic impacts.

- a. *Would the project conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit? (Appendix H – Traffic Impact Analysis; 2016 CALGreen Section 5.106.4.1)*

Construction-related Traffic

Construction would involve the use of on- and off-road heavy equipment, including dozers, graders, cranes, and pavers. According to CalEEMod, maximum daily construction-related trips would be approximately 44 vehicle trips and would occur during the paving phase (see Table 21).

Table 21 Construction Phase Vehicle Trips

Phase	Vendor Trips per Day	Construction Worker Trips per Day	Total Trips per Day
Site Preparation	0	8	8
Grading	0	8	8
Building Construction	13	31	44
Paving	0	13	13
Architectural Coating	0	6	6

Source: Appendix A

The amount of construction-related traffic would be nominal compared to the existing daily traffic volume of approximately 32,150 average daily trips (ADT) on the segment of Van Buren Boulevard that fronts the project site (Appendix H)⁷. Construction traffic would generally access the project site via SR 91 and northbound Van Buren Boulevard.⁸ Although large trucks entering and exiting the project site have the potential to disrupt local traffic patterns and increase safety risks to vehicles, the segment of Van Buren Boulevard fronting the project site is three lanes wide in the northbound direction and provides substantial space for other vehicles to avoid construction vehicles turning on to and off of the project site. Furthermore, as discussed under Item f below, construction activities would not impact public transit, bikeways, or pedestrian facilities. Therefore, project construction would not conflict with an applicable plan, ordinance or policy establishing a measure of

⁶ Based on the trip generation rates used in the TIA, the proposed project would generate 326 fewer vehicle trips related to the retail/mixed use space (2.75 thousand square feet x 118.5 daily trips per thousand square feet) and 53 more vehicle trips related to the fast food restaurant (0.112 thousand square feet x 470.95 daily trips per thousand square feet), as compared to the project analyzed by the TIA.

⁷ The estimate of ADT on Van Buren Boulevard was calculated by multiplying PM peak hour trips on the segment of Van Buren Boulevard that fronts the project site by 10. This method is standard industry practice for estimating ADT based on PM peak hour volumes (Precision Traffic & Safety Systems 2018).

⁸ Construction traffic would not be able to access to the project site via southbound Van Buren Boulevard because the existing median prevents left turns on southbound Van Buren Boulevard.

effectiveness for the performance of the circulation system, and impacts would be **less than significant**. **No mitigation is required.**

Operational Traffic

To evaluate the effects of the project's traffic on transportation infrastructure, the TIA analyzes the significance of traffic impacts in terms of the change to the level of service (LOS). According to City guidance, a significant impact would occur if project-related traffic causes the peak hour LOS at a study intersection to fall below the City's LOS standard of LOS D or if project-related traffic contributes to an existing or forecast LOS deficiency (Appendix H). Caltrans does not have significant impact criteria for study intersections, freeway segments, and freeway merge/diverge areas. Therefore, the TIA uses LOS standards of LOS D for Caltrans intersections and LOS E for freeway segments and merge/diverge areas. In addition, the TIA states that a significant impact would occur at a Caltrans facility if project-related traffic contributes to an existing deficiency.

The project would generate vehicle trips associated with commercial development, including employee and customer passenger vehicle trips. According to the TIA, the project would result in an increase of 3,862 ADT on area roadways, including 362 AM peak hour trips and 309 PM peak hour trips. The TIA evaluated the impact of the proposed project of nine intersections in the vicinity of the project site. The TIA also included a merge/diverge analysis at five freeway ramp merge/diverge areas and a freeway segment mainline analysis at seven freeway segments.

Intersections

Under existing plus project conditions, project-related traffic would not degrade the existing LOS at any of the study area intersections, and all study area intersections would continue to operate at LOS D or better, meeting City of Riverside and Caltrans standards.

Cumulative traffic volumes were forecast for the study intersections assuming development of the approved and pending projects located in the City of Riverside and the immediate surrounding area that would add traffic to the study intersections. According to the TIA, cumulative projects would generate a total of 29,133 ADT, including 1,511 AM peak hour trips and 2,864 PM peak hour trips (Appendix H). Under cumulative (2020) plus project conditions, all study area intersections would operate at LOS D or better with the exception of the Van Buren Boulevard/Magnolia Avenue intersection. A significant traffic impact would occur at the Van Buren Boulevard/Magnolia Avenue intersection during the PM peak hour because this intersection would operate at LOS E under cumulative (2020) conditions, which is below the City's threshold of LOS D (Appendix H). Project-related traffic would have a cumulatively considerable contribution to the cumulative traffic impact at this intersection because project-related traffic would contribute to the forecast deficiency. Therefore, implementation of Mitigation Measure T-1, which entails payment of a fair share fee toward a transportation system improvement that would re-time the signal at the Van Buren Boulevard/Magnolia Avenue intersection, would be required to reduce impacts to less than significant.

Freeway Segments and Ramps

Under existing plus project conditions, project-related traffic would not degrade the existing LOS at any of the study area freeway segments or ramps, and all study area freeway segments or ramps would operate at the threshold of LOS E or better with the exception of the westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp during the AM peak hour. The westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp currently operates at

LOS F during the AM peak hour, thereby exceeding the threshold of LOS E for freeway segments. The project would contribute to the existing and forecast deficiency at the westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp. As a result, there would be a potentially significant impact to freeway segments under existing plus project conditions.

Under cumulative (2020) plus project conditions, all study area freeway segments or ramps would operate at the threshold of LOS E or better with the exception of the westbound Van Buren Boulevard off-ramp/on-ramp and the westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp during the AM peak hour. The westbound Van Buren Boulevard off-ramp/on-ramp is projected to operate at LOS F during the AM peak hour under cumulative (2020) plus project conditions, thereby exceeding the threshold of LOS E for freeway ramps. However, the proposed project would not contribute traffic to the westbound Van Buren Boulevard off-ramp/on-ramp and therefore would not have a significant impact on this freeway segment. The westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp is projected to continue operating at LOS F during the AM peak hour, thereby exceeding the threshold of LOS E for freeway segments. The project would contribute to the existing and forecast deficiency at the westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp. However, under the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) Nexus Study program, a downstream interchange improvement is planned for the SR 91 and Tyler Street interchange, which would mitigate the existing and forecast weaving deficiency (Appendix H). The WRCOG TUMF program is intended to mitigate traffic impacts to the County's CMP network in western Riverside. New development projects within WRCOG region, including the proposed project, are required to contribute the appropriate fees to the WRCOG TUMF program. Therefore, the project applicant would be required to contribute fees to the WRCOG TUMF program, which would mitigate its contribution to the project opening and cumulative traffic impact at the westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp. As such, the project would not result in a significant impact to the westbound SR 91 weaving segment west of the Van Buren Boulevard on-ramp under existing plus project or cumulative (2020) plus project conditions.

Public Transit and Alternative Transportation

As discussed under Item f below, project operation would not adversely impact public transit, bikeways, or pedestrian facilities. The project would construct a bus shelter on the Van Buren Boulevard frontage and would include short-term bicycle parking spaces in accordance with the requirements of Section 5.106.4.1 of the 2016 CALGreen Standards, which would expand Riverside's public transit and bicycle facilities.

Conclusion

Operation of the proposed project would not significantly impact any of the study area intersections, freeway segments, or ramps with the exception of the Van Buren/Magnolia Avenue intersection. Under cumulative (2020) conditions, this intersection is forecast to operate at LOS E during the PM peak hour, which would exceed the City's threshold of LOS D. Project-related traffic would contribute to this forecast deficiency and would have a cumulatively considerable contribution to the cumulative traffic impact at Van Buren/Magnolia Avenue intersection. The project would not adversely impact public transit or alternative transportation facilities. Because project-related traffic would have a cumulatively considerable contribution to the cumulative traffic impact at the Van Buren/Magnolia Avenue intersection, project operation would conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system. Therefore, implementation of Mitigation Measure T-1, which entails

payment of a fair share fee toward a transportation system improvement that would re-time the signal at the Van Buren Boulevard/Magnolia Avenue intersection, would be required to reduce impacts to less than significant. Operational impacts would be **less than significant with mitigation incorporated**.

Mitigation Measure

T-1 Traffic Signal Retiming

To mitigate the project's contribution to the cumulative traffic impact to the Van Buren Boulevard/Magnolia Avenue intersection during the PM peak hour, the project applicant shall pay a fair share contribution of 23.84% of the total improvement cost to complete a traffic signal improvement project at the Van Buren Boulevard/Magnolia Avenue intersection prior to the issuance of the certificate of occupancy. The intersection shall be improved to re-time the signal timing splits for each phase while maintaining the existing cycle length (Appendix H). The signal re-timing project shall be completed prior to project operation.

Implementation of the signal re-timing project would improve the intersection operating conditions at the Van Buren Boulevard/Magnolia Avenue intersection to the City's LOS standard of LOS D (Appendix H). Therefore, the project's contribution to the cumulative traffic impact at this intersection would be **less than significant with mitigation incorporated**.

- b. *Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (Appendix A – Air Quality and Greenhouse Gas Assessment; Appendix H – Traffic Impact Analysis; Riverside County Transportation Commission - 2011 Congestion Management Program)*

SR 91, Van Buren Boulevard, and Magnolia Avenue are part of Riverside County's Congestion Management Program (CMP) network. Therefore, all of the study area intersections are part of the CMP network with the exception of Project Driveway 3/Andrew Street. The Riverside County CMP, prepared by the Riverside County Transportation Commission (RCTC), sets a standard of LOS E for all roadway segments and intersections within the CMP network with the exception of specific intersections and roadway segments that operated at LOS F in 1991 (RCTC 2011). According to Table 4-1 of the County's CMP, the SR 91/Van Buren Boulevard interchange is exempt from the CMP standard. Therefore, CMP-related traffic impacts at this interchange would not be considered significant even if the interchange is currently operating or projected to operate at LOS F.

Intersections

As discussed under Item a above, project-related traffic would not degrade the existing LOS at any of the study area intersections under existing plus project conditions, and all study area intersections would continue to operate at LOS D or better, meeting the County of Riverside CMP standard of LOS E. In addition, project-related traffic would not degrade the existing LOS at any of the study area intersections under cumulative plus project conditions, and all study area intersections would continue to operate at LOS E or better, meeting the County of Riverside CMP standard of LOS E.

Freeway Segments and Ramps

As discussed under Item a above, project-related traffic would not degrade the existing LOS at any of the study area freeway segments or ramps under existing plus project conditions. In addition, project-related traffic would not degrade the existing LOS at any of the study area freeway segments or ramps under cumulative plus project conditions. Project-related traffic would contribute to the existing deficiency at the westbound Van Buren Boulevard on-ramp under existing plus project and cumulative plus project conditions. This on-ramp currently operates at LOS F during the AM peak hour and is projected to continue operating at LOS F during the AM peak hour under cumulative plus project conditions. However, as discussed above, this on-ramp is exempt from the CMP standard of LOS E.

Conclusion

Operation of the proposed project would not significantly impact any of the County's CMP intersections, freeway segments, or ramps. Therefore, the project would not conflict with the County's CMP, and impacts would be **less than significant. No mitigation is required.**

- c. *Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Source: County of Riverside – Riverside County Airport Land Use Compatibility Plan)*

As discussed in Section 8, *Hazards and Hazardous Materials*, and Section 12, *Noise*, the closest airport is the Riverside Municipal Airport, located approximately 2 miles north. However, the project site is outside the airport influence area for this airport (County of Riverside 2004). Therefore, the project would not result in a change in air traffic patterns, and **no impact** would occur. **No mitigation is required.**

- d. *Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)? (Source: Appendix H – Traffic Impact Study)*

The project would include the construction of a commercial development in an urbanized area. Vehicular access to the project is provided via a proposed 49-foot wide driveway on Van Buren Boulevard. The project includes construction of a left turn lane into the project site for southbound traffic on Van Buren Boulevard. Secondary access is provided from Andrews Street through the adjacent commercial development to the north. The project would not include sharp curves, dangerous intersections, or incompatible uses that would increase hazards. Improvements to Van Buren Boulevard would be subject to review by the City of Riverside Public Works Department and would therefore not increase traffic hazards on Van Buren Boulevard.

Vehicles queuing at the proposed fast-food restaurant could result in a traffic hazard on-site if the vehicle queue extends outside of the drive-through lane. The proposed drive-through lane would provide queuing space for approximately 25 vehicles. According to the TIA, the anticipated maximum queue length is 18 to 23 vehicles based on observations at other similar-sized In-N-Out restaurants located on major streets next to freeway ramps that were anticipated to have similar drive-through queues as the proposed project (Appendix H). As a result, the project would provide adequate queue space, and vehicle queuing at the fast food restaurant would not cause a traffic hazard on-site. Impacts would be **less than significant. No mitigation is required.**

e. Would the project result in inadequate emergency access? (Source: Riverside Municipal Code Section 16.32)

The project would be designed, constructed, and operated per applicable standards outlined in the 2016 California Fire Code, as adopted in Section 16.32 of the RMC. Such requirements include building and emergency access; adequate emergency notification; and means of egress for emergency vehicles. Prior to project approval, RFD would formally review all project plans to ensure compliance with applicable fire safety requirements, ensuring that emergency access is adequate (Munoz 2018). The project would not result in inadequate emergency access on-site because it would be subject to plan review and inspection by the City of Riverside Fire Prevention Bureau prior to construction and occupancy, respectively, to ensure that required fire protection safety features, including building sprinklers and emergency access, are implemented. In addition, the project site plan includes several driveways that would provide site access for all emergency vehicles.

The project site is located across Teran Court from Riverside Fire Station No. 2, located at 9450 Andrew Street. As discussed above, the project would not have a significant impact on the Van Buren Boulevard/Andrew Street-Primrose Drive intersection or on the Project Driveway 3/Andrew Street intersection, which are the two intersections that emergency vehicles from Fire Station No. 2 would use to exit the immediate area in response to emergency calls in Riverside. As such, implementation of the project would not result in inadequate local emergency access by emergency vehicles departing Riverside Fire Station No. 2. Therefore, impacts to emergency access would be **less than significant. No mitigation is required.**

f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities? (Source: 2016 CALGreen Section 5.106.4.1)

The project involves construction of a commercial development on a vacant lot zoned for commercial use. The project's western frontage includes sidewalks and a Class II bicycle lane along the northbound lane of Van Buren Boulevard. The public transit stops nearest to the project site are located 120 feet northwest of the site at the Van Buren Boulevard/Andrew Street and Van Buren Boulevard/Primrose Drive intersections. These stops are served by Riverside Transit Agency bus lines 10 and 27. The project would also include construction of a bus shelter along the project frontage on Van Buren Boulevard, which would expand Riverside's transit facilities. The project would not involve construction or operational activities that would impact public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities. Furthermore, as discussed in Section 8, *Greenhouse Gas Emissions*, the proposed project would be required to include approximately nine short-term bicycle parking spaces in accordance with the requirements of Section 5.106.4.1 of the 2016 CALGreen Standards, which would expand Riverside's bicycle facilities. **No impact would occur. No mitigation is required.**

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17 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. 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
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a California Environmental Quality Act (CEQA) document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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 2024.1?*

As discussed in Section 3, *Cultural Resources*, no cultural resources were found to be present during the records search and field survey of the project site (see Appendix C). On July 25, 2019 a Sacred Lands File search was completed for the project site. The results of the search indicated that no sacred Native American sites have been recorded within the boundaries of the project site.

The City prepared and mailed notice letters to potentially interested Native American stakeholders on July 25, 2019 for a 30-day consultation request period, as required pursuant to AB 52. Additionally, because the project requires a Specific Plan Amendment, the City prepared and mailed notice letters to tribal stakeholders, as required pursuant to Senate Bill (SB) 18. Written responses were received from the Rincon Band of Luiseño Indians and the Morongo Band of Mission Indians. The Rincon Band of Luiseño Indians indicated that they do not have knowledge of tribal cultural resources within or near the project site but recommended performing a cultural resources records search. As mentioned above, this records search was performed, and no cultural resources were found to be present (see Appendix C). The Morongo Band of Mission Indians indicated that they had no additional information to provide but stated that they may provide other information to the lead agency during the AB 52 consultation process.

Although excavation and grading are not expected to uncover tribal cultural resources, the possibility for such resources to be encountered cannot be completely ruled out because the site is undeveloped. Implementation of Mitigation Measures TCR-1 through TCR-4 would reduce potential impacts to tribal cultural resources to a less than significant level by ensuring that any discovery of archaeological resources of Native American origin are appropriately identified and processed, as applicable, in consultation with the appropriate Native American entities. In addition, the project would be subject to a standard condition of approval that would require construction contractors to comply with state law in the event that human remains are discovered at the project site during grading or earthmoving. This condition of approval would require halting all activities within 100 feet of the find, notification of the Riverside County Coroner and the City's Community & Economic Development Department, and inspection of the remains by the County Coroner as mandated by California Health and Safety Code Section 7050.5(b). If human remains are determined to be of Native American origin, the project applicant would be required to comply with state law related to the disposition of Native American burials that fall within the jurisdiction of the Native American Heritage Commission (PRC Section 5097).

Mitigation Measure

TCR-1 Tribal Notification

Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the applicant and the City shall contact interested tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.

TCR-2 On-call Project Archaeologist

Prior to the issuance of a grading permit, the Property Owner/Developer shall provide a letter from a County certified Archaeologist and Paleontologist stating that the Property Owner/Developer has retained these individuals, and that the Archaeologist and Paleontologist shall be on call during all grading and other significant ground-disturbing activities in native sediments.

TCR-3 Treatment and Disposition of Tribal Cultural Resources

In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. **Consulting Tribes Notified:** within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed to access the discovery, in order to assist with the significance evaluation; and
2. **Temporary Curation and Storage:** During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and
3. **Treatment and Final Disposition:** The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:
 - a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed;
 - b. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility

within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;

- c. If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default; and
- d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and interested tribes.

TCR-4 Cultural Sensitivity Training

The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

18 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (Sources: City of Riverside – Riverside Water Quality Control Plant; City of Riverside – About the Sewer Division; Riverside Public Utilities - 2015 Urban Water Management Plan; Water Finance & Management – Active Expansion: Riverside Water Quality Control Plant Tackles Upgrades While Remaining Online)*

The City's wastewater is delivered to the Riverside Regional Water Quality Control Plant (RWQCP), which currently provides primary, secondary, and tertiary treatment for up to 46 million gallons per day (MGD) of wastewater (City of Riverside 2015a; Farr 2018). Wastewater treated by the Riverside RWQCP is either reused for irrigation or discharged to the Santa Ana River (City of Riverside 2015b). The Riverside RWQCP treats approximately 29,130 acre-feet per year (AFY), or approximately 26 MGD; therefore, the surplus available capacity of the Riverside RWQCP is 20 MGD (RPU 2016).

Local governments and water districts are responsible for complying with federal regulations, both for wastewater plant operation and the collection systems (e.g., sanitary sewers) that convey wastewater to the wastewater treatment facility. Proper operation and maintenance is critical for sewage collection and treatment as impacts from these processes can degrade water resources and affect human health. For these reasons, publicly owned treatment works (POTW) receive Waste Discharge Requirements (WDRs) to ensure that such wastewater facilities operate in compliance with water quality regulation set forth by the state. WDRs, issued by the state, establish effluent limits on the kinds and quantities of pollutants that POTWs can discharge. These permits also contain pollutant monitoring, recordkeeping, and reporting requirements. POTWs that intend to discharge into the nation's waters must obtain a WDR prior to initiating discharge. Wastewater generated by the project would be treated by the Riverside RWQCP, which is subject to WDRs issued by the SARWQCB. Therefore, the project would not result in an exceedance of the wastewater treatment requirements of the SARWQCB, and **no impact** would occur. **No mitigation is required.**

- b. *Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Sources: Riverside Public Utilities - 2015 UWMP; Riverside Public Utilities and Western Municipal Water District – Regional Water Partnership; SCAG – 2016 RTP/SCS)*

The proposed project does not include the construction of expansion of water or wastewater treatment facilities. Furthermore, as discussed under Items d and e below, the project would be accommodated by existing water supplies identified in the RPU 2015 Urban Water Management Plan (UWMP), and the Riverside RWQCP would have adequate capacity to treat wastewater generated by the project. Therefore, the project would not result in the construction or expansion of water or wastewater treatment facilities, the construction of which could cause significant environmental effects. Impacts would be **less than significant**, and **no mitigation is required.**

- c. *Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Source: Appendix F – Preliminary WQMP)*

As discussed in Section 9, *Hydrology and Water Quality*, the project site is undeveloped and mostly permeable with the exception of 500 square feet of impervious surfaces currently existing on-site. The project would increase impervious surfaces over the project site to approximately 131,028 square feet by constructing commercial development. Consequently, the project would reduce

groundwater recharge and increase surface runoff on the project site. Because the project would create 10,000 square feet or more of impervious surface on the project site, it would constitute “New Development” under the MS4 Permit and would be required to implement BMPs. As discussed in the project-specific Preliminary Water Quality Management Plan, the project would capture and treat all stormwater from the 85th percentile, 24-hour rainfall depth (0.58 inch) using infiltration-only BMPs. Such BMPs include StormTech chambers and isolator rows to trap sediment and debris on-site prior to discharge to the storm drain system (Appendix F). Therefore, the project would not require or result in the construction of new stormwater drainage facilities, and impacts would be **less than significant. No mitigation is required.**

- d. *Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (Sources: **Riverside Public Utilities - 2015 UWMP; Riverside Public Utilities and Western Municipal Water District – Regional Water Partnership; SCAG – 2016 RTP/SCS**)*

Water service to the project site would be provided by RPU, which delivers water to more than 64,000 service connections and over 300,000 people, mostly within Riverside city limits (RPU and Western Municipal Water District [WMWD] 2017). RPU’s water portfolio predominantly consists of local groundwater from the Bunker Hill and Riverside groundwater basins and recycled water from the Riverside RWQCP. Additionally, RPU can purchase imported water from WMWD via a connection at the Metropolitan Water District of Southern California’s Henry J. Mills Water Treatment Plant to meet peak demand as needed.

RPU has historically met nearly all of its demand from groundwater sources. RPU has extraction rights from the adjudicated Bunker Hill, Rialto-Colton, and Riverside basins under the 1969 Western-San Bernardino Judgement (RPU 2016). Water available for purchase from WMWD is imported from the State Water Project (SWP). Historically, such water has only been purchased to meet peak demand, as needed, and RPU has not purchased imported water from WMWD since 2009 (RPU 2016). Additional water supply is from recycled water to meet some of RPU’s non-potable water needs, such as outdoor irrigation and commercial purposes.

Given the adjudication of the groundwater basins upon which it depends and the dependability of recycled water as a supply, RPU assumes 100 percent of its groundwater and recycled water supplies would remain available during both single and multiple dry year scenarios. Table 22 compares anticipated demand to RPU’s normal, single, and multiple dry year supplies through 2035. Under all scenarios through 2035, water supply exceeds projected demand. Anticipated demand exceeds water supply by 169 AFY in the single dry year scenario in 2040. However, the water shortage contingency measures and stages of action contained in Chapter 9.0 of the UWMP would reduce demand in the event of a water supply shortage through water use restrictions and would therefore address the forecast 2040 deficit so that supply does not exceed demand.

Table 22 Water Supply and Demand in Single and Multiple Dry Years (AFY)

Year-Type	2020	2025	2030	2035	2040
Demand	95,221	96,534	99,015	101,588	104,258
Normal Year Supply	116,903	121,903	124,703	124,703	124,703
Single Dry Year Supply	96,288	101,288	104,088	104,088	104,088
Multiple Dry Year 1 st , 2 nd , and 3 rd Year Supply ¹	102,364	107,364	110,164	110,164	110,164

Units in acre-feet per year (AFY).

¹ Expected supplies for a period of multiple dry years are slightly higher than a single dry year due to higher average availability of SWP water.

Source: RPU 2016

According to the CalEEMod results, the project would create demand for approximately 3.5 million gallons of water per year, or approximately 10.7 AFY (Appendix A). This represents less than 0.1 percent of RPU's projected surplus of 21,682 AFY under normal year supply conditions in 2020 and approximately one percent of RPU's projected surplus of 1,067 AFY under single dry year supply conditions in 2020 (RPU 2016). Demand forecasts in the UWMP are based on regional forecasts published by SCAG. As discussed in Section 13, *Population and Housing*, the project would not generate employment exceeding SCAG's growth forecasts for the City of Riverside. Therefore, the project's demand was accounted for in the UWMP. Accordingly, the project would be accommodated by existing water supplies identified in the UWMP and would not require new entitlements or additional groundwater pumping. Impacts related to water supply would be **less than significant. No mitigation is required.**

- e. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?* (Sources: **Appendix A – Air Quality and Greenhouse Gas Assessment; City of Riverside – Riverside Water Quality Control Plant; City of Riverside – About the Sewer Division; Riverside Public Utilities - 2015 Urban Water Management Plan; Water Finance & Management – Active Expansion: Riverside Water Quality Control Plant Tackles Upgrades While Remaining Online**)

As discussed under Item a above, the Riverside RWQCP would treat wastewater generated by the proposed project. The RWQCP has a treatment capacity of 46 MGD of wastewater and currently treats approximately 26 MGD (City of Riverside 2015a; Farr 2018; RPU 2016). Therefore, the surplus available capacity of the Riverside RWQCP is 20 MGD.

The project would create demand for an estimated 3.5 million gallons of water per year according to CalEEMod estimates (Appendix A). Assuming that all of this water use would be treated as wastewater, the project would generate approximately 3.5 million gallons of wastewater per year, or 9,589 gallons per day, which represents less than 0.1 percent of the remaining daily capacity of 20 MGD at the Riverside RWQCP. Therefore, the project would result in a determination by the Riverside RWQCP that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be **less than significant. No mitigation is required.**

- f. *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (Sources: CalRecycle – Solid Waste Information System; CalRecycle – 2017 Landfill Summary Tonnage Report)*

Construction and operation of the project would generate solid waste. The City contracts with private waste haulers for the collection, transfer, recycling, and disposal of commercial solid waste. Approximately 75 percent of the City's solid waste is disposed of at the Badlands Sanitary Landfill, and approximately 16 percent is disposed of at the Lamb Canyon Sanitary Landfill. The Badlands Sanitary Landfill has a permitted daily throughput of 4,800 tons per day (CalRecycle 2018a). In 2017, the Badlands Sanitary Landfill collected an average of 2,320 tons per day (CalRecycle 2018b). Given the permitted daily throughput, the Badlands Sanitary Landfill has an available daily capacity of 2,480 tons. The Lamb Canyon Sanitary Landfill has an average daily throughput of approximately 1,868 tons per day and a maximum permitted throughput of 5,000 tons per day (CalRecycle 2018a). Given the permitted daily throughput, the Lamb Canyon Sanitary Landfill has an available daily capacity of 3,132 tons. According to CalEEMod estimations (Appendix A), project operation would generate approximately 82.1 tons of solid waste per year, or 0.22 ton of solid waste per day. Given the existing surplus capacity at the Badlands Sanitary Landfill and the Lamb Canyon Sanitary Landfill, the solid waste generated by operation of the project would be adequately served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Impacts would be **less than significant. No mitigation is required.**

- g. *Would the project comply with federal, state, and local statutes and regulations related to solid waste? (Sources: Appendix A – Air Quality and Greenhouse Gas Assessment, CalRecycle – Solid Waste Information System; CalRecycle – 2017 Landfill Summary Tonnage Report)*

The handling of all debris and waste generated during construction of the project would be subject to 2016 CALGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. In accordance with 2016 CALGreen requirements, the project would be required to achieve a minimum of 65 percent diversion rate for construction waste. For operational waste, AB 939 requires all cities and counties to divert a minimum of 50 percent of all solid waste from landfills. Furthermore, in accordance with the provisions of AB 341 and AB 1826, future tenants of the project that generate four or more cubic yards of solid waste per week would be required to recycle both inorganic and organic waste. The project would be required to comply with federal, state, and local statutes and regulations related to solid waste, such as AB 939, AB 341, and AB 1826. Therefore, the project would comply with applicable regulations related to solid waste, and **no impact** would occur. **No mitigation is required.**

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19 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Source: Appendix B – Biological Habitat Assessment and Burrowing Owl Survey; Appendix C – Phase I Cultural Resources Assessment)*

As discussed Section 4, *Biological Resources*, the project site consists of bare, graded ground with sparse low-lying vegetation. The project site is not within an MSHCP cell group or cell. Regional wildlife movement is restricted due to the urbanized nature of Riverside. As such, no native resident or migratory fish or wildlife species, established native resident or migratory wildlife corridors, or native wildlife nursery sites exist on the project site. Furthermore, there is no viable on-site habitat for special status species, including burrowing owls and nesting birds. Therefore, there would be no impact to fish, wildlife, or plant species. As noted under Section 5, *Cultural Resources*, there are no structures on the site. Therefore, there would be no impact related to the elimination of important examples of California history. The project would result in **no impact. No mitigation is required.**

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

As described in the discussion of environmental checklist Sections 1 through 18, the project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues. Cumulative impacts of several resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gases, and Transportation/Traffic (see CEQA Guidelines Section 15064(h)(3)). As discussed in Section 16, *Transportation/Traffic*, project-related traffic would have a cumulatively considerable contribution to the cumulative traffic impact at one intersection. Implementation of Mitigation Measure T-1, which involves the payment of a fair share fee for a signal retiming project at the Van Buren/Magnolia Avenue intersection would reduce the project’s contribution to cumulative traffic impacts to a less than significant level. As shown in Figure 4-3 of the TIA and discussed in Section 16, *Transportation/Traffic*, there are 21 planned projects in the vicinity of the project site that were analyzed as part of the cumulative traffic analysis (Appendix H). The cumulative project closest to the site is approximately 1,100 feet to the east. Therefore, planned projects are not close enough to the site to result in cumulative impacts related to resource areas such as noise and hydrology. Other resource areas (e.g., agricultural/forestry, biological, and mineral) were determined to have no impact. Therefore, the project would not contribute to cumulative impacts related to these issues. Several resource issues (e.g., geology, hazards and hazardous materials) are project-specific by nature and impacts at one location do not add to impacts at other locations or create additive impacts. As such, cumulative impacts would be **less than significant with mitigation incorporated. Mitigation Measure T-1 would apply.**

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Source: Appendix A – Air Quality and Greenhouse Gas Assessment; Appendix E – Phase I and II Environmental Site Assessment Reports; Appendix G – Noise Study)*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As discussed in Section 1, *Air Quality*, with incorporation of Mitigation Measure T-1, the project would not result in adverse effects on human beings from carbon monoxide hot spots. As detailed in Section 8, *Hazards and Hazardous Materials* and Section 12, *Noise*, the project would not result, either directly or indirectly, in adverse impacts related to hazardous materials or noise or noise. Compliance with applicable rules and regulations and mitigation measures would reduce potential impacts on human beings to a less than significant level. Therefore, impacts would be **less than significant with mitigation incorporated. Mitigation Measure T-1 would apply.**

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List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to Salem Engineering Group, Inc. Persons involved in data gathering analysis, project management, and quality control are listed below.

RINCON CONSULTANTS, INC.

Joe Power, Principal

Erik Feldman, Principal

Kari Zajac, Project Manager

Annaliese Miller, Associate Environmental Planner

John Sisser, Associate Environmental Planner

Jon Montgomery, GIS Analyst

Debra Jan Seltzer, Lead Document Formatting and Production Specialist

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Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Draft Initial Study-Mitigated Negative Declaration (IS-MND), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Cultural Resources							
CR-1: Unanticipated Discovery of Paleontological Resources							
In the inadvertent discovery of paleontological resources during ground disturbing activities, all work shall halt in the vicinity of the discovery until a qualified paleontologist inspects the find and evaluates it for significance. The City Planning and Historic Preservation Divisions shall be informed of the discovery immediately. If the paleontological resource is determined to be significant, the paleontologist shall have the authority to quickly and efficiently salvage and remove the fossil from its locality, as appropriate, before ground-disturbing activities resume in the area. Any fossils recovered during the development, along with their contextual stratigraphic data, shall be offered to the City of Riverside or other appropriate institution with an educational and research interest in the materials. The paleontologist shall prepare a report of the results of any findings as part of a testing or mitigation plan following accepted professional practice.	<p>If paleontological resources are discovered during ground disturbing activities, verify that the applicant has retained a Qualified Paleontologist to inspect the find and evaluate it for significance.</p> <p>If the paleontological resource discovered is determined to be significant, verify that the paleontologist has quickly and efficiently salvaged and removed the fossil from its locality, as appropriate, before ground-disturbing activities resume in the area. Verify that any fossils recovered during the development, along with their contextual stratigraphic data, are offered to the City of Riverside or other appropriate institution with an educational and research interest in the materials.</p>	As needed during ground disturbing activities.	As needed during ground disturbing activities	City of Riverside City Planning and Historic Preservation Division			
Transportation and Traffic							
T-1: Traffic Signal Retiming							
To mitigate the project’s contribution to the cumulative traffic impact to the Van Buren Boulevard/Magnolia Avenue intersection during the PM peak hour, the project applicant shall pay a fair share contribution of 23.84% of the total improvement cost to complete a traffic signal improvement project at the Van Buren Boulevard/Magnolia Avenue intersection prior	<p>Collect fair share transportation fees from the applicant for the traffic signal improvement project at Van Buren Boulevard/Magnolia Avenue intersection.</p> <p>Complete signal retiming project at Van Buren Boulevard/Magnolia Avenue intersection.</p>	Prior to the issuance of the certificate of occupant.	Once	City of Riverside Public Works Department			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
to the issuance of the certificate of occupancy. The intersection shall be improved to re-time the signal timing splits for each phase while maintaining the existing cycle length (Appendix H). The signal re-timing project shall be completed prior to project operation.							
Tribal Cultural Resources							
TCR-1: Tribal Notification							
Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact interested tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.	Verify that interested tribes have been notified of project changes, if any.	Prior to grading permit issuance.	Once	City of Riverside Community & Economic Development Department, Planning Division			
	Verify that additional consultation has occurred, if necessary.	Prior to grading permit issuance.	Once				
	Verify that avoidance and preservation measures are implemented if site design and/or proposed grades are revised.	Prior to grading permit issuance.	Once				
	Verify execution of tribal monitoring agreement, as needed.	Prior to grading permit issuance.	Once				

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
TCR-2: On-call Project Archaeologist							
Prior to the issuance of a grading permit, the Property Owner/Developer shall provide a letter from a County certified Archaeologist and Paleontologist stating that the Property Owner/Developer has retained these individuals, and that the Archaeologist and Paleontologist shall be on call during all grading and other significant ground-disturbing activities in native sediments.	Verify the retention of a County certified Archaeologist and Paleontologist.	Prior to the issuance of a grading permit.	Once	City of Riverside Community & Economic Development Department, Planning Division			
TCR-3: Treatment and Disposition of Cultural Resources							
In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:	Notify Tribes within 24 hours of any inadvertent discovery of cultural resources.	As needed during grading	Once	City of Riverside Community & Economic Development Department, Planning Division			
1. Consulting Tribes Notified: within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed to access the discovery, in order to assist with the significance evaluation; and	Obtain proof that the project applicant has temporarily curated discovered resources. Obtain inventory of all artifacts removed and verification of tribal oversight.	As needed during grading.	Once				
2. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and	Obtain evidence that all cultural resources are relinquished through one or more of the designated methods.	Upon completion of grading.	Once				
3. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
	artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:						
	a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed;						
	b. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;						
	c. If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default; and						

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and interested tribes.							
TCR-4: Cultural Sensitivity Training							
The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel	Verify completion of Cultural Sensitivity Training and obtain list of attendees.	Prior to the start of grading.	Once	City of Riverside Community & Economic Development Department, Planning Division			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.							

Appendix A

Air Quality and Greenhouse Gas Assessment and Mobile Source N₂O Emissions Modeling

Appendix B

Biological Habitat Assessment and Burrowing Owl Survey

Appendix C

Phase I Cultural Resources Assessment

Appendix D

Preliminary Soil Investigation and Infiltration Tests Report

Appendix E

Phase I and II Environmental Site Assessment Reports

Appendix F

Water Quality Management Plan

Appendix G

Noise Study

Appendix H

Traffic Impact Analysis