

# Desert Grove Retail Project (PLAN18-00049)

## Draft Environmental Impact Report



May 2019

**DRAFT ENVIRONMENTAL  
IMPACT REPORT**

for the

**Desert Grove Retail Project**  
(PLAN18-00049)

State Clearinghouse Number:  
2018121029

**Prepared for:**

City of Victorville  
14343 Civic Drive  
Victorville, California 92393

**Prepared by:**

Applied Planning, Inc.  
11762 De Palma Road, 1-C 310  
Corona, CA 92883

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# **1.0 EXECUTIVE SUMMARY**

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# 1.0 EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Consistent with requirements of the California Environmental Quality Act (CEQA), this Draft Environmental Impact Report (DEIR or EIR) evaluates and discloses potential environmental impacts resulting from construction and operation of the proposed Desert Grove Retail Project. (Project). The Project proposes development of approximately 96,300 square feet of commercial/retail uses within the approximately 14.8-acre Project site. The current site plan concept configures the Project uses as 10 pads.

The Project site is located at the southwesterly corner of the US-395/Palmdale Road (SR-18) intersection, in the City of Victorville (City).<sup>1</sup> US-395 and SR-18 at this location comprise the shared boundary between the City of Victorville and the City of Adelanto. Please refer also to EIR Section 3.0, *Project Description*, and Figure 3.2-1, *Project Location*.

This EIR Section summarizes Project background issues, provides a brief description of the Project and its Objectives, and summarizes potential environmental impacts of the proposal. Table 1.9-1, *Summary of Impacts and Mitigation*, presented at the conclusion of this Section, lists these impacts and identifies the mitigation measures recommended to eliminate or reduce the effects of those impacts which have been determined to be potentially significant. Alternatives to the Project which could reduce the extent or severity of the Project's significant environmental impacts are also briefly described within this Section.

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<sup>1</sup> The Project site borders an existing fast-food restaurant that is located at the southwest corner of the US-395/SR-18 intersection. This existing fast-food restaurant is not a part of the Project.

For a full description of the Project, its impacts, recommended mitigation measures, and considered Alternatives, please refer to EIR Sections 3.0, 4.0, and 5.0, respectively.

## **1.2 PROJECT ELEMENTS**

Primary Project elements are summarized below. Please refer also to EIR Section 3.0, *Project Description*.

### **1.2.1 Site Preparation**

Project site preparation activities would be required to conform to requirements of the City of Victorville Municipal Code (Municipal Code Chapter 17.88 - *Grading and Erosion Control*; Chapter 5 - *Building and Fire Regulations*, Article 2: - *Grading Regulations*, et. al.). Prior to approval of a development permit, the Project Applicant would be required to submit soils reports, erosion control plans, geologic engineering reports, and any other relevant site information determined necessary by the City Building and Fire Official. Site preparation activities would be undertaken consistent with the Project final soils report, geologic engineering report, erosion control plan, and other required reports and plans as reviewed and approved by the City.

### **1.2.2 Site Plan Concept**

The Project proposes the development of approximately 96,300 square feet of commercial/retail uses configured as 10 pads, as summarized below. Table 1.2-1 provides a breakdown of the proposed uses. Figure 1.2-1 presents the Project Site Plan Concept.

### **1.2.3 Access and Circulation**

Access to/from adjacent roads would be provided by four driveways. At the northwesterly corner of the Project site, a new all-way driveway would connect northerly to SR-18. As part of the Project, the existing signal at this location would be modified consistent with City requirements. Easterly of this signalized driveway, an existing driveway would provide right-in/right-out only access from/to SR-18.

**Table 1.2-1  
Proposed Uses**

<b>Pad</b>	<b>Use</b>	<b>Building Area</b>	
1	Automatic Car Wash (Single-tenant)	2,700 square feet (sf)	
2	Retail/ Fast Food Restaurant (Multi-tenant)	6,000 sf	4,000 sf Retail 2,000 sf Fast Food
3	Retail/Restaurant (Multi-tenant)	9,700 sf	5,200 sf Retail 4,500 sf High Turnover Fast Casual Restaurant
4	Retail/Fast Food Restaurant (Multi-tenant)	5,000 sf	3,000 sf Retail 2,000 sf Fast Food
5	Retail/Fast Food Restaurant (Multi-tenant)	5,000 sf	3,000 sf Retail 2,000 sf Fast Food
6	Fast Food	2,800 sf	
7	Gas Station w/Convenience Store (Single-tenant)	5,268 sf (16 Vehicle Fueling Points, VFP)	
8	Retail (Multi-tenant)	32,000 sf	16,000 sf Retail Major 16,000 sf Retail Major
9	Retail Anchor	15,560	
10	Retail Anchor	12,272	
<b>TOTAL</b>		<b>96,300 Square Feet (16 VFP)</b>	

**Source:** Desert Grove Retail Project Site Plan Concept (Avalon Architectural) April 1, 2019.

**Notes:** Within the Project site, individual uses and allocation of building pad areas are subject to future modification(s). All modifications would be contingent on approval by the Lead Agency and may require additional environmental analysis.

At the southeasterly corner of the Project site, a new signalized all-way driveway would connect easterly to US-395. Northerly of this signalized driveway, an existing driveway would provide right-in/right-out only access from/to US-395. Internal to the Project site, a private central main drive oriented along a northwest – southeast alignment would provide access to the Project buildings. This private drive would also indirectly provide access between SR-18 and US-395.

#### **1.2.4 Landscape/Hardscape**

Project landscape/hardscape would be required to conform to City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-2.10.020: - *Development standards*). All final Project landscape/hardscape plans would be subject to review and approval by the City.



### **1.2.5 Lighting**

All Project lighting would be required to conform to City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-3.10.020: - *Development standards*). All final Project lighting plans would be subject to review and approval by the City.

### **1.2.6 Signs**

All Project signs would be required to conform to applicable City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-3.10.020: - *Development standards*). All final Project sign plans would be subject to review and approval by the City.

### **1.2.7 Parking**

All Project parking would be required to conform to applicable City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-3.10.020: - *Development standards*). All final Project parking plans would be subject to review and approval by the City.

### **1.2.8 Infrastructure/Utilities/Services**

Infrastructure and utilities that would serve the Project site are summarized below.

#### **1.2.8.1 Water/Sewer Services**

Water service to the Project would be provided by Victorville Water District. All Project water service lines and connections to Water District system would be required to conform to City and Water District requirements. The Project Applicant would also be required to obtain a “Will-Serve” letter for water service. (See also: <https://www.victorvilleca.gov/government/city-departments/water/for-developers-contractors>).

Wastewater generated by the Project would be conveyed for treatment at the Victorville Industrial/Wastewater Treatment Plant (IWWTP), which is owned and operated by the Victorville Water District (VWD). All Project sewer service lines would be required to

conform to City and VWD requirements (See: Municipal Code Chapter 10.02 - *Sanitary Sewer Use Ordinance*).

### **1.2.8.2 Storm Water Management System**

The Project storm water management system would be required to incorporate drainage improvements, facilities, and programs to control and treat storm water pollutants. Prior to issuance of grading permits, a detailed Water Quality Management Plan (WQMP) would be required to be submitted to, and approved by, the City. Additionally, a Storm Water Pollution Prevention Plan (SWPPP) would be implemented consistent with the requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit. (See: Municipal Code Chapter 10.30 - *Storm Water and Urban Runoff Management and Discharge Control*).

### **1.2.8.3 Solid Waste Management**

Solid waste generated by the Project would be collected by Victorville Disposal and disposed of at the Victorville Landfill, operated by the County of San Bernardino Public Works Department. Burrtec Waste Industries, a private contractor, operates the landfill under contract to the County.

### **1.2.8.4 Utilities**

The Project would also be provided natural gas, electrical, telecommunications services. Service providers available to the Project are listed below:

- Natural gas (Southwest Gas Corporation);
- Electricity (SCE); and
- Telecommunications (various private services, including AT&T, Time Warner, and Frontier Communications).<sup>2</sup>

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<sup>2</sup> As part of the Project, a cell phone tower is proposed southerly of proposed "Pad 10." The cell phone tower would be designed and constructed consistent with City of Victorville Municipal Code Sec. 16-3.24.150: - *Wireless communication facilities*.

All modification of, and connection to, existing services would be accomplished consistent with City and purveyor requirements. It is noted that to allow for, and facilitate Project construction activities, provision of temporary SCE electrical services improvements would be required. The scope of such temporary improvements is considered to be consistent with, and reflected within the total scope of development proposed by the Project. Similarly, impacts resulting from the provision of temporary SCE services would not be substantively different from, or greater than, impacts resulting from development of the Project in total.

#### **1.2.8.5 Public Services**

Fire protection and emergency medical services for the Project would be provided by the City of Victorville Fire Department. Police protection services for the Project would be provided by the Victorville Police Department via contract with the San Bernardino County Sheriff.

The City also provides, or facilitates provision of, a range of other services that would be generally available to the Project patrons and employees. These services include, but are not limited to: educational services, library services, arts and entertainment, and human services.

#### **1.2.8.6 Alternative Transportation Modes**

Alternative transportation modes and services available to the Project site and vicinity are described below.

##### **Bus Services**

The Study Area is served by the Victor Valley Transit Authority (VVTA). VVTA provides bus service throughout the Victor Valley region. There are three transit routes that currently provide direct service to the Project site: VVTA Routes 31 (Victorville – South Adelanto), 33 (Adelanto Circulator) and 54 (Highway 395-Palmdale – Victor Valley Mall). Detailed bus routes and schedules are available at: <https://vvta.org>.

## **Bicycle Facilities**

There are no existing bicycle facilities in the Study Area. The City of Victorville Non-Motorized Transportation Plan does, however, identify the following planned bicycle facilities within the Study Area:

### Class II On-Street Bicycle Lanes

- SR-18 from Baldy Mesa Rd. to Amargosa Rd.
- Dos Palmas Rd. from Baldy Mesa Rd. to Amargosa Rd.
- Bear Valley Rd. from Mesa View Rd. to the Oro Grande Wash
- Cantina St.
- Mesa Linda St. from northern City limits to La Mesa Rd.
- El Evado Rd. from SCLA to La Mesa Rd.
- Amargosa Rd. south of Dos Palmas Rd.

### Class III Bicycle Routes

- Palmdale Rd. east of Amargosa Rd.
- Luna Rd. from Mesa View Rd. to Amargosa Rd.
- La Mesa Rd. from Mesa View Rd. to Amargosa Rd.
- Topaz Rd. from Luna St. to Mesa View Rd.
- Cobalt Rd.
- Amethyst Rd. from Hopland St. to Bear Valley Rd.
- El Evado Rd. south of La Mesa Rd.
- Amargosa Rd. from Hopland St. to Dos Palmas Rd.

The Project concept does not propose or require facilities or programs that would conflict or interfere with development and implementation of planned or proposed bicycle facilities. The Applicant would coordinate final Project designs to ensure accommodation of planned or proposed bicycle facilities. On-site Project bicycle amenities would be provided consistent with City of Victorville requirements.

See also: [http://sustain.scag.ca.gov/Documents/CBResources/Victorville Non-Motorized Plan Final Report.pdf](http://sustain.scag.ca.gov/Documents/CBResources/Victorville_Non-Motorized_Plan_Final_Report.pdf)

## **Pedestrian Access**

Pedestrian access would be facilitated by Project construction of the ultimate half-section of abutting US-395 and Palmdale Road (SR-18) to include curb and gutter and sidewalk improvements. All right-of-way improvements, including any temporary or interim improvements would be designed and constructed consistent with City Conditions of Approval. Additionally, sidewalk connections between the Project uses would facilitate pedestrian access within the Project site.

### **1.2.9 Energy Efficiency/Sustainability**

Energy-saving and sustainable design features and operational programs would be incorporated in the Project facilities and site plan concept pursuant to California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11) as implemented by the City of Victorville.

General Plan Policy 7.1.1, Implementation Measure 7.1.1.4, requires that the Project generate “electricity on site to [the] maximum extent feasible” (General Plan, p. R-31). The developer has committed to installing photovoltaic panels within the Project site to generate a portion of the project’s energy demands. Prior to final site plan approval and issuance of the first building permit, Project design(s) providing for on-site energy production would be documented and verified as part of the City’s development review processes. Compliance with the General Plan on-site energy production requirements would be verified by the City prior to issuance of Certificate(s) of Occupancy for any affected buildings (e.g., buildings with photovoltaic (PV) panels).

General Plan Policy 7.2.1, Implementation Measure 7.2.1.5, requires the Project “to be 15 percent more efficient than 2008 Title 24 Standards” (General Plan, p. R-31). Prior to final site plan approval and issuance of the first building permit, Project building/facility energy efficiencies would be documented as part of the City’s development review processes. Compliance with General Plan energy efficiency requirements would be verified by the City prior to issuance of Certificate of Occupancy for each building.

### **1.2.10 Construction Traffic Management Plan**

Temporary and short-term traffic detours and traffic disruptions could result during Project construction activities including implementation of access and circulation improvements noted above. Accordingly, the Project Applicant would be responsible for the preparation and submittal of a construction area traffic management plan (Plan) to be reviewed and approved by the City. Typical elements and information incorporated in the Plan would include, but would not be limited to:

- **Name of on-site construction superintendent and contact phone number.**
- **Identification of Construction Contract Responsibilities** - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).
- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).
- **Identification and Description of Material Storage Locations (if any).**
- **Location and Description of Construction Trailer (if any).**
- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.
- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of building permits. The Plan and its requirements would also be provided to all contractors as one required component of building plan/contract document packages.

### **1.2.11 Project Opening Year**

Under Opening Year Conditions, all Project facilities are assumed to be occupied and fully operational. For analytic purposes, a Project Opening Year of 2019 is assumed.

## **1.3 INITIAL STUDY/NOTICE OF PREPARATION**

The City of Victorville has determined that the Project has the potential to cause or result in significant environmental impacts, and warranted further analysis, public review, and disclosure through the preparation of an EIR.

A Notice of Preparation (NOP), dated December 2018, was forwarded to the Governor's Office of Planning and Research, State Clearinghouse (SCH), and circulated for public review and comment. The State Clearinghouse established the comment period for the NOP as December 13, 2018 through January 11, 2019. The assigned State Clearinghouse reference for the Project is SCH No. 2018121029. The Notice of Preparation, and all NOP responses are presented in Appendix A of this EIR.

## **1.4 IMPACTS NOT FOUND TO BE POTENTIALLY SIGNIFICANT**

As part of the EIR Initial Study, certain environmental impacts have been substantiated not to be potentially significant. These environmental impacts are summarized below. All other *CEQA Guidelines* environmental topics are discussed in the body text of this EIR.

Consistent with *CEQA Guidelines* Section 15143, *Emphasis*, these issues need not be addressed in detail in the EIR. Accordingly, the specific issues listed are not substantively discussed within the body of this EIR. Please refer also to the EIR Initial

Study presented at EIR Appendix A. All materials cited in the following summaries are available at, or can be made available by contacting the City of Victorville Development Department.

### *Aesthetics*

There are no designated scenic vistas nor significant natural features within the Project site, or in the vicinity of the Project site. There are no historic resources, State scenic highways, rock outcroppings, trees, or other notable visual resources within, or proximate to, the Project site. Neither are there any such off-site resources that would potentially be affected by the Project. No historic buildings exist within the Project site, and the Project does not propose or require actions or activities that would affect any off-site historic buildings.

The City of Victorville General Plan Land Use designation of the Project site is Commercial. Zoning designation of the Project site is C-2 (General Commercial). The Project uses are allowed under the site's current General Plan Commercial Land Use designation and are permitted or conditionally permitted the site's C-2 Zoning designation. The preliminary Project design concepts reflect and respond to standards for the City's C-2 Zone District established at Municipal Code Article 10: - Commercial Districts. Final Project designs would be subject to the City's Site Plan development and review processes (see Municipal Code Article 1: - Site Plan Review), acting to ensure conformance with City development standards.

The Project proposes development of conventional commercial/retail uses in an urban context. Adjacent commercial properties are developed with similar uses. The Project would be visually compatible with existing and anticipated development in its vicinity. Projects that are allowed land uses and that conform to City development standards are not considered to degrade existing visual conditions.

The Project would introduce new sources of light to the subject site and vicinity. Light sources would include, but would not be limited to: parking lot lighting, proposed traffic signal, lighting of facilities for aesthetic and security purposes, and illuminated signs.

The Project is located in an urbanizing area of the City. Similar commercial/retail land uses and associated commercial lighting characteristics currently exist in the Project vicinity. Further, the Project site and vicinity properties are exposed to existing light overspill from nighttime traffic along adjacent roadways (US-395, SR-18). As such, it is unlikely that conventional commercial/retail lighting and illuminated operations realized under the Project would discernibly, much less adversely, affect ambient light conditions.

It is further noted that all development proposed by the Project would be required to conform with applicable lighting standards of the City's C-2 Zone District, including types, locations, and orientation of Project lighting fixtures and illuminated features. Through established Site Plan review processes, the City would ensure that final design of the Project precludes or effectively minimizes potential light/glare overspill onto adjacent properties or roadways.

Based on the preceding, the Project would not result in potentially significant impacts for the following considerations:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; and
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

### *Agriculture and Forest Resources*

No portions of the Project site are currently under active cultivation, nor are the Project site or surrounding properties designated as farmland of local, regional or statewide importance.

The subject site is not zoned for agricultural uses, nor designated for agricultural purposes by the City's General Plan. Further, no Williamson Act contracts are in place for the proposed Project site.

No timberland or forest land uses, or properties zoned for timberland or forest land use are located on the Project site or its the vicinity. The Project does not propose or require facilities or uses that would otherwise potentially affect timberland or forest lands.

Based on the preceding, the Project would not result in potentially significant impacts for the following considerations:

- Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned "Timberland Production";
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- 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.

### *Air Quality*

Temporary, short-term odor releases may result from Project construction activities. Potential sources of odors would include but would not be limited to: asphalt/paving materials, glues, paint, and other architectural coatings. Construction-source odor impacts are reduced to levels that would be less-than-significant by established

requirements for a material handling and procedure plan. The plan identifies odor sources, odor-generating materials and quantities permitted on site, and isolation/containment devices or mechanisms to prevent significant release of odors.

The Project proposes conventional commercial/retail uses that would not be sources objectionable odors that could potentially affect a substantial number of persons. All municipal solid waste (MSW) generated by the Project uses would be disposed of in covered receptacles and routinely removed, thereby limiting the escape of waste-source odors to the open air. All Project MSW would be required to be collected, stored in standards containers, and removed from the Project site consistent with City requirements (see: Municipal Code Chapter 6.36 *Solid Waste Services*).

Additionally, the Project would be subject to MDAQMD Rule 402 prohibiting discharge of “air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.”

Based on the preceding discussion, the potential for the Project to create objectionable odors affecting a substantial number of people is considered less-than-significant.

### ***Biological Resources***

No biological resources protected by local ordinances or policies are present on site. The Project site is located within the West Mojave Plan (WMP) Area. However, the City of Victorville is not a signatory to the WMP. The Project site is also located within the area covered under the Desert Renewable Energy Conservation Plan (DRECP), however, because the Project does not include development of renewable energy, the DRECP is not applicable to this Project. On this basis, the Project does not have the potential to conflict with any applicable habitat conservation plan or natural communities conservation plan.

### ***Cultural Resources***

The likelihood of encountering human remains in the course of Project development is minimal. Further, as required by California Health and Safety Code Section 7050.5, should human remains be found, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains were found to be prehistoric, the coroner would coordinate with the California Native American Heritage Commission as required by State law.

Based on compliance with these existing regulations, the potential for the Project to disturb any human remains, including those interred outside of formal cemeteries is considered less-than-significant.

### ***Geology and Soils***

There are no known or suspected fault traces located within the City of Victorville (Victorville General Plan EIR [General Plan EIR], p. 5.6-15). The nearest known fault is the Helendale fault, located northerly of the Southern California Logistics Airport (SCLA), and is more than 5 miles distant from the Project site.

No faults within or near the City have been placed within an established Alquist-Priolo Earthquake Fault Zone. The Project site is not located within an Alquist-Priolo Special Study Zone. The Project does not propose uses or activities that would contribute to or exacerbate any existing fault hazard conditions.

Within the City, landslides are not an issue as most of the area is characterized by gently sloping topography of less than 9% grade (General Plan EIR, p. 5.6-16). The Project does not propose or require construction of substantive slopes. The Project site is not otherwise affected by substantive slopes.

Project construction activities would temporarily expose underlying soils, thereby increasing their susceptibility to erosion until the Project is fully implemented. Potential erosion impacts incurred during construction activities are mitigated below the level of

significance through the Project's mandated compliance with a City-approved Storm Water Pollution Prevention Plan (SWPPP). Further, the Project does not propose to significantly alter existing topography and would not substantively affect existing erosion conditions.

No septic tanks or other alternative wastewater disposal systems are proposed as part of the Project. The Project does not propose or require facilities or programs that would substantively affect off-site septic systems or alternative waste water disposal systems.

Based on the preceding the Project would result in no impacts or less-than-significant impacts under the following topics:

- Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault;
- Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides;
- Potential to result in substantial soil erosion or the loss of topsoil; and
- Potential to result in or cause adverse impacts associated with septic systems or alternative waste water disposal systems.

### ***Hazards and Hazardous Materials***

Project construction activities may result in the temporary presence of potentially hazardous materials including, but not limited to, fuels and lubricants, paints, solvents, and other construction-related materials on-site. Additionally, Project operations may involve use of various common, commercially available, pre-packaged hazardous building and landscape maintenance products, certain of which may be considered potentially hazardous.

A stringent regulatory system has evolved around the use, storage and disposal of potentially hazardous materials associated with Project construction and operations. The Project would be required to comply with applicable regulations addressing storage, use, and disposal/recycling of hazardous or potentially hazardous materials.

More specifically, under the California Unified Hazardous Waste and Hazardous Material Management Regulatory Program, (Chapter 6.11, Division 20, Section 25404 of the Health and Safety Code), hazards/hazardous materials management is addressed locally through the Certified Unified Program Agency (CUPA). The CUPA is required to consolidate, coordinate, and make consistent the administrative requirements, permits, fee structures, and inspection and enforcement activities within its jurisdiction. The CUPA for the City of Victorville is the San Bernardino County Fire Department.

Mandated compliance with regulations governing hazardous materials would minimize or preclude potential hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials.

The Project site is located approximately 0.5 miles from the nearest school (the Vista Verde Elementary School, located approximately 0.5 miles south of the Project site). The Project does not include elements or aspects that would create or otherwise result in hazardous emissions.

The Southern California Logistics Airport, located approximately 5 miles northerly of the Project site, is the nearest airport facility. No other public or private airstrips exist, or are proposed proximate to the Project site. Physical separation between the Project site and the closest airport facilities, as well as land use regulations that preclude or restrict development within airport approach/departure zones, reduce potential safety hazards to levels that would be less-than-significant.

The Project does not propose or require permanent alteration of vehicle circulation routes. Nor does the Project propose or require facilities or operations that would interfere with any identified emergency response or emergency evacuation plan. In

accordance with City policies, coordination with the local fire and police departments during construction would ensure that potential interference with emergency response and evacuation efforts are avoided. Further, potential temporary traffic/access disruption that may during Project construction would be addressed through the implementation of the Project Construction Traffic Management Plan (see: IS/MND Section 2.0, *Project Description*; 2.4.8.7, *Construction Traffic Management Plan*).

Fire protection services for the Project site and vicinity are currently available through the Victorville Fire Department. Urban fire hazards within the City are largely related to structural fires, and are typically due to carelessness and/or negligence. Adherence to local fire department building and site design requirements, and compliance with codified fire protection and prevention measures during construction and operation of the Project are required.

Based on the preceding, the Project would result in less-than-significant impacts, or no impacts under the following topics:

- Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Potential to generate hazardous emissions or involve hazardous materials handling within one-quarter mile of an existing or proposed school;
- Potential to result in exposure of persons or structures to airport/airstrip safety hazards;
- Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Potential to expose people to, or result in a significant risk of loss, injury or death involving wildland fires.

### ***Hydrology and Water Quality***

Project construction activities have the potential to impact surface water quality as the result of soil erosion during grading and soil stockpiling, and subsequent siltation. Post-construction Project operations could also affect area water quality through storm water discharge and conveyance of typical urban surface pollutants (e.g., solids; oxygen-demanding substances; nitrogen and phosphorus; pathogens; petroleum hydrocarbon; metals; synthetic organics) to receiving waters.

Discharge of pollutants from the Project site and all areas of the City would be minimized through compliance with requirements of the City Municipal Code (Chapter 10.30 - *Storm Water and Urban Runoff Management And Discharge Control*, et al.); and conformance with programs and performance standards established under the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System Permit (MS4 permit) issued by the California Water Resources Control Board, Santa Ana Region. The San Bernardino County Flood Control District (District), San Bernardino County, and the 16 incorporated cities in the Santa Ana River watershed (including the City of Victorville) are Co-Permittees under the MS4 Permit. The San Bernardino County Flood Control District has been designated “Principal Permittee” under the MS4 Permit and administers and coordinates many of the permit requirements on behalf of all the Permittees.

Consistent with MS4 Permit requirements, the Applicant would be required to develop and implement a construction Storm Water Pollution Prevention Program (SWPPP) acting to reduce and control potential erosion, siltation, and discharge of pollutants during Project construction.

Post-construction Project operations would comply with the Project’s mandated City-approved Water Quality Management Plan (WQMP) to minimize storm water pollutants of concern and document implementation of required BMPs.

Compliance with City requirements to include required implementation of the Project SWPPP and WQMP would ensure that construction and operation of the Project would not violate any water quality standards or waste discharge requirements.

Development of the Project would not contribute to groundwater depletion, nor discernibly interfere with groundwater recharge. The Project site is currently served by the municipal water system; the Project does not propose or require direct withdrawal of groundwater. Further, construction proposed by the Project would not involve substructures or other intrusions at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Project site is not a designated groundwater recharge area and the Project does not propose or require facilities or actions that would otherwise affect designated groundwater recharge areas.

Wastewater generated by the Project would be conveyed by the municipal sewer system for treatment at the Victorville Industrial/Wastewater Treatment Plant (IWWTP). The IWWTP provides tertiary treatment, minimizing the potential for treated wastewater effluent to adversely affect area water quality.

Storm water runoff from the Project area may include small amounts of oils from paved areas and other chemicals which may cumulatively result in degradation of off-site surface waters and could eventually affect receiving waters. Compliance with applicable MS4 Permit requirements supported by the Project's required WQMP minimizes the potential for storm water discharges from the Project site to adversely affect area water quality. The Project does not propose or require facilities or operations that would otherwise result in potentially significant water quality impacts.

Residential uses are not proposed as part of the Project. Additionally, as illustrated at General Plan Figure S-2, Flood Hazards Map, the Project site is not located within a 100-year flood hazard area.

The General Plan Safety Element states in pertinent part: “[p]otential threats of dam inundation to the Victorville Planning Area could occur if the dams at Silverwood or

Arrowhead Lakes failed and emptied into the Mojave River through Deep Creek. Considerable inundation might also occur from failure of the Mojave River Forks Dam. Due to the distance to the nearest developed areas, and precautions built into the holding basins below Lake Silverwood and in the Deep Creek area just before the water enters the Mojave River, the probability of extreme flood is unlikely” (General Plan, p. S-5). The Project does not propose or require uses or facilities that would contribute to or exacerbate flood hazards.

The Project site is not located near any bodies of water or water storage facilities that would be considered susceptible to seiche. No slopes of significance have been identified on or near the Project site, and the Project site has not historically been affected by mudflows. The Project site is not proximate to any coastal waters and would not be subject to tsunami hazards. The Project does not propose or require uses or facilities that would contribute to or exacerbate seiche, tsunami or mudflow flood hazards.

Based on the preceding, the Project would result in less-than-significant impacts, or no impacts under the following topics:

- Potential to violate any water quality standards or waste discharge requirements;
- Potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge;
- Potential to otherwise substantially degrade water quality;
- Potential to place housing within a 100-year flood hazard area; or place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Potential to create or expose people or property to a significant risk of loss due to flood hazards;

- Potential to expose people or structures to a significant risk due to seiche, tsunami, or mudflow.

### *Land Use and Planning*

No residences or other housing exists within the Project site. No residents would be displaced by the Project, nor would the physical arrangement of any neighboring residential communities be modified or divided by the Project.

The City of Victorville General Plan Land Use designation of the Project site is Commercial. Zoning designation of the Project site is C-2 (General Commercial). The Project does not propose any modification of these designations. The Project would implement commercial/retail uses within an urbanizing area of the City designated for, and anticipated to develop with, such uses.

No resources protected by local ordinances or policies are present on site. The Project site is located within the West Mojave Plan (WMP) Area. However, the City of Victorville is not a signatory to the WMP. The Project site is also located within the area covered under the Desert Renewable Energy Conservation Plan (DRECP), however, because the Project does not include development of renewable energy, the DRECP is not applicable to this Project.

Based on the preceding, the Project would result in no impacts or less-than-significant impacts under the following topics:

- Potential to physically divide an established community;
- Potential to conflict with an applicable jurisdictional land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; and
- Potential to conflict with any applicable habitat conservation plan or natural communities conservation plan.

As substantiated above, the Project is not anticipated to result in potentially significant Land Use and Planning impacts. To provide general context for the Project, the EIR nonetheless includes a discussion of Land Use and Planning.

### ***Mineral Resources***

Naturally occurring mineral resources within the City include sand, gravel or stone deposits that are suitable as sources of concrete aggregate, located primarily along the Mojave River. The General Plan recognizes the potential for occurrence of mineral resources along the Mojave River corridor, and designates these areas “MRZ-2b” (General Plan Figure RE-1, *Victorville Planning Area Mineral Land Classification Map*). The MRZ-2b mineral resource zone designation represents areas underlain by mineral deposits where geologic information indicates that significant resources are present or are inferred. Within the City of Victorville, the only areas designated MRZ-2b occur along the Mojave River corridor. The Project site is located approximately 2 miles westerly of the Mojave River corridor. The Project does not propose uses or facilities that would be located in, or otherwise substantively affect, the Mojave River corridor.

General Plan Figure RE-1 indicates that the Project site and the predominance of the City of Victorville are designated as a “MRZ-3a” mineral resource zone. The MRZ-3a zone is defined by the General Plan Resource Element as “[a]reas containing known mineral occurrences of undetermined mineral resource significance.”

The Project site and adjacent properties are designated for commercial development under the General Plan, and are not designated, planned, or anticipated as areas for extraction or recovery of mineral resources. There are no known or probable mineral resources of local, regional or state importance within the Project site. The Project does not propose or require facilities or operations that would substantively affect any off-site mineral resources.

Based on the preceding, the Project would result in less-than-significant impacts under the following topics:

- Potential loss of availability of a known mineral resource that would be of value to the region and to the residents of the state; and
- Potential loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

### *Noise*

The airport nearest the Project site is the Southern California Logistics Airport, located approximately 5 miles northerly of the subject property, and as such occasional aircraft overflights are expected. No other public or private airstrips exist within the vicinity of the Project. Due to the Project's physical separation from airport facilities, and the fact that the subject site does not lie within designated landing, take off or glide paths, no excessive aircraft-related noise is anticipated to affect the Project area. The Project does not propose or require uses that would substantively contribute to area airport/airstrip noise.

Based on the preceding, the Project would result in less-than-significant impacts under the following topics:

- Potential to expose people residing or working in the Project area to excessive noise levels from public airport or public use airport operations; and
- Potential to expose people residing or working in the Project area to excessive noise levels from private airstrip operations.

### ***Population and Housing***

Construction of new housing is not a component of the Project. As such, the Project would not directly contribute to population growth. Employment generated by the Project may incidentally contribute to secondary population growth. That is, job opportunities likely arising from the Project would include positions as retail sales, clerks, and cashiers. These types of employment opportunities are relatively common throughout Southern California and are unlikely to generate significant population migration (if any). Any Project-related employment demands would likely be filled by the available personnel pools within the City of Victorville, and/or neighboring communities.

Housing does not exist within the Project site, and therefore no housing or residents would be displaced by the Project. No construction of replacement housing would be required.

Based on the preceding, the Project would result in no impacts or less-than-significant impacts under the following topics:

- Potential to induce substantial population growth in the area, either directly indirectly;
- Potential to displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and
- Potential to displace substantial numbers of people necessitating the construction of replacement housing elsewhere.

### ***Public Services***

Fire protection and emergency response services for the Project and the City of Victorville are provided by the Victorville Fire Department. The City also participates in the Regional Fire Protection Authority (RFPA), which ensures provision of fire protection and emergency services under mutual aid agreements with San Bernardino County.

Within the City's corporate boundaries, five (5) fire stations are staffed and operated by the Victorville Fire Department. Additionally, under mutual aid agreements, three (3) County fire stations located within the City's Sphere of Influence provide fire protection services to the City and adjacent unincorporated areas. Of these fire stations, the nearest is the Mountain View Acres Station, located at 13782 El Evado Road, less than two miles southwesterly of the Project site.

To the satisfaction of the Victorville Fire Department and the City Development Department, the Project would comply with applicable City fire prevention and protection requirements, including building/site design requirements, and provisions for emergency access, thereby reducing potential increased demands for fire protection services.

Police protection for the Project site and vicinity properties is currently provided by the Victorville Police Department, as a contract service of the San Bernardino County Sheriff Department. The Victorville Police headquarters is located at 14200 Amargosa Road, approximately four miles easterly of the Project site. Provision and maintenance of adequate police protection services for the Project would be realized generally through a combination of Project site and facility designs that incorporate appropriate safety and security elements and continued adequate law enforcement funding.

The Project site plan concept and proposed building designs would be reviewed by the Victorville Police Department to ensure incorporation of appropriate safety and security elements. Such design features include secure building designs, defensible outdoor areas, and area and facility security lighting. Such physical design features act to discourage crimes, including vandalism, thereby reducing demands for police protection services.

Additionally, development fees, property tax revenues, and sales taxes generated by the Project may be used to offset the costs for providing police services to the site, and maintain and enhance police protection services within the City.

The Project is not expected to result in an identifiable increase in employees or residents (and thus, students) within the City. The potential for the Project to result in increased demands on school facilities is therefore considered less-than-significant. Further, prior to the issuance of building permits, the Project is required to pay school impact fees consistent with California Government Code Section 65995.

Demands for parks and recreational facilities is largely a function of the City's resident population. The Project would not result in result in a substantive increase in residents within the City.

Development of the Project would require established public agency oversight, including but not limited to: actions by the City Planning and Building and Safety Divisions, City Public Works Department, San Bernardino County Sheriff, Victorville Fire Department, Victorville Police Department and/or Caltrans. These actions typically fall within routine tasks of these agencies under current staffing, and within existing facilities.

Based on the preceding, the Project would result in less-than-significant impacts under the following topics:

- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts;
- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts;
- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts;

- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered recreational facilities, the construction of which could cause significant environmental impacts; and
- Potential to result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, the construction of which could cause significant environmental impacts.

### ***Recreation***

The Project does not propose elements (e.g., residential development), that would result in increased resident populations and associated increased demands for recreational facilities.

The construction of recreational facilities is not an element of the Project. The Project does not otherwise require or propose construction or expansion of recreational facilities.

Based on the preceding, the Project would result in no impacts or less-than-significant impacts under the following topics:

- Potential to increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial deterioration of the facility would occur or be accelerated; and
- Potential to require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

### ***Transportation/Traffic***

The nearest airport (Southern California Logistics Airport, SCLA) is located approximately 5 miles north/northeasterly of the Project site. The Project does not propose or require elements or operations that would affect, or be affected by, airport/airfield facilities.

The Project does not propose elements or aspects that would conflict with adopted alternative transportation policies. On a long-term basis, the Project may result in increased demand for public transportation as increased employment opportunities become available on-site; however, transit agencies routinely review and adjust their ridership schedules to accommodate public demand. As part of the City's standard development review processes, the need for transit-related facilities, bicycle, and pedestrian access would be coordinated between the City and the Project Applicant.

Based on the preceding, the Project would result in no impacts or less-than-significant impacts under the following topics:

- Potential to 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; and
- Potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

### ***Utilities and Service Systems***

The City operates a 2 1/2 million gallon per day wastewater treatment plant located at the Southern California Logistics Airport (SCLA). The Project is located within the Victorville Industrial/Wastewater Treatment Plant (IWWTP) boundary and therefore, wastewater generated by the Project would be conveyed by the municipal sewer system for treatment at the IWWTP. The IWWTP provides tertiary treatment, minimizing the potential for treated wastewater effluent to adversely affect area water quality. Project-generated wastewater would be typical of commercial sources, and would not require treatment beyond that provided by existing and programmed facilities. The Project would be developed and operated in compliance with the City regulations and standards of the Regional Water Quality Control Board (RWQCB), acting to ensure that wastewater treatment requirements are achieved. The Project would be required to comply with

applicable MS4 Permit requirements, acting to reduce Project wastewater treatment demands.

The City General Plan EIR substantiates that sufficient wastewater treatment capacity exists, or would be available to support wastewater treatment demands of the City under buildout conditions (General Plan EIR, pp. 5.16-31 – 5.16-36). On this basis, the General Plan EIR concludes that the potential for City buildout pursuant to the General Plan would result in less-than-significant wastewater treatment impacts. The Project land uses are consistent with the adopted General Plan and the Project wastewater treatment demands are reflected in the General Plan EIR conclusion regarding wastewater treatment impacts.

Wastewater treatment facilities specifically assigned to the Project, or constructed to serve the Project are not required. The Project does not require or propose construction of new water or wastewater treatment facilities or expansion of existing facilities.

Water would be provided to the Project by the Victorville Water District (VWD). The City General Plan EIR substantiates that sufficient treated water supplies are available, or would be available to support water demands of the City under buildout conditions (General Plan EIR, pp. 5.16-31 – 5.16-36). On this basis, the General Plan EIR concludes that the potential for City buildout pursuant to the General Plan would result in less-than-significant water supply and water treatment impacts. The Project land uses are consistent with the adopted General Plan and the Project water supply and water treatment demands are reflected in the General Plan EIR conclusion regarding water supply and water treatment impacts. Water supply or water treatment facilities specifically assigned to the Project, or constructed to serve the Project are not required.

Project improvements would include the construction of service laterals necessary to connect the Project to the existing water lines, and sewer lines located in adjacent roadways. This construction would occur within the Project site, or within dedicated public easements/right-of-way.

The Applicant would pay applicable impact fees, water and sewer connection fees, and service fees, which act to fund water and sewer improvement plans, operations, and maintenance. The City, in consultation with affected purveyors, would determine when and how treatment facilities would be constructed and/or upgraded to meet increasing demands of areawide development, including the incremental demands of the Project.

The implemented Project storm water management concept would ensure that post-development storm water discharge rates would not exceed pre-development conditions. The Project uses would generate typical storm water urban pollution constituents. The Project would implement required storm water quality control measures, minimizing potential effects of any discharged constituents. The Project storm water management system would detain and treat storm water runoff consistent with MS4 Permit requirements.

Project improvements would include the construction of storm drain laterals necessary to connect the Project to the existing storm drains located in adjacent roadways. This construction would occur within the Project site, or within dedicated public easements/right-of-way.

Solid waste generated by the Project would be conveyed to the Victorville Landfill (Landfill). The Landfill is operated by the Solid Waste Management Division of the San Bernardino County Public Works Department in accordance with a Waste Disposal Agreement between the City and the County. The Victorville landfill currently operates on 341 acres of a total 491-acre property with a capacity of 3,000 tons per day.<sup>3</sup> The City General Plan EIR substantiates that sufficient landfill capacity exists or would be available to support solid waste disposal demands of the City under buildout conditions (General Plan EIR, pp. 5.16-44 – 5.16-46). On this basis, the General Plan EIR concludes that the potential for City buildout pursuant to the General Plan would result in less-than-significant landfill impacts. The Project land uses are consistent with the adopted

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<sup>3</sup> CalRecycle. (2018). SWIS Facility Detail. [online] Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/36-AA-0045/> [Accessed 1 Oct. 2018].

General Plan and the Project solid waste disposal demands are reflected in the General Plan EIR conclusion regarding landfill impacts.

To reduce the amount of waste disposed at landfills, AB 939 (California Integrated Waste Management Act) requires every California city and county to divert 50 percent of its waste from landfills. On-going monitored compliance with AB 939 requirements is provided by CalRecycle. Additionally, as of July 1, 2012, commercial uses such as those proposed by Project are required to comply with applicable provisions of AB 341. In summary, AB 341 requires that businesses generating more than 4 cubic yards of commercial solid waste weekly<sup>4</sup> must implement a solid waste recycling program.

AB 341 does not specify how much or what type of materials must be recycled by businesses, nor does it limit the types of materials that could be included in a recycling or composting program.

The City is currently meeting or exceeding all state-mandated solid waste diversion targets. The Project would be required to comply with the California Integrated Waste Management Act and AB 341 as implemented by the City.

Consistent with Section 5.408, *Construction Waste Reduction, Disposal, and Recycling*, of the California Green Building Standards Code (CALGreen Code), as implemented by the City of Victorville, the Project in total would be required to recycle or salvage for reuse a minimum of 50 percent of the nonhazardous construction and demolition waste. A Construction Waste Management Plan would also be required consistent with Section 5.408.1.1 of the CALGreen Code. These measures would reduce Project construction waste and would act to reduce demands on solid waste management resources.

Based on the preceding, the Project would result in no impacts or less-than-significant impacts under the following topics:

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<sup>4</sup> Includes only commercial solid waste that would be disposed of at landfills. That is, the 4 cubic yards of commercial solid waste weekly criteria does not include commercial waste that has already been diverted or separated for recycling.

- Potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Potential to 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;
- Potential to 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;
- Potential to have insufficient water supplies available to serve the project from existing entitlements and resources;
- Potential to result in a determination by the wastewater treatment provider which serves or may serve the project that it has in adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Potential to exceed permitted capacity of serving landfills; and
- Potential to conflict with federal, state, and local statutes and regulations related to solid waste.

## **1.5 AREAS OF CONCERN OR CONTROVERSY**

Section 15123 of the *CEQA Guidelines* requires that the EIR summary identify areas of potential concern or controversy known to the lead agency, including issues raised by other agencies and the public. Issues of concern were identified by the Lead Agency, through responses to the Project Initial Study/Notice of Preparation (NOP), and other communications addressing the Project and the Project EIR.

Responses to the NOP are presented at EIR Appendix A. Table 1.5-1 lists NOP respondent agencies, organizations, and individuals. AB52 respondents (if any) are also identified. A corresponding summary of respondent comments is presented, indicated by *italicized text*. Responses to comments, together with correlating EIR references are indicated in subsequent statements. Unless otherwise noted, all respondent comments are addressed within the body of the EIR.

**Table 1.5-1  
List of NOP/AB52 Respondents and Summary of Comments/Responses**

Respondent	Summary of Comments
<b><u>State Agencies</u></b>	
Office of Planning and Research-State Clearinghouse (SCH)	<p><i>SCH lists Responsible and Trustee Agencies receiving the NOP. SCH assigns the SCH No. 2018121029 to the Project environmental documents. SCH established the review and comment period for the NOP as December 13, 2018 through January 11, 2019.</i></p> <p>EIR Appendix A includes a copy of the Project NOP and NOP Responses.</p>
California Department of Fish and Wildlife (CDFW)	<p><i>CDFW outlines required biological resource assessment methodologies and protocols, impact significance considerations, and suggested mitigation measures. CDFW also identifies required filing fees due at NOD filing by the Lead Agency.</i></p> <p>The EIR evaluates potential impacts to biological resources consistent with CDFW guidelines and requirements. Please refer to EIR Section 4.9, <i>Biological Resources</i>, and the Project Biological Report presented at EIR Appendix I. Should the Project be approved, the Applicant would pay requisite CDFW filing fees.</p>
Native American Heritage Commission (NAHC)	<p><i>NAHC provides procedural guidance in evaluating and determining potential impacts to cultural resources and Tribal Cultural Resources (TCRs).</i></p> <p>The EIR evaluates potential impacts to cultural resources consistent with NAHC guidelines and requirements. Please refer to EIR Section 4.10, <i>Cultural Resources/Tribal Cultural Resources</i> and the Project Cultural Resources Assessment presented at EIR Appendix J.</p>
State of California Department of Transportation, District 8 (Caltrans)	<p><i>Caltrans notes that Project traffic would have the potential to impact the State Highway System (SHS). Caltrans provides no specific comments on the Initial Study.</i></p> <p>The EIR evaluates potential transportation/traffic impacts at EIR Section 4.2, <i>Transportation/Traffic</i>. The EIR analysis addresses potential impacts to the SHS. Please refer also to the Project Traffic Impact Analysis (TIA) presented at EIR Appendix B.</p>

**Table 1.5-1**  
**List of NOP/AB52 Respondents and Summary of Comments/Responses**

<b>Respondent</b>	<b>Summary of Comments</b>
<b><u>Regional/County Agencies</u></b>	
Lahontan Regional Water Quality Control Board (LRWQCB)	<p><i>LRWQCB recommends incorporation of stormwater management strategies and measures that would minimize Project impacts to area water quality. LRWQCB identifies LRWQCB and State Water Resources Control Board (SWRCB, State Water Board) permitting requirements that may be applicable to the Project.</i></p> <p>Potential impacts to area water quality are discussed and addressed at EIR Section 4.8, <i>Hydrology/Water Quality</i> and within the Project Drainage Study (EIR Appendix H). Stormwater management strategies and measures that would minimize Project impacts to area water quality are identified. The Project Applicant would comply with applicable LRWQCB and SWRCB permitting requirements.</p>
Mojave Desert Air Quality Management District (MDAQMD)	<p><i>MDAQMD concurs with the preliminary analyses presented in the Initial Study. MDAQMD recommends that the City require various fugitive dust control measures to be implemented during Project construction.</i></p> <p>Evaluation of potential Project air quality impacts is presented at EIR Section 4.3, <i>Air Quality</i>. The EIR analysis substantiates that the Project would not result in potentially significant fugitive dust (PM<sub>10</sub>/PM<sub>2.5</sub>) air quality impacts. The City would require that prior to issuance of a grading permit, the Applicant prepare and submit to the MDAQMD a dust control plan that describes dust control measures to be employed during Project construction activities. The Applicant would implement all fugitive dust control measures required by the City. Please refer also to the Project Air Quality Impact Analysis (AQIA), EIR Appendix C.</p>
<b><u>AB 52 Respondents</u></b>	
Twenty-Nine Palms Band of Mission Indians Tribal Historic Preservation Office (TNPBMI)	<p><i>TNPBMI identifies no known cultural resources/Tribal Cultural Resources (TCRs) that would be potentially affected by the Project. TNPBMI recommends that, should as yet unknown cultural resources/TCRs be encountered in the course of Project development, construction be halted immediately and that appropriate agencies and tribe(s) be notified.</i></p> <p>Potential impacts to cultural resources/TCRs are evaluated and addressed at EIR Section 4.10, <i>Cultural Resources/Tribal Cultural Resources</i>. Mitigation is included that requires immediate cessation of construction activities should cultural resources/TCRs be encountered. AB 52 consultation correspondence received from TNPBMI is provided at EIR Appendix J.</p>
San Manuel Band of Mission Indians (SMBMI)	<p><i>SMBMI notes that the Project site lies within the Serrano ancestral territory and, therefore, is of interest to SBMI. SBMI identifies no known cultural resources/TCRs that would be potentially affected by the Project. SMBMI recommends certain cultural resources/TCRs mitigation measures be included as part of the Project permitting/plan conditions to address potential impacts to as yet unknown cultural resources/TCRs that may be encountered in the course of Project development.</i></p>

**Table 1.5-1  
List of NOP/AB52 Respondents and Summary of Comments/Responses**

Respondent	Summary of Comments
	Potential impacts to cultural resources/TCRs are evaluated and addressed at EIR Section 4.10, <i>Cultural Resources/Tribal Cultural Resources</i> . Cultural resources/TCRs mitigation measures recommended by SMBMI (or equivalent language) is/are incorporated in the EIR. AB 52 consultation correspondence received from SMBMI is provided at EIR Appendix J.

## 1.6 EIR TOPICAL ISSUES

Based on the Initial Study analysis, NOP comments, and other public/agency input, the analysis of the EIR addresses the following topics generally.<sup>5</sup>

- Air Quality;
- Biological Resources;
- Cultural Resources/Tribal Cultural Resources;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise; and
- Transportation/Traffic.

Additionally, EIR Section 5.0, *Other CEQA Considerations*, presents discussions of other mandatory CEQA topics including:

- Cumulative Impact Analysis;
- Alternatives Analysis;
- Growth-Inducing Impacts of the Proposed Action;

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<sup>5</sup> Under certain subtopics of these general headings, Project impacts have been substantiated in the Initial Study to not be potentially significant. These specific subtopics are not substantively evaluated in the EIR. Please refer also to discussions presented at previous Section 1.4, *Impacts not Found to be Potentially Significant*.

- Significant Environmental Effects;
- Significant and Irreversible Environmental Changes; and
- Energy.

## 1.7 SUMMARY OF SIGNIFICANT PROJECT IMPACTS

Implementation of the Project would result in certain impacts determined to be significant. These impacts are discussed in detail in the body of the EIR text under their associated topical headings and are summarized at Table 1.7-1.

**Table 1.7-1  
Summary of Significant Impacts**

Environmental Topic	Comments														
<b>Transportation/ Traffic</b>	<p>To address potentially significant impacts affecting Study Area facilities, the Applicant would pay all requisite fees, offsetting the Project’s proportional contributions to cumulative transportation/traffic impacts, thereby fulfilling the Applicant mitigation responsibilities. Notwithstanding, at the significantly-impacted locations noted herein, the required improvements are under the control of jurisdictions other than the City of Victorville, and/or payment of fees would not assure timely completion of improvements. Thus, while the physical improvements identified in the EIR would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured.</p> <p>On this basis, pending completion of required improvements, Project impacts at the facilities listed below would be cumulatively considerable, and impacts would be cumulatively significant.</p> <p><b>Existing (2017) Conditions:</b></p> <p><i>Intersections</i></p> <p>Pending completion of required improvements, the Project’s incremental contributions to Existing Conditions transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">ID No.</th> <th style="text-align: center;">Intersection</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Pearmain St./SR-18</td> </tr> <tr> <td style="text-align: center;">3</td> <td>US-395/Seneca Rd.</td> </tr> <tr> <td style="text-align: center;">4</td> <td>US-395/SR-18</td> </tr> </tbody> </table> <p><i>Roadway Segments</i></p> <p>Pending completion of required improvements, the Project’s incremental contributions to Existing Conditions transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">ID No.</th> <th style="text-align: center;">Roadway Segment</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">7</td> <td>US-395: SR-18 to Dos Palmas Rd.</td> </tr> <tr> <td style="text-align: center;">9</td> <td>US-395: Luna Rd. to La Mesa Rd.</td> </tr> </tbody> </table>	ID No.	Intersection	1	Pearmain St./SR-18	3	US-395/Seneca Rd.	4	US-395/SR-18	ID No.	Roadway Segment	7	US-395: SR-18 to Dos Palmas Rd.	9	US-395: Luna Rd. to La Mesa Rd.
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**Table 1.7-1  
Summary of Significant Impacts**

Environmental Topic	Comments																						
	<p align="center">10                      US-395: La Mesa Rd. to Bear Valley Rd.</p> <p><b>Opening Year (2019) Conditions:</b> The lane configurations and traffic controls assumed to be in place for the Opening Year Condition are consistent with Existing Conditions plus the following additional improvements:</p> <ul style="list-style-type: none"> <li>• Completion of planned connecting E – W segment of La Mesa Road at US-395 and signalization of the US-395/La Mesa Road intersection.</li> </ul> <p>Opening Year With-Project traffic volumes comprise 2019 background traffic volumes, plus traffic generated by the Project.</p> <p><b>Intersections</b> Pending completion of required improvements, the Project’s incremental contributions to Opening Year transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:</p> <table border="0" style="margin-left: 40px;"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Intersection</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Pearmain St./SR-18</td> </tr> <tr> <td>3</td> <td>US-395/Seneca Rd.</td> </tr> <tr> <td>4</td> <td>US-395/SR-18</td> </tr> <tr> <td>11</td> <td>Mesa Linda Rd./Dos Palmas Rd.</td> </tr> <tr> <td>14</td> <td>Topaz Rd./Luna Rd.</td> </tr> </tbody> </table> <p><b>Roadway Segments</b> Pending completion of required improvements, the Project’s incremental contributions to Opening Year transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:</p> <table border="0" style="margin-left: 40px;"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Roadway Segment</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>US-395: SR-18 to Dos Palmas Rd.</td> </tr> <tr> <td>8</td> <td>US-395: Dos Palmas Rd. to Luna Rd.</td> </tr> <tr> <td>9</td> <td>US-395: Luna Rd. to La Mesa Rd.</td> </tr> <tr> <td>10</td> <td>US-395: La Mesa Rd. to Bear Valley Rd.</td> </tr> </tbody> </table> <p><b>Interim Year (2029/2030) Conditions:</b> The lane configurations and traffic controls assumed to be in place for the Interim Year Condition include those provided under Existing Conditions, plus the following additional improvements:</p> <ul style="list-style-type: none"> <li>• Construction of the east and west legs and signalization of the US-395/La Mesa Road intersection;</li> <li>• Construction of the west leg of the US-395/Seneca Road intersection;</li> <li>• Construction of the south leg and signalization of the Pearmain Street/Palmdale Road (SR-18) intersection;</li> <li>• Construction of the south leg of the Cantina Street/Palmdale Road (SR-18) intersection.</li> </ul>	ID No.	Intersection	1	Pearmain St./SR-18	3	US-395/Seneca Rd.	4	US-395/SR-18	11	Mesa Linda Rd./Dos Palmas Rd.	14	Topaz Rd./Luna Rd.	ID No.	Roadway Segment	7	US-395: SR-18 to Dos Palmas Rd.	8	US-395: Dos Palmas Rd. to Luna Rd.	9	US-395: Luna Rd. to La Mesa Rd.	10	US-395: La Mesa Rd. to Bear Valley Rd.
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Summary of Significant Impacts**

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	<p>Interim Year With-Project Condition traffic volumes comprise background Interim Condition traffic volumes plus Project-generated traffic.</p> <p><b>Intersections</b> Pending completion of required improvements, the Project’s incremental contributions to Interim Year transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:</p> <table border="0"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Intersection</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>US-395/Seneca Rd.</td> </tr> <tr> <td>4</td> <td>US-395/SR-18</td> </tr> <tr> <td>6</td> <td>US-395/Dos Palmas Rd.</td> </tr> <tr> <td>11</td> <td>Mesa Linda Rd./Dos Palmas Rd.</td> </tr> </tbody> </table> <p><b>Roadway Segments</b> Pending completion of required improvements, the Project’s incremental contributions to Interim Year transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:</p> <table border="0"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Roadway Segment</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>US-395: Seneca Rd. to SR-18</td> </tr> <tr> <td>7</td> <td>US-395: SR-18 to Dos Palmas Rd.</td> </tr> <tr> <td>8</td> <td>US-395: Dos Palmas Rd. to Luna Rd.</td> </tr> <tr> <td>9</td> <td>US-395: Luna Rd. to La Mesa Rd.</td> </tr> <tr> <td>10</td> <td>US-395: La Mesa Rd. to Bear Valley Rd.</td> </tr> </tbody> </table> <p><b>General Plan Buildout (2040) Condition:</b> The lane configurations and traffic controls assumed to be in place for the General Plan Buildout Condition include those provided under Existing Conditions, plus the following additional improvements:</p> <ul style="list-style-type: none"> <li>• Construction of the east and west legs and signalization of the US-395/La Mesa Road intersection;</li> <li>• Construction of the west leg of the US-395/Seneca Road intersection;</li> <li>• Construction of the south leg and signalization of the Pearmain Street/Palmdale Road (SR-18) intersection;</li> <li>• Construction of the south leg of the Cantina Street/Palmdale Road (SR-18) intersection.</li> </ul> <p>General Plan Buildout With-Project Condition traffic volumes comprise background General Plan Buildout Condition traffic volumes plus Project-generated traffic.</p>	ID No.	Intersection	3	US-395/Seneca Rd.	4	US-395/SR-18	6	US-395/Dos Palmas Rd.	11	Mesa Linda Rd./Dos Palmas Rd.	ID No.	Roadway Segment	6	US-395: Seneca Rd. to SR-18	7	US-395: SR-18 to Dos Palmas Rd.	8	US-395: Dos Palmas Rd. to Luna Rd.	9	US-395: Luna Rd. to La Mesa Rd.	10	US-395: La Mesa Rd. to Bear Valley Rd.
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<b>Air Quality</b>	<p><b>NOx Regional Threshold Exceedance</b> Project operational-source emissions of nitrogen oxides (NO<sub>x</sub>) would exceed applicable MDAQMD regional thresholds. This is a Project-level and cumulatively significant impact.</p> <p><b>Contributions to Non-Attainment Conditions</b> The Project is located within ozone and PM<sub>10</sub>/PM<sub>2.5</sub> non-attainment areas (NO<sub>x</sub> is a precursor to ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>). Project operational-source NO<sub>x</sub> emissions exceedances would therefore result in a cumulatively considerable net increase in criteria pollutants (ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.</p> <p><b>AQMP Inconsistency</b> Project operational-source NO<sub>x</sub> emissions exceedances have the potential to increase the frequency or severity of a violation in the federal or state ambient air quality standards. Project operational-source NO<sub>x</sub> emissions exceedances may delay or obstruct goals and strategies articulated in the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert (Attainment Plans). These Attainment Plans comprise the Air Quality Management Plan (AQMP) for the MDAB. On this basis, the Project would conflict with the referenced Attainment Plans and the governing AQMP. This is a Project-level and cumulatively significant impact.</p>																												

As substantiated within this EIR, all other potential environmental effects of the Project would be less-than-significant or are reduced below levels of significance with application of mitigation measures identified herein. A summary of all Project impacts and proposed mitigation measures is presented at EIR Section 1.9, *Summary of Impacts and Mitigation*.

## **1.8 ALTERNATIVES TO THE PROJECT**

### **1.8.1 Description of Alternatives**

Consistent with provisions of the *CEQA Guidelines*, this EIR evaluates alternatives to the Project that would lessen its significant environmental effects while allowing for attainment of the basic Project Objectives.

Alternatives to the Project considered in detail within this EIR include:

- No Project Alternative;
- Reduced Intensity Alternative.

Alternatives considered and rejected include:

- Alternative Sites; and
- Avoidance of Significant Transportation/Traffic Impacts Alternative.

Alternatives to the Project that are considered in this analysis are summarized below. Please refer also to EIR Section 5.2.2, *Description of Alternatives*.

#### **1.8.1.1 No Project Alternative Overview**

The *CEQA Guidelines* specifically require that an EIR include evaluation of a No Project Alternative. The No Project Alternative should make a reasoned assessment as to future disposition of the subject site should the Project under consideration not be developed. In this latter regard, the *CEQA Guidelines* state in pertinent part:

“If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this “no project” consequence should be discussed. In certain instances, the no project alternative means “no build” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment (*CEQA Guidelines*, Section 15126.6 (e)(3)(b)).”

In the case considered here, the subject site is a vacant and available property absent any significant environmental or physical constraints. Further, the Project area is fully served by proximate available utilities and supporting public services; and is provided appropriate access. Areas around the subject site are developed with or are being developed with urban uses. The Project area is not substantively constrained by physical conditions or environmental considerations.

Given the availability of infrastructure/services, lack of environmental or physical constraints; and proximity of other urban development, it is considered unlikely that the subject site would remain vacant or in a “No Build” condition. Evaluation of a No Build condition would therefore “analyze a set of artificial assumptions that would be required to preserve the existing physical environment.” This is inconsistent with direction provided at *CEQA Guidelines*, Section 15126.6 (e)(3)(b), as presented above. On this basis, a No Build condition is rejected as a potential EIR No Project Alternative.

## **Evaluated No Project Alternative**

In light of the preceding discussions, for the purposes of this Alternatives Analysis, and to provide for analysis differentiated from the Project, the No Project Alternative considered here assumes development of the 14.8-acre Project site in total with general retail uses. The No Project Alternative reflects development of the Project site at a mid-range development intensity (30 percent lot coverage) allowed under the Project site's current C-2 *General Commercial* Zoning designation.<sup>6</sup> Translated over the entire 14.8-acre site, the No Project Alternative would yield approximately 193,400 square feet of general retail development.

The No Project Alternative would result in generally decreased environmental impacts when compared to the Project. As with the Project, transportation/traffic impacts would be significant. Significant NO<sub>x</sub> regional threshold exceedances and related nonattainment impacts and AQMP inconsistency impacts otherwise resulting from the Project would be avoided. Other impacts under the No Project Alternative would likely be less-than-significant or could be mitigated to levels that would be less-than-significant.

### **1.8.1.2 Reduced Intensity Alternative Overview**

The Project would result in certain significant air quality impacts (NO<sub>x</sub> emissions regional threshold exceedances and associated nonattainment contribution impacts and AQMP inconsistency impacts) and significant transportation/traffic impacts (roadway segments and intersections). The Reduced Intensity Alternative considered in this EIR is directed at reduction of the Project's significant air quality impacts and would also diminish the scope of Project significant traffic impacts. Other already less-than-significant Project impacts would be generally reduced.

## **Evaluated Reduced Intensity Alternative**

The Reduced Intensity Alternative considers a development scenario that would reduce vehicular-source NO<sub>x</sub> emissions via reduction of Project traffic. For purposes of the EIR

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<sup>6</sup> The C-2 Zone District allows development at up to 60 percent lot coverage (City of Victorville Development Code, Table 10-1: *Commercial Development Standards*).

Alternatives Analysis, the Reduced Intensity Alternative is based on an overall reduction in Project trip generation of 25 percent. This 25 percent reduction in Project trip generation would reduce vehicular-source NOx emissions by approximately 25 percent, and would reduce Project operational-source NOx emissions to levels that would be less-than-significant. To achieve the 25 percent reduction in trip generation, the scope of Project uses could be reduced, and/or the types and variety of occupancies proposed by the Project could be modified.

In addition to a general reduction in significant transportation/traffic impacts and avoidance of significant air quality impacts, the Reduced Intensity Alternative would further reduce other already less-than-significant impacts otherwise occurring under the Project.

### **1.8.1.3 Alternatives Considered and Rejected**

#### **Alternative Sites Considered and Rejected**

As stated in the *CEQA Guidelines* §15126.6 (f)(1)(2)(A), the “key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” *CEQA Guidelines* §15126.6 (f) (1) also provides that when considering the feasibility of potential alternative sites, the factors that may be taken into account include: “site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives.”

As discussed in the body of the Draft EIR and summarized previously at Table 5.2-1, the Project would result in the following significant impacts:

- Certain significant transportation/traffic impacts under Existing (2018), Opening Year (2019), Interim Year (2029/2030) and General Plan Buildout (2040) Conditions;
- Operational-source NO<sub>x</sub> emissions exceeding MDAQMD regional thresholds and related nonattainment impacts and AQMP inconsistency impacts.

All other potential Project impacts would be either less-than-significant, or less-than-significant after mitigation.

Relocation to an Alternative Site is not likely to achieve any measurable reduction in the Project's transportation/traffic impacts. Specifically, implementation of traffic improvements as envisioned under the City General Plan Circulation Element are on-going processes undertaken in conjunction with the development of vacant or underutilized properties throughout the City. It is unlikely that a suitable Alternative Site could be identified that would distribute Project trips only to roadways that have already been improved to their ultimate General Plan configurations. Additionally, it is unlikely that a suitable Alternative Site could be identified that would preclude required improvements at any extra-jurisdictional locations. Moreover, there are no alternative sites under control or likely control of the Applicant that would allow for relocation of the Project and that would preclude or substantially reduce the Project's significant transportation/traffic impacts.

Relocation to an Alternative Site would not likely achieve any measurable reduction in the Project's NO<sub>x</sub> emissions exceedances impacts. Specifically, Project operational-source NO<sub>x</sub> emissions would exceed the applicable MDAQMD regional threshold. The Project operational-source NO<sub>x</sub> exceedance is a regional air quality impact. Relocation of the Project anywhere within the Mojave Desert Air Basin would not alter or diminish the significance of this impact. Similarly, the Project operational-source NO<sub>x</sub> exceedances are the source of the Project non-attainment impacts and inconsistency with the governing

AQMP. Relocation of the Project anywhere within the affected non-attainment areas and within the AQMP jurisdictional area (both of which encompass all of the City of Victorville) would not alter or diminish the significance of these impacts.

Moreover, there are no alternative sites under control or likely control of the Applicant that would allow for relocation of the Project and that would preclude or substantially reduce the Project's significant NOx emissions exceedances impacts.

Based on the preceding considerations, analysis of an Alternative Site was not further considered.

### **Avoidance of Significant Transportation/Traffic Impacts Alternative Considered and Rejected**

Specific improvements identified in the Project TIA and summarized at EIR Section 4.2, *Transportation/Traffic*, would, to the extent feasible, provide a physical solution to identified potentially significant transportation/traffic impacts. Notwithstanding, timely implementation of the improvements required as mitigation for potentially significant transportation/traffic impacts cannot be assured. Impacts are therefore considered significant pending completion of the required improvements.

Any viable development of the subject site would generate trips likely affecting some or all of the facilities that would be affected by Project traffic. Additional traffic contributed to these facilities would result in significant transportation/traffic impacts similar to those occurring under the Project. No feasible mitigation exists that would avoid these impacts or reduce these impacts to levels that would be less-than-significant. However, this impact would be diminished under the EIR Reduced Intensity Alternative.

### **1.8.2 Environmentally Superior Alternative**

The *CEQA Guidelines* require that the environmentally superior alternative (other than the No Project Alternative) be identified among the Project and other Alternatives considered in an EIR.

As indicated at Table 5.2-6, with exclusion of the No Project Alternative as provided of under CEQA,<sup>7</sup> the Reduced Intensity Alternative would likely result in a general reduction in other environmental effects when compared to the Project. For the purposes of CEQA, the Reduced Intensity Alternative is identified as the “environmentally superior alternative.”

***Significant Transportation/Traffic Impacts Diminished but Not Eliminated or Avoided Under the Reduced Intensity Alternative***

The Reduced Intensity Alternative would reduce but would not avoid significant transportation/traffic impacts otherwise occurring under the Project. However, significant transportation/traffic impacts otherwise occurring under the Project would persist.

***Significant Air Quality Impacts Avoided Under the Reduced Intensity Alternative, but with Limited Attainment of Project Objectives***

Significant air quality impacts (NO<sub>x</sub> regional threshold exceedances, nonattainment contributions, AQMP inconsistency) otherwise occurring under the Project would be reduced to levels that would be avoided under the Reduced Intensity Alternative. This reduction in scope may however be considered infeasible by the Lead Agency as it would restrict attainment of the Project Objectives. Notably, the 25 percent reduction in Project scope under the Reduced Intensity Alternative would:

- Reduce the scope and mix of uses otherwise realized under the Project;
- Reduce commercial retail shopping opportunities otherwise available under the Project;
- Reduce the number patrons and scope and variety of retailers that would be attracted to the City;

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<sup>7</sup> If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6 (e)(2)).

- Diminish the potential for development of the site with uses and an intensity the City considers to be the highest and best use for the subject property;
- Diminish fiscal benefits available to the City of Victorville. Benefits would include new sales tax revenues and increased property tax revenues; and
- Diminish job creation otherwise realized under the Project.

### **Summary and Conclusions**

The Reduced Intensity Alternative would reduce but would not avoid significant transportation/traffic impacts otherwise occurring under the Project. Under the Reduced Intensity Alternative, significant air quality impacts of the Project would be avoided. Limited attainment of Project Objectives would be achieved.

### **1.9 SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Table 1.9-1 summarizes potential impacts resulting from implementation and operations of the Project. The impacts identified at Table 1.9-1 correspond with environmental topics and impacts discussed at EIR Section 4.0, *Environmental Impact Analysis*. Table 1.9-1 also lists measures proposed to mitigate potentially significant environmental impacts of the Project and indicates the level of significance after application of proposed mitigation.

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<b>4.1 Land Use and Planning</b>			
Physically divide an established community.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
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.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Conflict with any applicable habitat conservation plan or natural community conservation plan.	No Impact	No Mitigation Measures Are Required.	Not Applicable
<b>4.2 Transportation/Traffic</b>			
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.			

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<i>Existing Conditions (2017) With-Project</i>			
- Intersection LOS Analysis	Potentially Cumulatively Significant	No feasible mitigation measures.	<p align="center"><b><i>Significant and Unavoidable</i></b></p> <p><b>Remarks:</b> The Applicant would pay all requisite fees, offsetting the Project's proportional contributions to traffic impacts projected to occur under Existing With-Project Conditions, thereby fulfilling the Applicant's mitigation responsibilities. Notwithstanding, fees paid consistent with City DIF mandates, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-10 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.</p>
- Roadway Segment Analysis	Potentially Cumulatively Significant	No feasible mitigation measures.	<p align="center"><b><i>Significant and Unavoidable</i></b></p> <p><b>Remarks:</b> The Applicant would pay all requisite fees, offsetting the Project's proportional contributions to traffic impacts projected to occur</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			<p>under Existing With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. Notwithstanding, fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-13 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.</p>
<i>Opening Year (2019) With-Project</i>			
<p>- Intersection LOS Analysis</p>	<p>Potentially Cumulatively Significant</p>	<p>4.2.1 <i>The Applicant shall pay fair share fees toward those Table 4.2-16 improvements under the jurisdiction of the City not reflected in the City's current CIP. Prior to building permit issuance for each building, fair share fees for that building shall be calculated by the City. Prior to issuance of a Certificate of Occupancy for the considered building, the Project Applicant shall pay that building's required fair share fee amounts. Where intersection improvements require additional through lanes, fair share fees shall also be applied</i></p>	<p><b>Significant and Unavoidable</b></p> <p><b>Remarks:</b> Fees paid consistent with City DIF mandates, Fair Share Fees paid pursuant to Mitigation Measure 4.2.1, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-16 would be capable of mitigating potentially</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<i>to construction of required through lane/roadway segment improvements.</i>	significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.
- Roadway Segment Analysis	Potentially Cumulatively Significant	No feasible mitigation measures.	<p><b>Significant and Unavoidable</b></p> <p><b>Remarks:</b> Fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-19 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured.</p>
<i>Interim Year (2029 – 2030)</i>			
Intersection LOS Analysis	Potentially Cumulatively Significant	4.2.2 <i>The Applicant shall pay fair share fees toward those Table 4.2-22 improvements under the jurisdiction of the City not reflected in the City’s current CIP. Prior to building permit issuance for each building, fair share fees for that building shall be calculated by the City. Prior to issuance of a Certificate of Occupancy for the considered building, the Project Applicant shall pay that building’s required fair share fee amounts. Where intersection improvements require additional</i>	<p><b>Significant and Unavoidable</b></p> <p><b>Remarks:</b> Completion of the identified improvements would achieve acceptable intersection LOS conditions under Interim Year With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project’s</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<i>through lanes, fair share fees shall also be applied to construction of required through lane/roadway segment improvements.</i>	proportional contributions to traffic impacts projected to occur under Interim Year With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. Notwithstanding, fees paid consistent with City DIF mandates, Fair Share Fees paid pursuant to Mitigation Measure 4.2.2, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-22 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.
Roadway Segment Analysis	Potentially Cumulatively Significant	No feasible mitigation measures.	<b><i>Significant and Unavoidable</i></b>  <b>Remarks:</b> Fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-26 would be

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			capable of mitigating potentially significant impacts, these improvements cannot be timely assured. Pending completion of the required improvements, Project contributions to roadway segment LOS deficiencies under Interim Year With-Project Conditions are recognized as significant and unavoidable at the deficient Study Area intersections listed at Table 4.2-24.
<i>General Plan Buildout (2040) With-Project</i>			
- Intersection LOS Analysis	Potentially Cumulatively Significant	4.2.3 <i>Prior to building permit issuance for each building, the Project Applicant shall pay that building's required fair share fee amounts toward the construction of City of Victorville improvements required under General Plan Buildout With-Project Conditions, listed at EIR Table 4.2-28 and not included in the City's current CIP. Where intersection improvements require additional through lanes, fair share fees shall also be applied to construction of required through lane/roadway segment improvements.</i>	<b>Significant and Unavoidable</b>  <b>Remarks:</b> Completion of the identified improvements would achieve acceptable intersection LOS conditions under General Plan Buildout With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project's proportional contributions to traffic impacts projected to occur under General Plan Buildout With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. Notwithstanding,

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			<p>fees paid consistent with City DIF mandates, Fair Share Fees paid pursuant to Mitigation Measure 4.2.3, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-28 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.</p>
<p>- Roadway Segment Analysis</p>	<p>Potentially Cumulatively Significant</p>	<p>No feasible mitigation measures.</p>	<p><b><i>Significant and Unavoidable</i></b></p> <p><b>Remarks:</b> Completion of the identified improvements would achieve acceptable roadway segment LOS conditions under General Plan Buildout With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project's proportional contributions to traffic impacts projected to occur under General Plan Buildout With-Project Conditions, thereby fulfilling</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			<p>the Applicant mitigation responsibilities. Notwithstanding, fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-31 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured.</p>
<p>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.</p>	<p>Potentially Cumulatively Significant</p>	<p><b>CMP Roadway Segments</b> Mitigation of roadway segment impacts (including CMP roadway segment deficiencies) are addressed through city-wide and regional improvements plans and programs. The Applicant would pay required DIF, a portion of which would be allocated for Study Area CMP roadway segment improvements. Payment of DIF would satisfy the Applicant’s mitigation responsibilities for incremental traffic impacts affecting Study Area CMP roadway segments under all TIA scenarios. There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant that would reduce cumulatively significant impacts to Study Area CMP roadways segments to levels that would be less-than-significant. On this basis, Project impacts to CMP roadway segments identified listed Table</p>	<p><b>Significant and Unavoidable</b> <b>Remarks:</b> The Project would pay all requisite fees for improvements at Study Area CMP intersections. However, fee payments would not ensure timely completion of improvements required for mitigation of cumulatively significant impacts affecting Study Area CMP intersections. Pending completion of required improvements, Project contributions to impacts would be significant and unavoidable.</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p>would be significant and unavoidable under one or more of the TIA scenarios.</p> <p><b>CMP Intersections</b> Mitigation for CMP intersection deficiencies is coincident with intersection improvements identified herein. No additional mitigation is proposed or required.</p>	
<p>Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.</p>	<p>Less-Than-Significant</p>	<p>No Mitigation Measures Are Required.</p>	<p>Not Applicable</p>
<p><b>4.3 Air Quality</b></p>			
<p>Conflict with or obstruct implementation of the applicable air quality plan (AQMP).</p>	<p>Potentially Significant (Operational-source NOx emissions would exceed MDAQMD regional thresholds)</p>	<p>No Feasible Mitigation.</p>	<p><b>Significant and Unavoidable</b></p> <p><b>Remarks:</b> The predominance (more than 99 percent by weight) of Project operational-source NOx emissions would be generated by vehicles accessing the Project site. Neither the Project Applicant nor the Lead Agency have regulatory authority to control vehicular-source NOx emissions, and no feasible mitigation measures exist that would otherwise reduce Project operational-source NOx emissions to levels that are less-than-significant. Project operational-</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			source NOx emissions exceedances and related impacts concerning consistency with the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert are therefore considered significant and unavoidable.
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	Potentially Significant (Operational-source NOx emissions would exceed MDAQMD regional thresholds)	No Feasible Mitigation.	<b>Significant and Unavoidable</b>  <b>Remarks:</b> Please refer to previous remarks regarding infeasibility of reducing operational-source NOx emissions.
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).	Potentially Significant (Operational-source NOx emissions would exceed MDAQMD regional thresholds)	No Feasible Mitigation.	<b>Significant and Unavoidable</b>  <b>Remarks:</b> The Project area is designated as a nonattainment area for ozone, PM10, and PM2.5. Project operational-source NOx emissions would exceed applicable MDAQMD thresholds. NOx is an ozone and PM10/PM2.5 precursor.  Please refer to previous remarks regarding infeasibility of reducing operational-source NOx emissions.
Expose sensitive receptors to substantial pollutant concentrations.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
<b>4.4 Global Climate Change and Greenhouse Gas Emissions</b>			
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
<b>4.5 Noise</b>			
Project construction activities and associated noise would 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.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Project construction activities and associated noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Project-related off-site traffic noise would 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 other applicable standards of other agencies.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable

**Table 1.9-1  
Summary of Impacts and Mitigation**

<b>Potential Impact</b>	<b>Level of Significance Without Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance With Mitigation</b>
Project-related off-site traffic noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Project operational/area-source noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Project operational/area-source noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
The Project would result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
<b>4.6 Geology and Soils</b>			
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable

**Table 1.9-1  
Summary of Impacts and Mitigation**

<b>Potential Impact</b>	<b>Level of Significance Without Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance With Mitigation</b>
Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
<b>4.7 Hazards and Hazardous Materials</b>			
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
<b>4.8 Hydrology and Water Quality</b>			
Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or that would substantially increase the rate or amount of surface runoff in a	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable

**Table 1.9-1  
Summary of Impacts and Mitigation**

<b>Potential Impact</b>	<b>Level of Significance Without Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance With Mitigation</b>
<p>manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of the existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.</p>			
<b>4.9 Biological Resources</b>			
<p>Substantially affect, either directly or through habitat modifications, 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 (CDFW) or United States Fish and Wildlife Service (USFWS).</p>	<p>Potentially Significant</p>	<p><i>4.9.1 In Spring 2019, prior to any site disturbances, a qualified biologist shall conduct protocol surveys for the desert tortoise. If continued absence of this species is confirmed, no additional mitigation will be required. If, however, desert tortoise is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Project Applicant shall consult with the wildlife agencies regarding the potential Project impacts to desert tortoise and the appropriate mitigation measures. Mitigation measures may include avoidance, in-lieu fees, or habitat preservation/restoration.</i></p> <p><i>After consultation and agreement with the wildlife agencies, and prior to any site disturbances, the Project Applicant shall construct permanent desert tortoise exclusion fencing around the perimeter of the site using the USFWS's fence specifications to ensure that no desert tortoise moves onto the site. A qualified</i></p>	<p>Less-Than-Significant</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p><i>biologist will be present during the installation of the desert tortoise exclusion fence to ensure that the installation process does not result in take of the desert tortoise. The desert tortoise exclusion fence will be repaired immediately (within 48 hours) if it is not serving its intended purpose.</i></p> <p><i>Immediately after the desert tortoise exclusion fence is constructed around the site, the qualified biologist will conduct a presence-absence survey using belt transects with a maximum width of 30 feet. If the site has vegetation or topography that obscures or reduces the biologist's ability to see a desert tortoise or desert tortoise sign, the width of the transect will be reduced, as appropriate. The qualified biologist will examine every location that the desert tortoise may use as shelter within the site; therefore, a special emphasis will be placed on examining the interior of all burrows that could be used by the desert tortoise as shelter sites. Burrows would not be excavated to determine if desert tortoises are present. Results of fence construction monitoring and the presence-absence surveys will be reported to the USFWS and CDFW. Any tortoises found on-site shall be relocated to other locations as approved by the City, CDFW, and USFWS.</i></p> <p><i>Prior to initiation of any construction-related activities (including equipment or vehicle staging), the limits of disturbance will be clearly</i></p>	

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p><i>marked with temporary construction fencing or lath with flagging tape, and the qualified biologist will survey the entire area within limits of disturbance in the morning prior to the initiation of any such activities. During construction, a biological monitor (may be different than the qualified biologist, as approved by the USFWS and CDFW) will survey ahead of all equipment to ensure that no desert tortoises are present in the anticipated path of the equipment. Results of the daily surveys and construction monitoring will be reported to the USFWS and CDFW following construction documenting compliance with these measures.</i></p> <p><i>4.9.2 In Spring 2019, prior to any site disturbances, focused breeding season surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, no additional mitigation will be required. If, however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Project Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls.</i></p> <p><i>As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur</i></p>	

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p><i>outside of the breeding/nesting season. That is, active eviction shall be accomplished between September 1 and February 15.</i></p> <p><i>If more than 30 days has elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.</i></p> <p><i>4.9.3 In Spring 2019, prior to any site disturbances, a qualified biologist shall conduct pre-construction surveys for the Mohave ground squirrel (MGS) consistent with the January 1991 Guidelines, as modified in January 2003. Visual surveys to determine activity and habitat quality must be undertaken between March 16 and April 15, during daylight hours. If visual surveys do not reveal the presence of this species, trapping grids shall be established to trap for a minimum of five consecutive days, or until an MGS is captured, between March 21 and April 30. If no MGS is captured during the first five-day period, the grid will be sampled a second time, at least two weeks after the first period and between May 1 and May 31. If no MGS is captured during the second five-day period, the grid will be sampled a third time, at least two weeks after the end of the second period and between June 15 and July 15. If the</i></p>	

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p><i>continued absence of the MGS is confirmed, no further mitigation shall be required.</i></p> <p><i>Alternatively, the Project Applicant shall pay \$1,000/acre to CDFW as security for the acquisition of suitable replacement habitat, plus \$250/acre to CDFW for any necessary enhancement of the property, plus \$1,300/acre to CDFW as an endowment to protect the property. Within 18 months of such payment, as extended at CDFW discretion, the Project Applicant shall purchase suitable replacement habitat and deed it to CDFW. At that time, CDFW shall return the \$1,000/acre acquisition fee, and any remainder of the \$250/acre enhancement fee not required for the replacement habitat.</i></p> <p><i>4.9.4 In Spring 2019, prior to any site disturbances, focused protocol spring time surveys shall be conducted for special-status plant species. If special-status plant species are encountered on-site, mitigation shall be accomplished as specified in a formal agreement between CDFW, USFWS and the Project Applicant, to include marking plant locations with a pin flag in spring when plants are in bloom, then salvaging soil, seeds and roots in fall after plants have died back for the winter, followed by transplant to the closest adjacent suitable preserved habitat, as specified by CDFW/USFWS.</i></p>	

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p>4.9.5 <i>A biological monitor must be on-site during all ground disturbance activities, and will halt any such activities if, in his or her professional opinion, such activities will result in the take of a protected species.</i></p> <p>4.9.6 <i>Limits of the Project site shall be clearly marked by stakes or other means to ensure that off-site areas are not disturbed by Project construction activities.</i></p>	
<p>Substantially affect any riparian habitat or other sensitive natural community identified in local or regional plans, polices, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; or substantially and adversely affect federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruptions or other means.</p>	<p>Potentially Significant</p>	<p>4.9.7 <i>Prior to any site disturbances or any earthmoving activities, the Project Applicant shall consult with the Corps to determine if a Corps 404 permit is required for the Project. If the Corps determine a 404 permit is required, then the Project Applicant shall obtain the 404 permit from the Corps prior to initiating any site disturbances or any earthmoving activities.</i></p> <p>4.9.8 <i>Prior to any site disturbances or any earthmoving activities, the Project Applicant shall consult with the California Regional Water Quality Control Board to determine if a Regional Board 401 certification is required for the Project. If the Regional Board determines that a 401 certification is required, then the Project Applicant shall obtain the 401 certification from the Regional Board prior to initiating any site disturbances or any earthmoving activities.</i></p>	<p>Less-Than-Significant</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p>4.9.9 Prior to any site disturbances or any earthmoving activities, the Project Applicant shall complete and submit to CDFW a notification package pursuant to Fish and Game Code Section 1602, together with the requisite fee. Based on its review of the notification package, CDFG shall determine applicable provisions of a Project Lake or Streambed Alteration Agreement (LSAA). The Applicant shall obtain the LSAA from CDFW prior to initiating any site disturbances or any earthmoving activities and will comply with all included LSAA measures to protect fish and wildlife resources.</p>	
<p>Interfere substantially with the movement of any 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.</p>	<p>Potentially Significant</p>	<p>4.9.10 In order to avoid impacts to nesting birds within the Project area, vegetation clearing and grading shall be conducted outside the nesting season. The nesting season generally occurs from February 15 through August 31, but can vary slightly from year to year. If clearing of the site will occur during the nesting season, no more than thirty (30) days prior to site clearing/grading, a breeding bird survey shall be conducted by a qualified biologist. This survey shall identify any potential nesting activities within the Project site. If an active nest is observed, a minimum 300 foot radius buffer area shall be established and clearly designated by flags or other suitable means around the occupied nests(s). Until any nestlings have fledged, periodic monitoring by a qualified biologist shall</p>	<p>Less-Than-Significant</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<i>be conducted throughout construction activities to ensure that nesting birds are not disturbed. Such monitoring shall be conducted at least once per week.</i>	
Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.	Less-Than-Significant	No Mitigation Measures Are Required.	Not Applicable
<b>4.10 Cultural Resources/Tribal Cultural Resources</b>			
Cause a substantial adverse change in the significance of historic and archaeological resources as defined in §15064.5.	Potentially Significant	4.10.1 <i>If previously-unidentified archaeological or historic resources of potential significance are encountered during grading and/or other ground-disturbing activities, work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist (Project archaeologist) meeting Secretary of Interior standards shall be contacted to identify and interpret the encountered resources. The Project archaeologist shall have the authority to stop or divert construction excavation, as necessary. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted regarding the find and be provided information as to the archaeologist's assessment of the find, so as to provide Tribal input with regards to significance and treatment. Monitoring shall be considered complete and may be discontinued at the conclusion of grading/ground-disturbing activities, or at an earlier date should the qualified</i>	Less-Than-Significant

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p><i>professional, in cooperation with SMBMI, determine that on-site activities would not disturb cultural resources of potential significance.</i></p> <p><i>4.10.2 If the Project archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find shall be developed. Drafts of these plans shall be provided to SMBMI for review and comment.</i></p>	
<p>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.</p>	<p>Potentially Significant</p>	<p><i>4.10.3 At least 30 days prior to application for a grading permit and prior to any Project ground-disturbing activities, the Applicant shall retain a qualified paleontologist, selected in consultation with the City (Project Paleontological Monitor/Consultant). The Project Paleontological Monitor/Consultant shall be on-site and shall conduct on-going monitoring of affected areas for potential discovery of potentially of potentially significant paleontological resources. Alternatively, the Project Paleontological Monitor/Consultant shall prepare and submit to the City, a letter substantiating that monitoring is not necessary.</i></p> <p><i>4.10.4 If monitoring is required, the Project Paleontological Monitor/Consultant shall have the authority to temporarily halt ground-disturbing activities if paleontological resources</i></p>	<p>Less-Than-Significant</p>

**Table 1.9-1  
Summary of Impacts and Mitigation**

Potential Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		<p><i>(finds) of potential significance are encountered. At the direction of the Project Paleontological Monitor/Consultant, ground-disturbing activities in the immediate vicinity of the find shall cease until the potential significance of the encountered find can be assessed. Work may continue in other areas of the Project site and for other Project elements while the encountered find is evaluated.</i></p> <p><i>If potentially significant paleontological resources are encountered, they shall be analyzed in accordance with standard guidelines, recovered, and curated with the appropriate facility. if disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.</i></p> <p><i>At the conclusion of monitoring activities, the Project Paleontological Monitor/Consultant shall document monitoring results together with disposition of any encountered finds in a report to the City.</i></p>	
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the	Potentially Significant	4.10.5 <i>The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted if any pre-contact cultural resources are discovered during Project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with</i>	Less-Than-Significant

**Table 1.9-1  
Summary of Impacts and Mitigation**

<b>Potential Impact</b>	<b>Level of Significance Without Mitigation</b>	<b>Mitigation Measures</b>	<b>Level of Significance With Mitigation</b>
<p>size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</li> </ul>		<p><i>regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the Project archaeologist (see MM 4.10.1), in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the Project, should SMBMI elect to place a monitor on-site.</i></p> <p><i>4.10.6 Any and all archeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or Applicant shall, in good faith, consult with SMBMI throughout the life of the Project.</i></p>	

## **2.0 INTRODUCTION**

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## 2.0 INTRODUCTION

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### 2.1 OVERVIEW

This Environmental Impact Report (DEIR or EIR) evaluates and discloses potential environmental impacts of the Desert Grove Retail Project (the Project). The Project proposes development of approximately 96,300 square feet of commercial/retail uses. The current site plan concept configures the Project uses as 10 pads. The approximately 14.8-acre Project site is located at the southwesterly corner of the US-395/Palmdale Road (SR-18) intersection, in the City of Victorville (City).<sup>1</sup> Elements of the Project are further described at EIR Section 3.0, *Project Description*.

This EIR is an informational document intended to advise decision-makers and the general public of potentially significant environmental impacts of the Project. The EIR also identifies possible ways to preclude or minimize these potentially significant impacts (referred to as mitigation) and describes reasonable alternatives to the Project that may also reduce or avoid significant impacts. Having the authority to take action on the Project, the City of Victorville will consider the information in this EIR in their evaluations of the proposal. The EIR findings and conclusions regarding environmental impacts do not control the City's discretion to approve, deny, or modify the Project, but instead are presented as information to aid the decision-making process.

### 2.2 AUTHORIZATION

This EIR has been prepared by the City of Victorville in accordance with the *Guidelines for the Implementation of the California Environmental Quality Act (Guidelines)*, (Sections 15000-15387 of the California Code of Regulations), and the City *CEQA Guidelines (Guidelines)*. The Desert Grove Retail Project considered in this EIR is a "project," as

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<sup>1</sup> The Project site borders an existing fast-food restaurant that is located at the southwest corner of the US-395/SR-18 intersection. This existing fast-food restaurant is not a part of the Project.

defined at Section 15378 of the *Guidelines*. The *Guidelines* stipulate that an EIR must be prepared for any project that may have a significant impact on the environment. Upon its initial environmental review, the City determined that the Desert Grove Retail Project may have a significant adverse impact on the environment and, therefore, the preparation of an EIR was required.

### **2.3 LEAD AND RESPONSIBLE AGENCIES**

CEQA defines a “lead agency” as the public agency which has the principal responsibility for carrying out or approving a Project which may have a significant effect upon the environment. Other agencies, e.g., the California Department of Transportation (Caltrans), the Mojave Desert Air Quality Management District (MDAQMD) or the Regional Water Quality Control Board (RWQCB), having certain authority or responsibility to issue permits for Project implementation, are designated as “responsible agencies.” Both the lead agency and responsible agencies must consider the information contained in the EIR prior to acting upon or approving the Project. The City of Victorville is the lead agency for the proposed Project.

The City’s address is:

City of Victorville  
14343 Civic Drive  
Victorville, California 92393  
Contact Person: Mike Szarzynski, Senior Planner

### **2.4 PROJECT APPLICANT**

The Project Applicant is:

Blue Peak Engineering, Inc.  
18543 Yorba Linda Blvd., Suite 235  
Yorba Linda, CA 92886

## 2.5 THE EIR PROCESS

When a public agency determines that there is substantial evidence that a project may have a significant effect on the environment, the agency must prepare an EIR before a decision is made to approve or deny the project. The purpose of the EIR is to disclose a project's potential environmental impacts and recommend measures to reduce effects of or avoid potentially significant impacts. The basic content of an EIR includes a description of the project under consideration and its objectives, a description of the existing project site and vicinity environmental conditions, a discussion of the potentially significant environmental effects of the project, recommended measures for reducing these effects, and identification and evaluation of feasible alternatives to the project which may also reduce potentially significant impacts of the proposal.

Typically, EIRs consist of two documents: a Draft EIR, distributed by the lead agency for review and comment by the general public and any interested governmental agencies; and a Final EIR, comprising responses to comments received on, together with any necessary modifications to, the Draft EIR. After the Draft EIR has been circulated for review and the Final EIR has been prepared, the EIR must be certified by the lead Agency as having complied with CEQA and considered by the agency's decision-making body before any action can be taken on a project.

When a public agency receives a complete project application or decides to undertake a project of its own, it first determines if the project is subject to environmental review under CEQA and, if it is, the agency then typically prepares an Initial Study (IS) to determine if the project has the potential to cause significant adverse environmental effects. The IS serves as a tool to help the agency determine if an EIR is needed and also helps determine what issues should be examined in the EIR. An agency may skip the Initial Study process if it is evident in the preliminary assessment of a project that an EIR will be required.

The EIR process is initiated by the distribution of a Notice of Preparation (NOP). Together with the Initial Study, the NOP is sent to agencies and interested individuals to solicit their suggestions for appropriate issues and types of analysis to be included in the Draft EIR. When preparation of the Draft EIR has been completed, it is circulated to responsible agencies, other affected or interested agencies, and interested members of the public for review and comment. The review period for a Draft EIR is typically 45 days. To provide for appropriate consideration in the Final EIR, all comments and concerns regarding the Draft EIR should be received by the lead agency during this 45-day period.

Responses to comments received on the Draft EIR are prepared by the lead agency and included in the Final EIR. The Final EIR may also contain some additional information about the project's potential impacts and minor corrections or modifications to the Draft EIR. The Final EIR must be certified by the lead agency's decision-making body before, or in conjunction with, any action to approve or deny a project.

CEQA requires that the EIR only address significant adverse impacts. The *CEQA Guidelines* suggest thresholds or standards which define the significance of various types of impacts. The *CEQA Guidelines* also state that the significance of impacts should be considered in relation to their severity and probability of occurrence. However, ultimately, the determination of the significance of impacts is at the discretion of the lead agency. The identification of significant impacts in the EIR does not prevent an agency from approving a project. A project may be approved if the lead agency determines that impacts cannot be feasibly mitigated below a level of significance and if the agency determines that there are important overriding considerations, such as social and economic benefits, which are sufficient to justify approval of the considered project.

## **2.6 EIR CONTENT AND FORMAT**

This Draft EIR is organized into seven Chapters or Sections, each dealing with a separate aspect of the required content of an EIR as described in the *Guidelines*. A summary of the project's impacts and recommended mitigation measures is included in Chapter 1.0. An introduction and general overview of the environmental process and the format of this

EIR can be found within Chapter 2.0. Chapter 3.0 contains a complete description of the Project, including its location, objectives, and physical and operational characteristics. The complete and detailed impact analysis is presented in Chapter 4.0. The topical issues mandated by CEQA dealing with cumulative impacts, alternatives, long-term implications of the Project, and energy conservation are found in Chapter 5.0. Chapter 6.0 lists and defines the acronyms and abbreviations contained in this document. Chapter 7.0 lists the information sources and persons consulted during the environmental analysis process, and presents a list of the persons who prepared the Draft EIR.

Chapter 4.0, *Environmental Impact Analysis*, is the focal component of the Draft EIR. The environmental impact analysis has been organized into a series of sections, each addressing an environmental topic or area of concern identified through the Initial Study process (e.g., Land Use and Planning, Traffic and Circulation, Air Quality, Noise, etc.). To assist the reader in understanding the organization and basis of the analysis, the sections covering each individual environmental topic are typically divided into the following subsections:

- **Reader's Abstract:** An introductory reader's abstract, summarizing content and findings, is provided at the beginning of each topical section.
- **Introduction:** The introduction summarizes the content of the section and references other important studies and reports, such as technical studies appended to the EIR.
- **Setting:** This subsection describes existing environmental conditions that may be subject to change as a result of implementation of the Project. Regulatory settings are also discussed where applicable. Separate descriptions of existing environmental conditions are provided for each environmental topic.
- **Standards of Significance:** Before potential impacts are evaluated, the standards which will serve as the basis for judging significance are presented.

- **Potential Impacts and Mitigation Measures:** This subsection discusses and substantiates potential Project environmental impacts. Based on the standards of significance, impacts are categorized as either potentially significant or less-than-significant. If the impacts are considered to be potentially significant, mitigation measures are proposed to reduce the impacts. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of feasible mitigation measures. Potentially significant impacts that cannot be mitigated to levels that would be less-than-significant are identified as significant and unavoidable.

The summary presented in Chapter 1.0 provides a comprehensive overview of the Project's environmental impacts. For a more detailed description of Project impacts, it is recommended that the reader review the Project Description (Chapter 3.0), and then read the sections on the topics of interest presented in the environmental impact analysis (Chapter 4.0).

## 2.7 INTENDED USE OF THIS EIR

This EIR addresses the potential environmental effects of the implementation and operation of the proposed Desert Grove Retail Project (the Project). The City of Victorville (City) is the lead agency for the purposes of CEQA because it has the principal responsibility and authority for deciding whether or not to approve the Project, and how it will be implemented. As the lead agency, the City is also responsible for preparing the environmental documentation for the Project in compliance with CEQA.

The lead agency will employ this EIR in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Project, to include potential effects of the Project's component elements. It is anticipated that this EIR may also be employed by responsible agencies, e.g., the Air Quality Management District(s), Regional Water Quality Control Board(s), *et al.*, for their related or dependent environmental analyses.

## **2.8 DOCUMENTS INCORPORATED BY REFERENCE**

Section 15150 of the State *CEQA Guidelines* permits and encourages an environmental document to incorporate, by reference, other documents that provide relevant data. The documents summarized below are incorporated by reference, and the pertinent material is summarized within this EIR, where that information is relevant to the analysis of potential Project impacts. All documents incorporated by reference are available for review at, or can be obtained through, the City of Victorville Development Department. Technical studies cited below were specifically developed in conjunction with the Project, and are included in their entirety in the CD-ROM attached to the EIR's back cover.

### **2.8.1 Victorville General Plan and Zoning Code**

The City of Victorville General Plan (General Plan) establishes Goals and Policies and provides guidance for future development of the City. The General Plan provides the guidance necessary for successful implementation of General Plan Policies.

The Victorville General Plan was developed consistent with State of California General Plan Guidelines and contains the following state-mandated elements: Land Use, Circulation, Housing, Resource, Noise, and Safety. All proposed development projects within the City are evaluated for consistency with the intent and purpose of the applicable General Plan land use designation(s) and related General Plan Policies.

### **2.8.2 Project Technical Studies/EIR Appendices**

Following are summary descriptions of documents and supporting technical studies which are appended to the main body of the Draft EIR. Working titles of these documents generically refer to the Project and its physical attributes, and may not necessarily reflect the currently assigned "Desert Grove Retail Project" development title.

#### **2.8.2.1 NOP and NOP Responses - EIR Appendix A**

The Project Notice of Preparation (NOP) and NOP responses are presented in EIR Appendix A. Based on consultation with the City of Victorville and the responses to the NOP, the EIR has been focused on the topics of: Land Use and Planning;

Transportation/Traffic; Air Quality; Global Climate Change and Greenhouse Gas Emissions; Noise; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Biological Resources; and Cultural Resources/Tribal Resources.

#### **2.8.2.2 Traffic Impact Analysis - EIR Appendix B**

The detailed evaluation of Project-related traffic/transportation impacts is documented in *SWC US-395/Palmdale Road (SR-18), Traffic Impact Analysis* (TJW Engineering, Inc.) March 13, 2019 (TIA). The traffic issues related to the Project have been evaluated within the TIA in the context of the California Environmental Quality Act and as directed by the City of Victorville.

#### **2.8.2.3 Air Quality Impact Analysis - EIR Appendix C**

Potential air quality impacts of the Project, including potential short-term construction-source emissions impacts and potential long-term operational-source emissions impacts are assessed within the *Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville* (Urban Crossroads, Inc.) March 13, 2019.

#### **2.8.2.4 Greenhouse Gas Analysis - EIR Appendix D**

Detailed analysis of the Project's potential Greenhouse Gas and Global Climate Change impacts are presented in *Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville* (Urban Crossroads, Inc.) March 13, 2019.

#### **2.8.2.5 Noise Impact Analysis - EIR Appendix E**

Potential noise impacts of the Project, including potential short-term construction-source noise impacts and potential long-term operational-source noise impacts are assessed within *Desert Grove Retail Project, Noise Impact Analysis, City of Victorville* (Urban Crossroads, Inc.) March 21, 2019.

#### **2.8.2.6 Geotechnical Investigation - EIR Appendix F**

An assessment of the soils and geological conditions affecting the Project site and vicinity properties is presented in: *Geotechnical Investigation, Proposed Victorville Retail Shopping Center, SWC Palmdale Road and Highway 395, Victorville, California* (Geocon West, Inc.) August 15, 2018. The Geotechnical Investigation also provides recommendations pertaining to geotechnical aspects of constructing the Project.

#### **2.8.2.7 Phase I Environmental Assessment - EIR Appendix G**

Potential hazards/hazardous conditions affecting the Project site and surrounding properties are evaluated in: *Phase I Environmental Site Assessment, Proposed Walgreen Store Location, SWC of US Highway 395 and Palmdale Road, Victorville, California* (Clayton Group Services, Inc.) July 21, 2006.

#### **2.8.2.8 Hydrology Study - EIR Appendix H**

Hydrology and water quality considerations, respectively, are addressed in *Preliminary Drainage Study, Victorville Retail Project, SWC US 395 & SR-18, Victorville, CA* (Blue Peak Engineering, Inc.) March 1, 2019 (Drainage Study); and *Preliminary Mojave River Watershed Water Quality Management Plan for Victorville Retail Project* (Blue Peak Engineering, Inc.) March 1, 2019 (Preliminary WQMP).

#### **2.8.2.10 Biological Resources Study - EIR Appendix I**

Biological resources considerations are addressed in *Biological Report for the Desert Grove Project Site* (Harmsworth Associates) November 2018.

#### **2.8.2.9 Cultural Resources/Tribal Cultural Resources - EIR Appendix J**

A Cultural Resources Investigation of the Project site was completed in August 2018 and is presented in: *Cultural Resources Assessment, Victorville Retail Project, City of Victorville, San Bernardino County, California* (BCR Consulting LLC) September 10, 2018. This Investigation, prepared by BCR Consulting LLC, includes a visual survey of the Project site, a review of previous cultural resource studies, and correspondence with Native American tribal representatives.

## **3.0 PROJECT DESCRIPTION**

## 3.0 PROJECT DESCRIPTION

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### 3.1 OVERVIEW

The proposed Desert Grove Retail Project (Project), including all proposed facilities, on- and off-site supporting improvements, and associated discretionary actions comprise the Project considered in this Environmental Impact Report (EIR). The Project proposes development of approximately 96,300 square feet of commercial/retail uses on an approximately 14.8-acre site. The current site plan concept configures the Project uses as 10 pads.

### 3.2 PROJECT LOCATION

The Project site is located at the southwesterly corner of the US-395/Palmdale Road (SR-18) intersection, in the City of Victorville (City).<sup>1</sup> US-395 and SR-18 at this location comprise the shared boundary between the City of Victorville and the City of Adelanto. The Project location is presented at Figure 3.2-1.

### 3.3 LAND USES and LAND USE DESIGNATIONS

Project site and vicinity land uses are presented in Figure 3.3-1 and are described below.

#### 3.3.1 Existing Land Uses

Existing land uses are illustrated at Figure 3.3-1. The Project site is currently vacant. An existing fast-food restaurant is located at southwesterly corner of the US-395/SR-18 and abuts the Project site to the northwest. A commercial trailer polishing use with frontage on US-395 is located southerly adjacent to the Project site. Southerly of this trailer polishing use are vacant properties.

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<sup>1</sup> The Project site borders an existing fast-food restaurant that is located at the southwest corner of the US-395/SR-18 intersection. This existing fast-food restaurant is not a part of the Project.

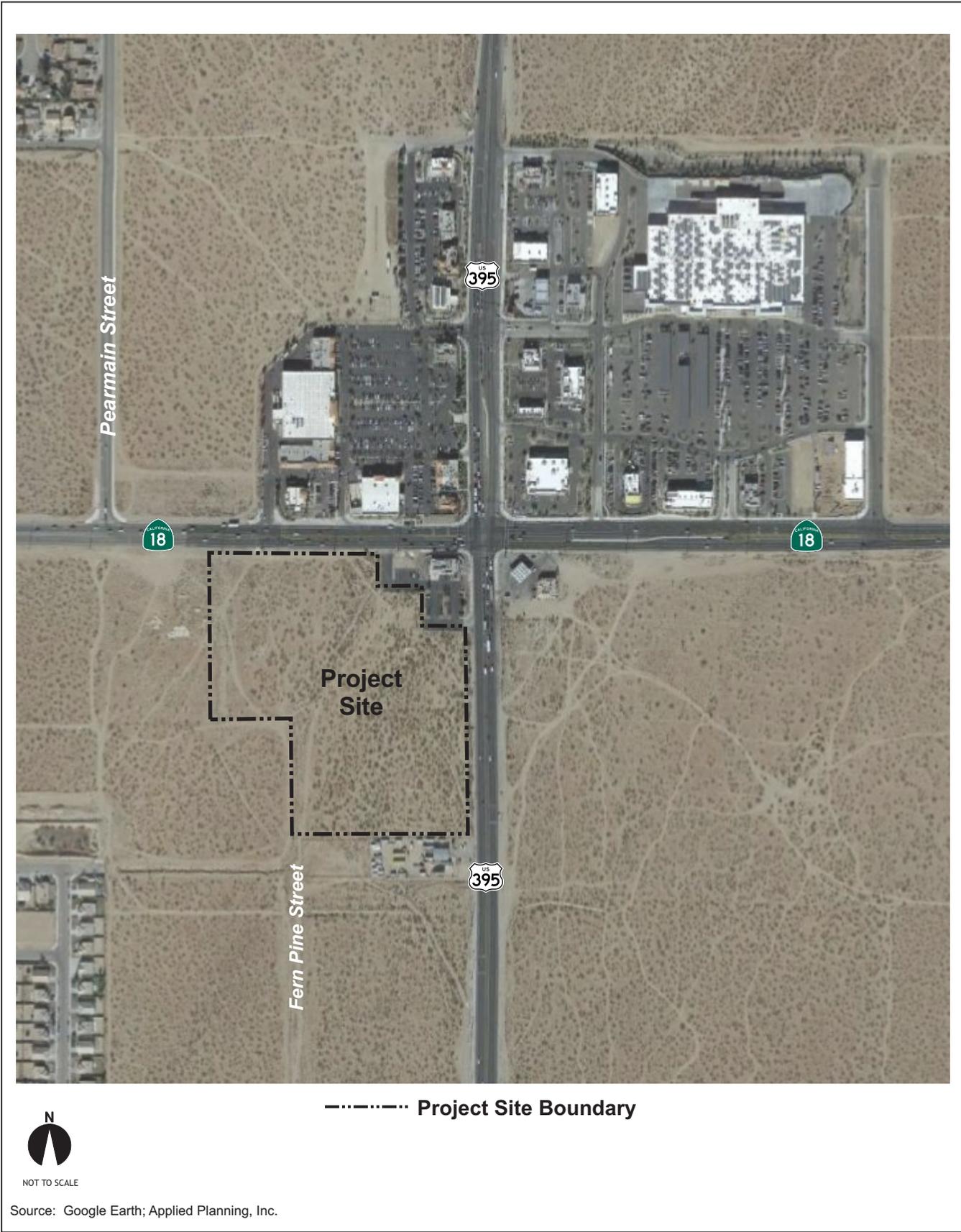


Figure 3.2-1  
Project Location



Figure 3.3-1  
Existing Land Uses

- Northerly of the Project site, across SR-18 at the northwest corner of the US-395/SR-18 intersection, is a commercial/retail shopping center. Northeasterly of the Project site, across the US-395/SR-18 intersection, are additional commercial/retail uses.
- Easterly of the Project site, across US-395 at the southeasterly corner of the US-395/SR-18 intersection, is a gas station. Southerly of this gas station and easterly of the Project site, across US-395, are vacant properties.
- Properties to the west of the Project site are vacant.
- Properties located southwesterly of the Project site are developed with single-family residential uses.

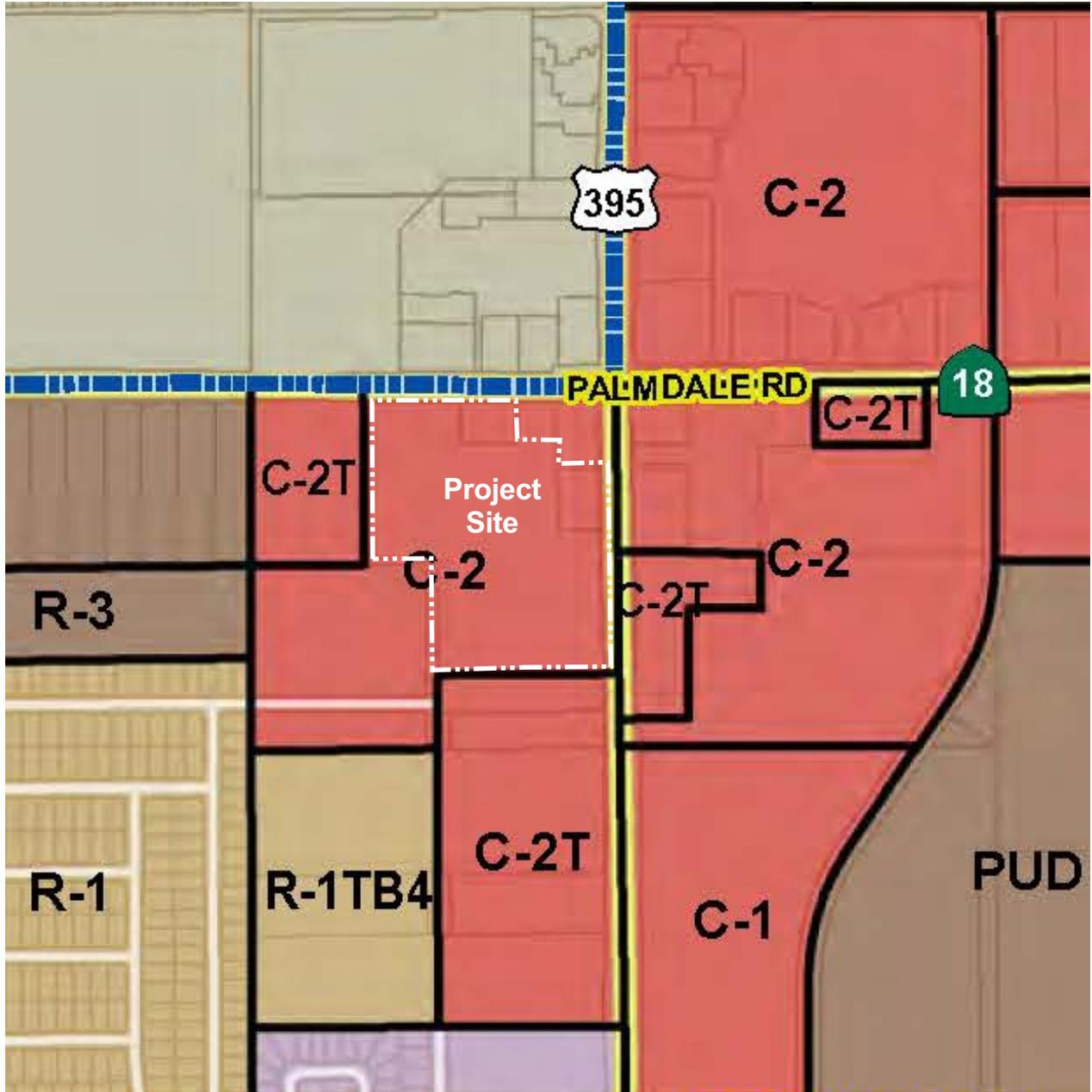
### **3.3.2 Land Use Designations**

Project site and vicinity City of Victorville General Plan (General Plan) Land Use and Zoning designations are presented at Figure 3.3-2. The General Plan Land Use designation of the site is “Commercial.” Zoning designation of the Project site is C-2, “General Commercial.” The Project does not propose or require any General Plan Land Use or Zoning modifications.

## **3.4 PROJECT ELEMENTS**

### **3.4.1 Site Preparation**

Project site preparation activities would be required to conform to requirements of the City of Victorville Municipal Code (Municipal Code Chapter 17.88 - *Grading and Erosion Control*; Chapter 5 - *Building and Fire Regulations*, Article 2: - *Grading Regulations*, et. al.). Prior to approval of a development permit, the Project Applicant would be required to submit soils reports, erosion control plans, geologic engineering reports, and any other relevant site information determined necessary by the City Building and Fire Official. Site preparation activities would be undertaken consistent with the Project final soils report, geologic engineering report, erosion control plan, and other required reports and plans as reviewed and approved by the City.



**GENERAL PLAN LEGEND**

- Commercial
- Low Density Residential (5 du/ac)
- High Density Residential (15-20 du/ac)

**ZONING LEGEND**

- RESIDENTIAL:**
- R-1 Single Family
  - R-3 Multi-Family (15 du/ac)
- COMMERCIAL:**
- C-1 Neighborhood Retail / Service
  - C-2 General Commercial
- OTHER:**
- PUD Planned Unit Development
  - \*T Transitional



NOT TO SCALE

Source: City of Victorville; Applied Planning, Inc.

Figure 3.3-2  
General Plan & Zoning Designations

### 3.4.2 Site Plan Concept

The Project proposes the development of approximately 96,300 square feet of commercial/retail uses configured as 10 pads, as summarized below. Table 3.4-1 provides a breakdown of the proposed uses. Figure 3.4-1 presents the Project Site Plan Concept.

**Table 3.4-1  
Proposed Uses**

<b>Pad</b>	<b>Use</b>	<b>Building Area</b>	
1	Automatic Car Wash (Single-tenant)	2,700 square feet (sf)	
2	Retail/ Fast Food Restaurant (Multi-tenant)	6,000 sf	4,000 sf Retail
			2,000 sf Fast Food
3	Retail/Restaurant (Multi-tenant)	9,700 sf	5,200 sf Retail
			4,500 sf High Turnover Fast Casual Restaurant
4	Retail/Fast Food Restaurant (Multi-tenant)	5,000 sf	3,000 sf Retail
			2,000 sf Fast Food
5	Retail/Fast Food Restaurant (Multi-tenant)	5,000 sf	3,000 sf Retail
			2,000 sf Fast Food
6	Fast Food	2,800 sf	
7	Gas Station w/Convenience Store (Single-tenant)	5,268 sf (16 Vehicle Fueling Points, VFP)	
8	Retail (Multi-tenant)	32,000 sf	16,000 sf Retail Major
			16,000 sf Retail Major
9	Retail Anchor	15,560	
10	Retail Anchor	12,272	
<b>TOTAL</b>		<b>96,300 Square Feet (16 VFP)</b>	

**Source:** Desert Grove Retail Project Site Plan Concept (Avalon Architectural) April 1, 2019.

**Notes:** Within the Project site, individual uses and allocation of building pad areas are subject to future modification(s). All modifications would be contingent on approval by the Lead Agency and may require additional environmental analysis.

### 3.4.3 Access and Circulation

Access to/from adjacent roads would be provided by four driveways. At the northwesterly corner of the Project site, a new all-way driveway would connect northerly to SR-18. As part of the Project, the existing signal at this location would be modified consistent with City requirements. Easterly of this signalized driveway, an existing driveway would provide right-in/right-out only access from/to SR-18.



At the southeasterly corner of the Project site, a new signalized all-way driveway would connect easterly to US-395. Northerly of this signalized driveway, an existing driveway would provide right-in/right-out only access from/to US-395. Internal to the Project site, a private central main drive oriented along a northwest – southeast alignment would provide access to the Project buildings. This private drive would also indirectly provide access between SR-18 and US-395.

#### **3.4.4 Landscape/Hardscape**

Project landscape/hardscape would be required to conform to City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-2.10.020: - *Development standards*). All final Project landscape/hardscape plans would be subject to review and approval by the City.

#### **3.4.5 Lighting**

All Project lighting would be required to conform to City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-3.10.020: - *Development standards*). All final Project lighting plans would be subject to review and approval by the City.

#### **3.4.6 Signs**

All Project signs would be required to conform to applicable City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-3.10.020: - *Development standards*). All final Project sign plans would be subject to review and approval by the City.

#### **3.4.7 Parking**

All Project parking would be required to conform to applicable City requirements for commercial uses (Municipal Code Article 10: - *Commercial Districts*; Sec. 16-3.10.020: - *Development standards*). All final Project parking plans would be subject to review and approval by the City.

### **3.4.8 Infrastructure/Utilities/Services**

Infrastructure and utilities that would serve the Project site are summarized below.

#### **3.4.8.1 Water/Sewer Services**

Water service to the Project would be provided by Victorville Water District. All Project water service lines and connections to Water District system would be required to conform to City and Water District requirements. The Project Applicant would also be required to obtain a “Will-Serve” letter for water service. (See also: <https://www.victorvilleca.gov/government/city-departments/water/for-developers-contractors>).

Wastewater generated by the Project would be conveyed for treatment at the Victorville Industrial/Wastewater Treatment Plant (IWWTP), which is owned and operated by the Victorville Water District (VWD). All Project sewer service lines would be required to conform to City and VWD requirements (See: Municipal Code Chapter 10.02 - *Sanitary Sewer Use Ordinance*).

#### **3.4.8.2 Storm Water Management System**

The Project storm water management system would be required to incorporate drainage improvements, facilities, and programs to control and treat storm water pollutants. Prior to issuance of grading permits, a detailed Water Quality Management Plan (WQMP) would be required to be submitted to, and approved by, the City. Additionally, a Storm Water Pollution Prevention Plan (SWPPP) would be implemented consistent with the requirements of the City’s National Pollutant Discharge Elimination System (NPDES) Permit. (See: Municipal Code Chapter 10.30 - *Storm Water and Urban Runoff Management and Discharge Control*). Additionally, as part of the Project and per Victorville Master Plan Drainage Study, a region-serving storm drain would be constructed along the Project site easterly boundary, adjacent to US-395. This storm drain (Regional Storm Drain Line E-01) would comprise an 84-inch reinforced concrete pipe (RCP) at the southeasterly corner of the Project and would extend northerly, transitioning to a double 7’ x 3’ reinforced concrete box (RCB) culvert before connecting to the existing double 7’ x 3’ RCB culvert located at the northeasterly corner of the Project site, westerly of the SR-18/US-395

intersection. The Project would also construct a 48-inch RCP traversing the Project site along a generally southwest-to-northeast alignment. This storm drain (referred to herein as “Line E-01.A”) would convey stormwaters discharged from properties located southwest of the Project site and would connect to Regional Storm Drain Line E-01 within the Project site. Regional Storm Drain Line E-01 and Line E-01.A would be constructed within dedicated drainage easements. No surface structures would be permitted within these easements.

### **3.4.8.3 Solid Waste Management**

Solid waste generated by the Project would be collected by Victorville Disposal and disposed of at the Victorville Landfill, operated by the County of San Bernardino Public Works Department. Burrtec Waste Industries, a private contractor, operates the landfill under contract to the County.

### **3.4.8.4 Utilities**

The Project would also be provided natural gas, electrical, telecommunications services. Service providers available to the Project are listed below:

- Natural gas (Southwest Gas Corporation);
- Electricity (SCE); and
- Telecommunications (various private services, including AT&T, Time Warner, and Frontier Communications).<sup>2</sup>

All modification of, and connection to, existing services would be accomplished consistent with City and purveyor requirements. It is noted that to allow for, and facilitate Project construction activities, provision of temporary SCE electrical services improvements would be required. The scope of such temporary improvements is considered to be consistent with, and reflected within the total scope of development

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<sup>2</sup> As part of the Project, a cell phone tower is proposed southerly of proposed “Pad 10.” The cell phone tower would be designed and constructed consistent with City of Victorville Municipal Code Sec. 16-3.24.150: - *Wireless communication facilities*.

proposed by the Project. Similarly, impacts resulting from the provision of temporary SCE services would not be substantively different from, or greater than, impacts resulting from development of the Project in total.

#### **3.4.8.5 Public Services**

Fire protection and emergency medical services for the Project would be provided by the City of Victorville Fire Department. Police protection services for the Project would be provided by the Victorville Police Department via contract with the San Bernardino County Sheriff.

The City also provides, or facilitates provision of, a range of other services that would be generally available to the Project patrons and employees. These services include, but are not limited to: educational services, library services, arts and entertainment, and human services.

#### **3.4.8.6 Alternative Transportation Modes**

Alternative transportation modes and services available to the Project site and vicinity are described below.

##### **Bus Services**

The Study Area is served by the Victor Valley Transit Authority (VVTA). VVTA provides bus service throughout the Victor Valley region. There are three transit routes that currently provide direct service to the Project site: VVTA Routes 31 (Victorville – South Adelanto), 33 (Adelanto Circulator) and 54 (Highway 395-Palmdale – Victor Valley Mall). Detailed bus routes and schedules are available at: <https://vvta.org>.

##### **Bicycle Facilities**

There are no existing bicycle facilities in the Study Area. The City of Victorville Non-Motorized Transportation Plan does, however, identify the following planned bicycle facilities within the Study Area:

### Class II On-Street Bicycle Lanes

- SR-18 from Baldy Mesa Rd. to Amargosa Rd.
- Dos Palmas Rd. from Baldy Mesa Rd. to Amargosa Rd.
- Bear Valley Rd. from Mesa View Rd. to the Oro Grande Wash
- Cantina St.
- Mesa Linda St. from northern City limits to La Mesa Rd.
- El Evado Rd. from SCLA to La Mesa Rd.
- Amargosa Rd. south of Dos Palmas Rd.

### Class III Bicycle Routes

- Palmdale Rd. east of Amargosa Rd.
- Luna Rd. from Mesa View Rd. to Amargosa Rd.
- La Mesa Rd. from Mesa View Rd. to Amargosa Rd.
- Topaz Rd. from Luna St. to Mesa View Rd.
- Cobalt Rd.
- Amethyst Rd. from Hopland St. to Bear Valley Rd.
- El Evado Rd. south of La Mesa Rd.
- Amargosa Rd. from Hopland St. to Dos Palmas Rd.

The Project concept does not propose or require facilities or programs that would conflict or interfere with development and implementation of planned or proposed bicycle facilities. The Applicant would coordinate final Project designs to ensure accommodation of planned or proposed bicycle facilities. On-site Project bicycle amenities would be provided consistent with City of Victorville requirements.

See also: [http://sustain.scag.ca.gov/Documents/CBResources/Victorville\\_Non-Motorized\\_Plan\\_Final\\_Report.pdf](http://sustain.scag.ca.gov/Documents/CBResources/Victorville_Non-Motorized_Plan_Final_Report.pdf)

### **Pedestrian Access**

Pedestrian access would be facilitated by Project construction of the ultimate half-section of abutting US-395 and SR-18 to include curb and gutter and sidewalk improvements. All right-of-way improvements, including any temporary or interim improvements would

be designed and constructed consistent with City Conditions of Approval. Additionally, sidewalk connections between the Project uses would facilitate pedestrian access within the Project site.

### **3.4.9 Energy Efficiency/Sustainability**

Energy-saving and sustainable design features and operational programs would be incorporated in the Project facilities pursuant to California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11) as implemented by the City of Victorville.

General Plan Policy 7.1.1, Implementation Measure 7.1.1.4, requires that the Project generate “electricity on site to [the] maximum extent feasible” (General Plan, p. R-31). The developer has committed to installing photovoltaic panels within the Project site to generate a portion of the project’s energy demands. Prior to final site plan approval and issuance of the first building permit, Project design(s) providing for on-site energy production would be documented and verified as part of the City’s development review processes. Compliance with the General Plan on-site energy production requirements would be verified by the City prior to issuance of Certificate(s) of Occupancy for any affected buildings (e.g., buildings with photovoltaic (PV) panels).

General Plan Policy 7.2.1, Implementation Measure 7.2.1.5, requires the Project “to be 15 percent more efficient than 2008 Title 24 Standards” (General Plan, p. R-31). Prior to final site plan approval and issuance of the first building permit, Project building/facility energy efficiencies would be documented as part of the City’s development review processes. Compliance with General Plan energy efficiency requirements would be verified by the City prior to issuance of Certificate of Occupancy for each building.

### **3.4.10 Construction Traffic Management Plan**

Temporary and short-term traffic detours and traffic disruptions could result during Project construction activities including implementation of access and circulation improvements noted above. Accordingly, the Project Applicant would be responsible for the preparation and submittal of a construction area traffic management plan (Plan) to be

reviewed and approved by the City. Typical elements and information incorporated in the Plan would include, but would not be limited to:

- **Name of on-site construction superintendent and contact phone number.**
- **Identification of Construction Contract Responsibilities** - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).
- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).
- **Identification and Description of Material Storage Locations (if any).**
- **Location and Description of Construction Trailer (if any).**
- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.
- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.
- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of building permits. The Plan and its requirements would also be provided to all contractors as one required component of building plan/contract document packages.

### **3.4.11 Project Opening Year**

Under Opening Year Conditions, all Project facilities are assumed to be occupied and fully operational. For analytic purposes, a Project Opening Year of 2019 is assumed.

## **3.5 PROJECT OBJECTIVES**

Project Objectives include the following:

- Create a new mix of uses that capitalizes on the site's location in proximity to surrounding commercial retail facilities;
- Provide a commercial retail shopping center that serves the local market area and beyond;
- Attract new customers and retailers to the City of Victorville;
- Transition the Project site from its current unimproved state to a commercial development, with resulting new fiscal benefits to the City of Victorville. Benefits will include new sales tax revenues and increased property tax revenues;
- Develop the Project site with uses and at intensities the Lead Agency considers to be the highest and best use of the subject site; and
- Provide a commercial development that creates new jobs for City residents.

## **3.6 DISCRETIONARY APPROVALS AND PERMITS**

Discretionary actions, permits, and related consultation(s) necessary to approve and implement the Project include, but are not limited to, the following.

### **3.6.1 Lead Agency Discretionary Actions and Permits**

*CEQA Guidelines* Section 15124 states in pertinent part that if “a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed...” Discretionary actions and permits necessary to realize the Desert Grove Retail Project would include the following:

- Certification of the Desert Grove Retail Project EIR;
- Approval of Tentative Parcel Map(s);
- Approval(s) of Conditional Use Permits;
- Site Plan Approval(s);
- Approval of Infrastructure Improvement Plans including, but not limited to: roads, sewer, water, and storm water management systems; and
- City of Victorville construction, grading, and encroachment permits.

### **3.6.2 Other Agency Consultation and Permits**

Anticipated consultation(s) and permits from agencies (other than the City) necessary to realize the Project would likely include, but are not limited to, the following:

- Permitting by/through the Lahontan Regional Water Quality Control Board (LRWQCB) consistent with requirements of the City’s National Pollutant Discharge Elimination System (NPDES) Permit.
- Permitting by/through the Mojave Desert Air Quality Management District (MDAQMD) for certain equipment or land uses that may be implemented within the Project area; and
- Various construction, grading, and encroachment permits allowing implementation of the Project facilities.

## **4.0 ENVIRONMENTAL IMPACT ANALYSIS**

## 4.0 ENVIRONMENTAL IMPACT ANALYSIS

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This chapter of the EIR analyzes and describes the potential environmental impacts associated with the adoption and implementation of the Desert Grove Retail Project (Project). The environmental impact analysis has been organized into a series of sections, each addressing a separate environmental topic. Environmental topics addressed in this EIR are presented in the following sections:

<b><u>Section</u></b>	<b><u>Topic</u></b>
4.1	Land Use and Planning
4.2	Transportation/Traffic
4.3	Air Quality
4.4	Global Climate Change and Greenhouse Gas Emissions
4.5	Noise
4.6	Geology and Soils
4.7	Hazards and Hazardous Materials
4.8	Hydrology and Water Quality
4.9	Biological Resources
4.10	Cultural Resources/Tribal Cultural Resources

Within each of the above topical Sections, the discussion is typically divided into subsections which: describe the “setting” or existing environmental conditions; identify regulations and policies, which through their observance typically resolve many potential environmental concerns; identify thresholds of significance applicable to potential environmental effects of the Project; describe the significance of Project-related environmental effects in the context of applicable significance thresholds; and for impacts which are potentially significant or significant, recommend mitigation measures to

eliminate or reduce their effects. In this latter regard, it is recognized that the intent of the California Environmental Quality Act (CEQA) is to focus on significant, or potentially significant adverse effects of the Project, and therefore, mitigation is proposed only for potential impacts of this magnitude.

As noted above, before potential impacts are evaluated, the standards or thresholds which will serve as the basis for judging the relative significance of impacts are presented. Often thresholds serve as a general guide or gauge for determining an impact's potential relative significance, rather than defining its absolute effects. Subsequent to identification of relevant significance thresholds, potential Project-related effects and impacts are identified and explained. If an impact is considered to be potentially significant, mitigation measures are proposed to avoid the impact, or reduce its effects to the extent feasible. In determining the potential significance of impacts, the adequacy of existing policies and regulations in addressing each impact is taken into consideration. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of mitigation measures.

In the environmental analysis, the following terms are used to describe the potential effects of the Project:

- **Less-Than-Significant Impacts:** Minor changes or effects on the environment caused by the Project which do not meet or exceed the criteria, standards, or thresholds established to gauge significance are considered to be less-than-significant impacts. Less-than-significant impacts do not require mitigation. In some cases, these impacts may appear to be potentially significant. However, existing public policies, regulations, and procedures adequately address these potential effects, thereby reducing them to a less-than-significant level, without the need for additional mitigation.

- **Potentially Significant Impacts:** Potentially significant impacts are defined as a substantial, or potentially substantial, adverse change in the environment. The *CEQA Guidelines* and various responsible agencies provide guidance for determining the significance of impacts. However, the determination of impact significance is ultimately based on the judgment of the lead agency. Similarly, the establishment of any criteria to be used in evaluating the significance of impacts is the responsibility of the lead agency. Wherever possible, mitigation is proposed in the EIR to avoid or reduce the magnitude of potentially significant impacts.
- **Significant Impacts:** Impacts identified in the EIR which cannot be mitigated below thresholds of significance through the application of feasible mitigation measures are categorized as “significant.”
- **Cumulative Impacts:** A discussion of cumulative impacts is provided in Section 5.0 of this environmental analysis. Cumulative impacts refer to the impacts of the Project as they are combined or interact with anticipated impacts of other vicinity projects and physical effects of projected ambient regional growth.

## **4.1 LAND USE AND PLANNING**

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## 4.1 LAND USE AND PLANNING

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### *Abstract*

*This Section identifies and addresses potential impacts that may result from land use and planning decisions necessary to implement the Desert Grove Retail Project (the Project). Potential land use impacts that may occur due to the type of development proposed, its location or scale are discussed. Specifically, the discussion in this Section seeks to determine whether the Project would:*

- Physically divide an established community;*
- 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; and*
- Conflict with any applicable habitat conservation plan or natural community conservation plan.*

*As supported by the analysis presented in this Section, potential land use and planning impacts of the Project are determined to be less-than-significant.*

### 4.1.1 INTRODUCTION

Land use refers to occupation and employment of properties for various purposes such as commerce, industry, open space, community services, infrastructure, and residential uses. Local land use plans, policies, and development regulations control the types, configurations, and intensities of land uses within the community. Changes in land use patterns resulting from new development can affect overall characteristics of an area, and

may result in physical impacts to the environment. This Land Use and Planning Section of the EIR focuses on the Project's consistency with applicable land use plans, policies and regulations, and its potential incompatibilities with land use districts and existing and proposed vicinity development.

#### **4.1.2 SETTING**

##### **4.1.2.1 Existing Land Uses**

The Project site is currently vacant. An existing fast-food restaurant is located at the southwesterly corner of US-395/Palmdale Road (SR-18) and abuts the Project site to the northwest. A commercial trailer polishing use with frontage on US-395 is located southerly adjacent to the Project site. Southerly of this trailer polishing use are vacant properties. Northerly of the Project site, across SR-18 at the northwest corner of the US-395/SR-18 intersection, is a commercial/retail shopping center. Northeasterly of the Project site, across the US-395/SR-18 intersection, are additional commercial/retail uses. Easterly of the site, across US-395 is a gas station, located at the southeasterly corner of the US-395/SR-18 intersection. Southerly of this gas station and easterly of the Project site, across US-395, are vacant properties. Properties to the west of the Project site are vacant. Properties located southwesterly of the Project site are developed with single-family residential uses. Please refer also to Figure 3.3-1, *Existing Land Uses*, presented in Section 3.0.

##### **4.1.2.2 General Plan Land Use and Zoning Designations**

The City of Victorville General Plan Land Use designation of the Project site is Commercial. Zoning designation of the Project site is C-2 (General Commercial). The Project does not propose any modification of these designations.

#### **4.1.3 LAND USE PLANS, GOALS, POLICIES, AND REGULATIONS**

The Project would be subject to, and would be required to comply with, applicable land use plans, goals, policies, and regulations, including the City of Victorville General Plan and Zoning Code. In many instances, compliance with existing policies and regulations eliminates, or substantially reduces, potential environmental effects. Existing policies and

regulations, to some extent, also indicate community and regional values and prerogatives relative to environmental concerns.

#### **4.1.3.1 Regional Planning**

The Southern California Association of Governments (SCAG) is the federally recognized metropolitan planning organization (MPO) for this region, which encompasses over 38,000 square miles, and comprises representatives of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their potential impacts on regional planning programs. As Southern California's MPO, SCAG cooperates with the Mojave Desert Air Quality Management District (MDAQMD), the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents.

In 2016, SCAG adopted the *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*. The 2016 – 2040 RTP/SCS vision encompasses general principles and themes that collectively work to shape the Southern California region. The 2016 – 2040 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the federal Clean Air Act.

#### **4.1.3.2 City of Victorville General Plan 2030**

The City of Victorville General Plan 2030 (General Plan) was developed consistent with State of California General Plan Guidelines, and contains the following Elements: Land Use, Circulation, Housing, Resource, Noise, and Safety. General Plan Land Use designations direct the general character and intensities of land uses within the City boundaries.

#### **4.1.3.3 Victorville Zoning Ordinance**

Zoning is generally considered the primary tool for implementing a general plan. In contrast to the long-term, broad-based outlook of the general plan, zoning is a site-specific device designed to control the locations, densities, and intensities of various land uses. To prevent incompatible land use relationships, the zoning ordinances and accompanying map(s) designate different areas or zones for different types of land uses, and establish standards for development. These standards may specify requirements for lot sizes, lot coverages, building heights, setbacks, parking, landscaping, and other development parameters.

#### **4.1.4 STANDARDS OF SIGNIFICANCE**

Appendix G of the California Environmental Quality Act Guidelines (*CEQA Guidelines*), as applied by the City of Victorville, indicates that a Project will normally have a significant effect related to land use if it would:

- Physically divide an established community;
- 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; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

## 4.1.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

### 4.1.5.1 Impact Statements

**Potential Impact:** *Physically divide an established community.*

**Impact Analysis:** No established communities exist within the Project site, nor does the Project propose or require elements or operations that would divide an off-site community. No residents would be displaced by the Project, nor would the physical arrangement of any neighboring residential communities be modified or divided by the Project. On this basis, the potential for the Project to physically divide an established community is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *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.*

**Impact Analysis:**

#### **General Plan and Zoning Consistency**

The City of Victorville General Plan Land Use designation of the Project site is Commercial. Zoning designation of the Project site is C-2 (General Commercial). The Project does not propose any modification of these designations. The Project would implement commercial/retail uses within an urbanizing area of the City designated for, and anticipated to develop with, such uses. Based on the preceding, the potential for the Project to conflict with an applicable jurisdictional land use plan, policy, or regulation would be less-than-significant.

## SCAG RTP/SCS Consistency

Table 4.1-1 provides the City's analysis of the Project's consistency with the goals of the 2016 – 2040 SCAG Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).

**Table 4.1-1  
Consistency with SCAG RTP/SCS Goals**

RTP/SCS Goals	Remarks
<i>Goal 1:</i> Align the plan investments and policies with improving regional economic development and competitiveness.	<b>Consistent:</b> The Project proposes contemporary urban uses, providing an opportunity for development investment on currently underutilized land.
<i>Goal 2:</i> Maximize mobility and accessibility for all people and goods in the region.	<b>Consistent:</b> The transportation network in the Project area has been developed and maintained to meet local and regional transportation demands, and to ensure efficient mobility. Draft EIR Section 4.2, <i>Traffic and Circulation</i> , addresses local and regional transportation, traffic, and transit in more detail.
<i>Goal 3:</i> Ensure travel safety and reliability for all people and goods in the region.	<b>Consistent:</b> The Project TIA identifies improvements that would promote and facilitate the safe movement of people and goods. All transportation modes within the Project area would be required to comply with incumbent regulatory safety standards.
<i>Goal 4:</i> Preserve and ensure a sustainable regional transportation system.	<b>Consistent:</b> The Project TIA assesses all potentially affected roadways and identifies required improvements to the existing transportation network. The Project would construct required improvements, and/or would offset its incremental transportation system impacts through payment of requisite transportation/traffic impact fees. Project construction of required improvements and payment of transportation/traffic impact fees preserves and maintains sustainable local and regional transportation systems.
<i>Goal 5:</i> Maximize the productivity of our transportation system.	<b>Consistent:</b> Local and regional transportation systems would be improved and maintained to encourage their efficiency and productivity. The City oversees the improvement and maintenance of all aspects of the public right-of-way on an as-needed basis.

**Table 4.1-1**  
**Consistency with SCAG RTP/SCS Goals**

RTP/SCS Goals	Remarks
<p><i>Goal 6:</i> Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).</p>	<p><b>Consistent:</b> The Project would accommodate and would not interfere with existing or planned bicycle facilities and improvements. The Project would provide pedestrian connection between the Project site and off-site pedestrian network.</p>
<p><i>Goal 7:</i> Actively encourage and create incentives for energy efficiency, where possible.</p>	<p><b>Consistent:</b> Energy-saving and sustainable design features and operational programs would be incorporated in the Project facilities pursuant to California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11) as implemented by the City of Victorville.</p> <p>Consistent with City of Victorville General Plan Policy 7.2.1, Implementation Measure 7.2.1.5, the Project would be required “to be 15 percent more efficient than 2008 Title 24 Standards” (General Plan, p. R-31). Prior to issuance of a building permit, Project building/facility energy efficiencies would be documented and verified as part of the City’s standard Building Permit review processes. Compliance with required energy efficiencies would be verified by the City prior to issuance of a Certificate of Occupancy.</p> <p>General Plan Policy 7.1.1, Implementation Measure 7.1.1.4, requires that the Project generate “electricity on site to [the] maximum extent feasible” (General Plan, p. R-31). The developer has committed to installing photovoltaic panels within the Project site to generate a portion of the project’s energy demands. Compliance with the General Plan on-site energy production requirements would be verified by the City prior to issuance of a Certificate of Occupancy.</p>
<p><i>Goal 8:</i> Encourage land use and growth patterns that facilitate transit and non-motorized transportation.</p>	<p><b>Consistent:</b> The Project proposes development with proximate access to local and regional transportation facilities. Intensified development of the Project site in combination with existing proximate urban development acts to focus transit ridership base, thereby supporting existing and future transit opportunities.</p>

**Table 4.1-1  
Consistency with SCAG RTP/SCS Goals**

RTP/SCS Goals	Remarks
<p><b>Goal 9:</b> Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.</p>	<p><b>Consistent:</b> The City of Victorville is responsible for monitoring of roadways and transit routes to determine the adequacy and safety of these systems. The City and other local and regional agencies and organizations (e.g., RTA, Caltrans, and SCAG) cooperatively manage these systems. Security situations involving roadways and evacuations would be addressed through City emergency response plans.</p>

Sources: Goal Statements from: 2016–2040 RTP/SCS; Remarks by Applied Planning, Inc.

### Conclusion

The Project is consistent with the existing General Plan and zoning designations of the site. Additionally, the Project would be consistent with goals presented within the General Plan and established by the 2016 – 2040 RTP/SCS. On this basis, the potential for the Project to 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 is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

**Impact Analysis:** No resources protected by local ordinances or policies are present on site. The Project site is located within the West Mojave Plan (WMP) Area. However, the City of Victorville is not a signatory to the WMP. The Project site is also located within the area covered under the Desert Renewable Energy Conservation Plan (DRECP), however, because the Project does not include development of renewable energy, the DRECP is not applicable to this Project. On this basis, the Project does not have the

potential to conflict with any applicable habitat conservation plan or natural communities conservation plan.

**Level of Significance:** No Impact.

## **4.2 TRANSPORTATION/TRAFFIC**

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## 4.2 TRANSPORTATION/TRAFFIC

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### *Abstract*

*Detailed analysis of the Project's potential transportation/traffic impacts is presented in SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019 (Project TIA, TIA). Within the TIA, potential transportation/traffic impacts are evaluated under the following scenarios: Existing (2017) Conditions, Opening Year (2019) Conditions, Interim Year (2029/2030) Conditions, and General Plan Buildout (2040) Conditions. The TIA is provided at EIR Appendix B. This Section substantiates whether the Project would:*

- 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;*
- 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;*
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities;*
- 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;*
- Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and*

- *Result in inadequate emergency access.*

*The Project would construct all necessary site access and site adjacent roadway improvements as summarized in the EIR Project Description (please refer to EIR Section 3.0, Project Description, Section 3.4.3, Access and Circulation). Final design and construction of these improvements would be as directed by the City of Victorville (City) through the Project Conditions of Approval.*

***Impacts at Off-site/Extra-Jurisdictional Transportation Facilities Would be Significant and Unavoidable***

*Applicant mitigation responsibilities for traffic impacts at off-site City of Victorville locations facilities would be fulfilled through payment of requisite Development Impact Fees (DIF) and Fair Share Fees. Fees would be directed toward the completion of those improvements necessary to achieve acceptable performance standards (e.g., Level of Service, vehicle delay, vehicle densities). Applicant payment of fees would not however ensure timely completion of required off-site improvements. Unless otherwise noted herein, pending completion of required circulation system improvements, Project contributions to deficiencies affecting off-site City of Victorville locations under Existing Conditions, Interim Conditions, Opening Year Conditions, and General Plan Buildout Conditions would be significant and unavoidable.*

*Similarly, for required extra-jurisdictional improvements identified on the Congestion Management Program/San Bernardino County Measure I exhibit(s), payment of DIF would fulfill the Applicant's mitigation responsibilities. Project DIF collected by the City of Victorville would be allocated for regional traffic improvements as provided for under Measure I.<sup>1</sup> Applicant payment of fees would not however ensure timely completion of required extra-jurisdictional improvements. Unless otherwise noted herein, pending completion of required circulation system improvements, Project contributions to deficiencies affecting extra-jurisdictional locations under Existing Conditions, Interim Conditions, Opening Year Conditions, and General Plan Buildout Conditions would be significant and unavoidable.*

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<sup>1</sup> Additionally, area-serving transportation system improvements are funded generally through sales taxes collected under Measure I.

***CMP Facilities Impacts Would be Coincident with Impacts Generally***

*Within the TIA Study Area, US-395 and SR-18 are designated San Bernardino County Congestion Management Program (CMP) Roadways; and the intersection of US-395 and SR-18 is a designated CMP Intersection. Project impacts at these facilities are coincident with impacts affecting Study Area roadway segments and intersections generally.*

***Alternative Transportation Modes Impacts Would be Less-Than-Significant***

*The Applicant and City will coordinate Project final designs with the Victor Valley Transit Authority (VVTA) to evaluate and implement appropriate transit access and amenities. The Project would also construct pedestrian access and bicycle facilities improvements consistent with City standards and requirements. On this basis, the potential for the Project to conflict with policies, plans, or programs for public transit, bicycle, or pedestrian facilities, would be less-than-significant.*

***Airfield/Airport Operations Impacts Would be Less-Than-Significant***

*The Project site is located approximately 5 miles southerly of the nearest airport/airfield (Southern California Logistics Airport [SCLA]). The Project does propose or require uses or operations that would substantively affect, or be affected by SCLA facilities or operations. The potential for the Project to 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 would therefore be less-than-significant.*

***Transportation Hazards Impacts Would be Less-Than-Significant***

*The Project does not propose or require hazardous designs or hazardous features; or uses that would generate traffic incompatible with vicinity uses. The potential for the Project to substantially increase hazards to a design feature or incompatible uses would therefore be less-than-significant.*

***Emergency Access Impacts Would be Less-Than-Significant***

*All Project designs, including but not limited to emergency access provisions, would conform to City of Victorville, San Bernardino County Fire Department, and Victorville Police Department standards and requirements. Over the life of the Project, this would reduce the potential for the Project to result in inadequate emergency access to levels that would be less-than-significant. The*

*Project would also implement a construction traffic management plan minimizing the potential for construction activities to result in potential for temporary emergency access. On this basis, the potential for the Project to result in inadequate emergency access would be less-than-significant.*

#### **4.2.1 INTRODUCTION**

This Section presents existing and future transportation/traffic conditions within the TIA Study Area (Study Area) and identifies potential transportation/traffic impacts resulting from implementation of the Project. Study Area circulation system facilities are discussed, and effects of Project traffic on circulation system Level of Service (LOS) conditions are evaluated. Where the Project would result in, or substantively contribute to transportation/traffic deficiencies, required circulation system improvements are identified. The detailed evaluation of potential Project-related transportation/traffic impacts is documented in *SWC US-395/Palmdale Road (SR-18), Traffic Impact Analysis* (TJW Engineering, Inc.) March 13, 2019 (TIA, EIR Appendix B).

#### **4.2.2 STUDY AREA AND METHODOLOGIES**

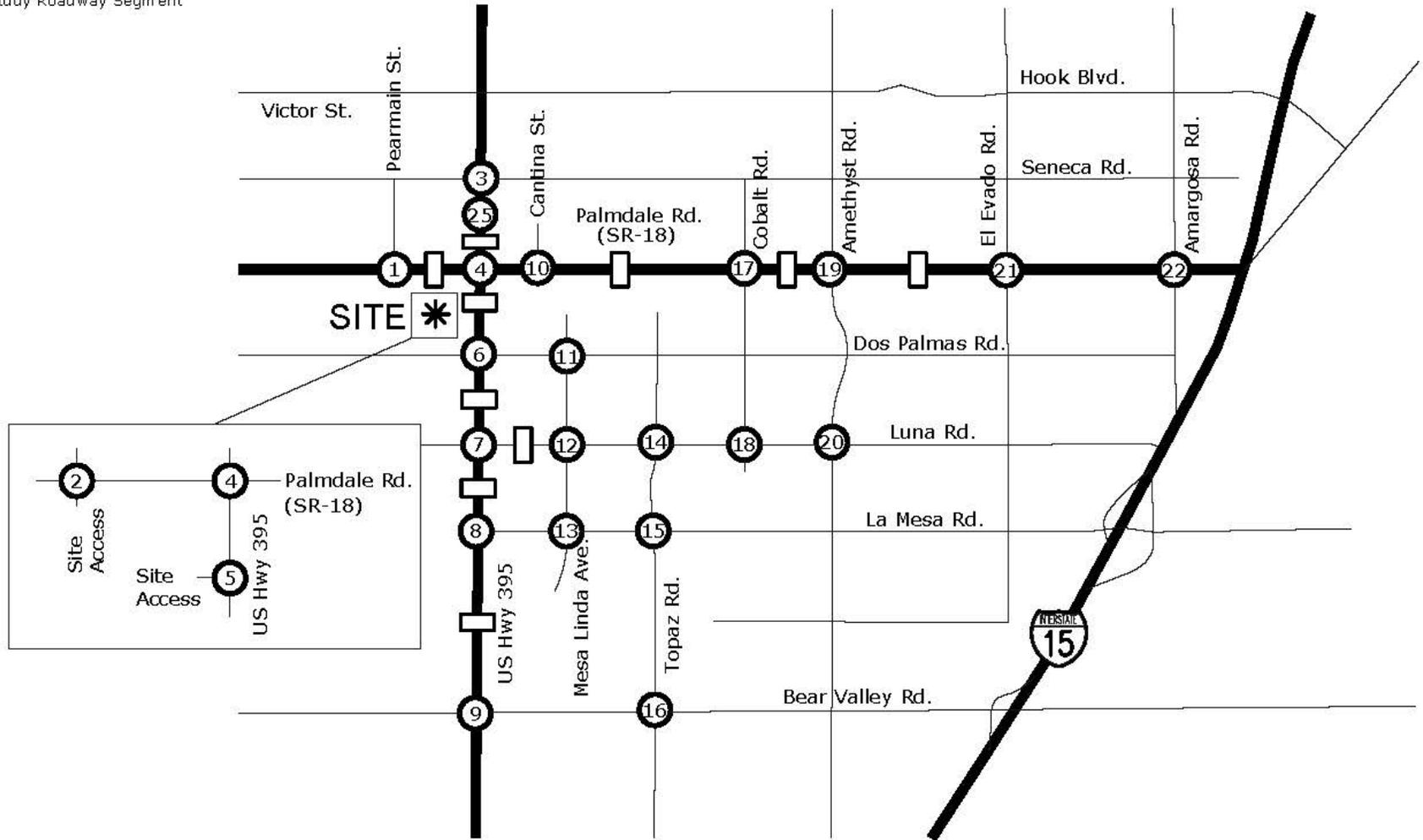
##### **4.2.2.1 Overview**

The TIA Study Area is presented at Figure 4.2-1. The TIA was prepared in consultation with the City and in accordance with the City-approved TIA Scoping Agreement (TIA Appendix A); *County of San Bernardino Traffic Impact Study Guidelines; Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County*; and the *California Department of Transportation (Caltrans) Guide for the Preparation of Traffic Impact Studies*.

Analyses of traffic conditions are presented for Existing (2017) Conditions, Project Opening Year (2019) Conditions, Interim (2029/2030) Conditions, and General Plan Buildout (2040) Conditions. The TIA employs LOS methodology and criteria in determining deficient conditions. Planned projects considered as part of the cumulative development setting were identified in consultation with the City. For the purposes of the TIA and the EIR analyses, all Project facilities are assumed to be complete and operational by 2019, the Project Opening Year.

**Legend:**

-  = Study Intersection
-  = Study Roadway Segment



NOT TO SCALE

Source: TJW Engineering, Inc.

Figure 4.2-1  
TIA Study Area

#### 4.2.2.2 Intersection Analysis

##### Intersection Level of Service (LOS)

Traffic operations of roadway intersections are described in terms of LOS. LOS for signalized intersections is based on average control delay for all movements during the peak hour. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Caltrans requires signalized intersection LOS operations be analyzed utilizing the Highway Capacity Manual (HCM) 2010 methodology. The City requested that signalized intersection LOS operations be analyzed utilizing Webster software, which utilizes the HCM 2000 methodology.

Signalized intersections have been analyzed utilizing both the Webster software (HCM 2000 methodology) and Synchro software (HCM 2010 methodology) for existing conditions. Synchro and the HCM 2010 methodology have been employed for all other analysis scenarios. In instances where the software outputs differ, the most conservative result (maximum LOS delay) is reflected in the analyses. Tables 4.2-1 and 4.2-2 present HCM LOS and Delay Ranges for signalized and unsignalized intersections.

**Table 4.2-1  
HCM Signalized Intersection LOS and Delay Ranges**

Level of Service	Description	Average Control Delay (seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. LOS E is the limit of acceptable delay.	55.01 to 80.00

**Table 4.2-1  
HCM Signalized Intersection LOS and Delay Ranges**

Level of Service	Description	Average Control Delay (seconds)
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up

Source: HCM 2010.

**Table 4.2-2  
HCM Unsignalized Intersection LOS and Delay Ranges**

Level of Service	Description	Average Control Per Vehicle (seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays; intersection capacity exceeded.	50.01 and up

Source: HCM 2010.

### Study Area Intersections

Study Area intersections to be evaluated were selected in consultation with City Staff. Table 4.2-3 lists the evaluated Study Area intersections and indicates the jurisdictional control of each. Minimum acceptable LOS standards are also indicated. Please refer also to the discussion of jurisdictional deficiency criteria and operational standards presented subsequently at Section 4.2.2.4.

**Table 4.2-3  
Study Area Intersections**

ID No.	Intersection	Jurisdiction	LOS Std.
1	Pearmain St./SR-18	Caltrans	D
2	Project Signalized Access/SR-18	Caltrans	D
3	US-395/Seneca Rd.	Caltrans	D
4	US-395/SR-18	Caltrans <sup>1</sup>	D
5	US-395/Project Signalized Access	Caltrans	D
6	US-395/Dos Palmas Rd.	Caltrans	D

**Table 4.2-3  
Study Area Intersections**

<b>ID No.</b>	<b>Intersection</b>	<b>Jurisdiction</b>	<b>LOS Std.</b>
7	US-395/Luna Rd.	Caltrans	D
8	US-395/La Mesa Rd.	Caltrans	D
9	US-395/Bear Valley Rd.	Caltrans	D
10	Cantina St./SR-18	Caltrans	D
11	Mesa Linda Avenue/Dos Palmas Rd.	City of Victorville	D
12	Mesa Linda Avenue/Luna Rd.	City of Victorville	D
13	Mesa Linda Avenue/La Mesa Rd.	City of Victorville	D
14	Topaz Rd./Luna Rd.	City of Victorville	D
15	Topaz Rd./La Mesa Rd.	City of Victorville	D
16	Topaz Rd./Bear Valley Rd.	City of Victorville	D
17	Cobalt Rd./SR-18	Caltrans	D
18	Cobalt Rd./Luna Rd.	City of Victorville	D
19	Amethyst Rd./SR-18	Caltrans	D
20	Amethyst Rd./Luna Rd.	City of Victorville	D
21	El Evado Rd./SR-18	Caltrans	D
22	Amargosa Rd./SR-18	Caltrans	D
23	Existing Dwy./SR-18	Caltrans	D
24	Existing Dwy./US-395	Caltrans	D
25	US-395/Crossroads	Caltrans	D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: 1. The intersection of US 395 and SR-18 (Study Area Intersection No. 4) is a designated CMP intersection.

### 4.2.2.3 Roadway Segment Analysis

#### Roadway Segment Capacities

Table 4.2-4 summarizes City of Victorville roadway segment roadway classifications and capacities. Capacities are expressed in terms of maximum LOS E average daily traffic (ADT) volumes. The City of Victorville General Plan EIR indicates that LOS C is the acceptable operating condition for City roadway segments. “LOS C ranges between 70% to 79% of the approximate [LOS E] ADT volume capacity” (General Plan EIR, *Transportation Study Report*, p. 27).

**Table 4.2-4  
City of Victorville Roadway Classifications and Capacities**

<b>Roadway Classification</b>	<b>Number of Lanes</b>	<b>Two-Way Traffic Volume (ADT) @ Los E (V/C = 1.00)</b>
Local	2	10,000
Collector	2	12,500
Residential Arterial	4	25,000
Arterial	2	18,750*
	4	37,500
Major Arterial	2	18,750*
	4	37,500
Super Arterial/ Modified Super Arterial	2	18,750*
	4	37,500*
	6	56,300

**Source:** General Plan EIR, *Transportation Study Report*, p. 27, Table 4.1 *Roadway Classifications and Capacities*.

**Notes:** \* For purposes of the TIA, where roadways are not constructed to ultimate configurations, roadway capacities reflect approximate proportional lane capacities for each roadway classification.

Roadway capacities identified at Table 4.2-4 are employed for planning purposes and are affected by factors including intersection spacing, configuration and control features; roadway access control(s), grades, and design geometrics; sight distance limitations; car/truck vehicle mix; and presence of, or accommodations for, pedestrian and bicycle traffic. The more detailed peak hour intersection operation analysis takes into account the above-noted factors that can affect roadway capacity. If the analysis of intersections along the affected roadway segments indicates that the controlling intersections would operate acceptably under peak hour conditions, additional through lane improvements other than those identified at the affected intersections are generally not required.

### **Study Area Roadway Segments**

Study Area roadway segments to be evaluated were selected in consultation with City Staff. Table 4.2-5 identifies evaluated Study Area roadway segments and jurisdiction of each. Minimum acceptable LOS standards are also indicated. Please refer also to the discussion of jurisdictional deficiency criteria and operational standards presented subsequently at Section 4.2.2.4.

**Table 4.2-5  
Study Area Roadway Segments**

<b>ID No.</b>	<b>Roadway Segment</b>	<b>Jurisdiction</b>	<b>LOS Std.</b>
1	Luna Road between US-395 and Mesa Linda Avenue	City of Victorville	C
2	SR-18 between Pearmain Rd. and US-395	Caltrans	D
3	SR-18 between US-395 and Cobalt Rd.	Caltrans	D
4	SR-18 between Cobalt Rd. and Amethyst Rd.	Caltrans	D
5	SR-18 between Amethyst Rd. and El Evado Rd.	Caltrans	D
6	US-395 between Seneca Rd. and SR-18	Caltrans	D
7	US-395 between SR-18 and Dos Palmas Rd.	Caltrans	D
8	US-395 between Dos Palmas Rd. and Luna Rd.	Caltrans	D
9	US-395 between Luna Rd. and La Mesa Rd.	Caltrans	D
10	US-395 between La Mesa Rd. and Bear Valley Rd.	Caltrans	D

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

#### **4.2.2.4 Jurisdictional Deficiency Criteria and Operational Standards**

Jurisdictional deficiency criteria and operational standards for circulation system facilities are presented below. For facilities located outside of the City, this EIR evaluates Project transportation/traffic impacts consistent with performance standards adopted by the agency with jurisdiction over the facility(is) under consideration.

#### **City of Victorville Deficiency Criteria and Operational Standards**

##### **Intersections**

Deficient intersections are those with an Intersection Capacity Utilization (ICU) value greater than 0.95 or HCM delay LOS worse than D (i.e., E or F). Intersections under this category would require mitigation to improve the LOS to satisfactory levels, that is, to an ICU less than 0.95 or an HCM delay LOS of D or better (City of Victorville General Plan, Circulation Element, p. C-25).

##### **Roadway Segments**

The City of Victorville General Plan EIR indicates that LOS C is the acceptable operating condition for City roadway segments (General Plan EIR, p. 4-6). Roadway segments

operating below LOS C would be considered deficient. Mitigation in the General Plan EIR requires that the City develop a program designating Deficient Roadway Segments that cannot feasibly meet the LOS C level of service standard for roadway segments (General Plan EIR, p. 2-26, et al.).

### **San Bernardino County/San Bernardino Associated Governments Congestion Management Program Deficiency Criteria and Operational Standards**

Within the Study Area, US-395 and SR-18 are both state highways and are on the Congestion Management Program (CMP) roadway network. Additionally, the intersection of US-395/SR-18 is a CMP intersection. For these facilities, the San Bernardino Associated Governments (SANBAG) CMP controls the definition of deficiency and significant impacts. The SANBAG CMP has established LOS E as the target acceptable LOS for all designated CMP roadway segments and intersections (*San Bernardino County Congestion Management Program, 2016 Update* [SANBAG] June 2016 [SANBAG CMP], p. 1-6 et al.). If the LOS at an intersection or roadway segment drops below the adopted LOS standard (LOS E), or if the current LOS is F and the quantitative measure of LOS increases by 10 percent or more, local jurisdictions are required to prepare, adopt and implement a deficiency [program] to maintain conformance with the CMP and avoid loss of the increment of the local gas tax subvention added by Proposition 111 in 1990 (SANBAG CMP, Appendix C, p. 2).

### **Caltrans Deficiency Criteria and Operational Standards**

Caltrans criteria (excerpted below) were employed in the analysis of Caltrans facilities in the Study Area:

The LOS for operating State highway facilities is based upon Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target

LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained.<sup>2</sup>

Within these analyses, LOS D is considered to be the limit of acceptable traffic operations for Caltrans-maintained intersections and roadway segments. Study Area facilities located within Adelanto City limits are all maintained by Caltrans, and are evaluated against the Caltrans LOS D standard.

### **Other Deficiency Criteria and Operational Standards**

Other potential effects of the Project (*italicized*) and applicable deficiency/significance criteria are listed below.

- *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*  
Deficiencies in these regards would occur if the Project demonstrably would not or could not conform to applicable policies and programs.
- *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.*  
Deficiencies in these regards would occur if the Project would directly or indirectly affect air traffic patterns in manner that could result in substantial safety risks.
- *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*  
Deficiencies in these regards would occur if Project design features would be hazardous, would cause or result in substantial hazards, would indirectly or directly result in collocation of incompatible use, or if the Project could not be reasonably designed and constructed to avoid or preclude substantial traffic hazards.

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<sup>2</sup> *Guide for the Preparation of Traffic Impact Studies* (State of California, Department of Transportation) December 2002.

- *Result in inadequate emergency access.*

Deficiencies in these regards would occur if the Project would impair or obstruct emergency access, or if the Project could not be reasonably designed and constructed to avoid or preclude impairment or obstruction of emergency access.

## **4.2.3 EXISTING CONDITIONS**

### **4.2.3.1 Overview**

The following discussions summarize the existing Study Area roadway network and describe other transportation modes that exist within, or are available to, the Study Area.

### **4.2.3.2 Existing Roadway System**

The major factors affecting access to the Project site are the location of the site and the efficiency of the roadway system serving the site. Efficiency of access is a function of travel time, convenience, directness, and available capacity of the routes utilized in accessing the development.

#### **Regional Access**

US-395 (N – S) and SR-18 (E – W) provide regional access to the City of Victorville and surrounding communities generally. Adjacent to the Project, US-395 and SR-18 are currently four-lane divided roadways (with additional turn lanes). SR-18 interchanges with Interstate 15 (I-15) approximately 4.3 miles easterly of the Project. US-395 interchanges with I-15 approximately 7.3 miles southerly of the Project. I-15 traverses the City of Victorville on a northwest – southeast alignment, connecting the High Desert area with the Los Angeles Basin.

#### **Site Access**

Direct access to the Project would be provided by SR-18 and US-395. The Project would construct site adjacent improvements and driveways providing access to these existing streets. Please refer to subsequent discussions of Project access and site-adjacent improvements presented at Section 4.2.5, *Project Improvements*.

### 4.2.3.3 Alternative Transportation Modes

Alternative transportation modes and services available to the Project site and vicinity are described below.

#### **Bus Services**

The Study Area is served by the Victor Valley Transit Authority (VVTA). VVTA provides bus service throughout the Victor Valley region. There are three transit routes currently provide direct service the Project site, VVTA Routes 31 (Victorville – South Adelanto), 33 (Adelanto Circulator) and 54 (Highway 395-Palmdale – Victor Valley Mall). Detailed bus routes and schedules are available at: <https://vvta.org>.

#### **Bicycle Facilities**

There are no existing bicycle facilities in the Study Area. The City of Victorville Non-Motorized Transportation Plan does however identify the following planned bicycle improvements within the Study Area:

##### Class II<sup>3</sup> On-Street Bicycle Lanes

- SR-18 from Baldy Mesa Rd. to Amargosa Rd.
- Dos Palmas Rd. from Baldy Mesa Rd. to Amargosa Rd.
- Bear Valley Rd. from Mesa View Rd. to the Oro Grande Wash
- Cantina St.
- Mesa Linda St. from northern City limits to La Mesa Rd.
- El Evado Rd. from SCLA to La Mesa Rd.
- Amargosa Rd. south of Dos Palmas Rd.

##### Class III<sup>4</sup> Bicycle Routes

- Palmdale Rd. east of Amargosa Rd.
- Luna Rd. from Mesa View Rd. to Amargosa Rd.
- La Mesa Rd. from Mesa View Rd. to Amargosa Rd.

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<sup>3</sup> Class II Bicycle Lanes are striped lanes for one-way bike travel on a street or highway, adjacent to auto travel lanes.

<sup>4</sup> Class III Bicycle Routes are signed on-street routes providing for shared use with motor vehicle traffic.

- Topaz Rd. from Luna St. to Mesa View Rd.
- Cobalt Rd.
- Amethyst Rd. from Hopland St. to Bear Valley Rd.
- El Evado Rd. south of La Mesa Rd.
- Amargosa Rd. from Hopland St. to Dos Palmas Rd.

The Project does not propose or require facilities or programs that would conflict or interfere with development and implementation of planned or proposed bicycle facilities. The Applicant would coordinate final Project designs to ensure accommodation of planned or proposed bicycle facilities. On-site Project bicycle amenities would be provided consistent with City requirements.

See also: [http://sustain.scag.ca.gov/Documents/CBResources/Victorville\\_Non-Motorized\\_Plan\\_Final\\_Report.pdf](http://sustain.scag.ca.gov/Documents/CBResources/Victorville_Non-Motorized_Plan_Final_Report.pdf)

### **Pedestrian Access**

Pedestrian access would be facilitated by Project construction of the ultimate half-section of abutting US-395 and SR-18 to include curb and gutter and sidewalk improvements. All right-of-way improvements, including any temporary or interim improvements would be designed and constructed consistent with City Conditions of Approval. Additionally, sidewalk connections between the Project uses would facilitate pedestrian access within the Project site.

#### **4.2.3.4 Existing Traffic Volumes**

Existing Study Area peak hour traffic volumes were determined by AM and PM peak hour traffic counts conducted in January 2017 (while schools were in session). Weekday morning (AM) peak traffic conditions are represented by traffic counts conducted for the two-hour period between 7:00 and 9:00 a.m. Weekday evening (PM) peak hour traffic conditions are represented by traffic counts conducted for the two-hour period from 4:00 to 6:00 p.m. The TIA traffic count data is considered representative of peak hour traffic conditions in the Study Area.

There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity that would prevent or limit roadway access and detour routes. Diagrammatic representations of existing intersection traffic volumes are presented at TIA Exhibit 4. Raw manual peak hour turning movement traffic count data sheets are provided at TIA Appendix C.

#### 4.2.3.5 Existing Conditions-Intersection Operations

Table 4.2-6 summarizes Existing Conditions (2017) intersection LOS deficiencies within the Study Area. All other Study Area intersections operate acceptably during the peak hour periods. For a complete listing of all existing Study Area intersection LOS conditions, please refer to TIA Table 5.

**Table 4.2-6  
Intersection Deficiencies, Existing Conditions**

ID #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour		Jurisdiction(s)/ LOS Std.
			Delay (V/C)	LOS	Delay (V/C)	LOS	
1	Pearmain St./SR-18	TWSC	<b>104.2</b> <b>(N/A)*</b>	F	<b>75.3</b> <b>(N/A)*</b>	F	Caltrans
3	US-395/Seneca Rd.	TWSC	<b>46.9</b> <b>(N/A)*</b>	E	<b>49.6</b> <b>(N/A)*</b>	E	Caltrans

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

**Notes:** TWSC – One- or Two-Way Stop-Control, AWSC – All-Way Stop-Control. Delay expressed in seconds. (N/A)\* - Per the 2010 Highway Capacity Manual, overall average delay and LOS are shown for signalized and all-way stop-controlled intersections. For intersections with one-or-two-way stop-control, the delay and LOS for the worst individual movement is shown. Deficiencies are indicated by **BOLD** text.

#### 4.2.3.6 Existing Conditions-Roadway Segment Operations

Table 4.2-7 summarizes Existing Conditions (2017) roadway segment LOS deficiencies within the Study Area. All other Study Area roadway operate acceptably during the peak hour periods under Existing Conditions. For a complete listing of all existing Study Area roadway segment LOS conditions, please refer to TIA Table 6.

**Table 4.2-7  
Roadway Segment Deficiencies, Existing Conditions**

ID #	Roadway	Segment Limits	Existing Lanes (Classification)	Capacity-ADT	Volume-ADT	V/C	LOS	Jurisdiction(s)/LOS Std.
9	US-395	Luna Rd. to La Mesa Rd.	2 Lanes (SA)	18,750	27,295	<b>1.456</b>	F	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2 Lanes (SA)	18,750	24,763	<b>1.321</b>	F	Caltrans/D

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

**Notes:** SA- Super Arterial; Roadway capacity reflects proportional lane capacities for the designated roadway classification. Deficiencies are indicated by **BOLD** text.

#### 4.2.4 FUTURE TRAFFIC VOLUMES

The following discussions identify traffic volumes anticipated to be generated by the Project, and traffic attributable to other growth and development within the Study Area.

##### 4.2.4.1 Project Trip Generation

Trip generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Institute of Transportation Engineers (ITE) trip generation rates and equations for different land uses are utilized by the City in determining development-related trip generation characteristics and were employed in the Project TIA in estimating the Project's trip generation. The Project gross trip generation estimates were then adjusted to reflect pass-by trip rates.

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. Pass-by trip reductions for the Project Land Uses have been reviewed and approved by the City. Project trip generation is summarized at Table 4.2-8.

Project traffic volumes considered in this analysis represent the likely maximum traffic generation and traffic impact condition. The assumptions and methods used to estimate the Project trip generation characteristics are discussed in greater detail at TIA Section 4.2, *Project Trip Generation*. As indicated at Table 4.2-8, the Project would generate an

estimated net total of 8,463 trip-ends per day on a typical weekday; 489 AM peak hour trips; and 657 PM peak hour trips.

**Table 4.2-8  
Project Trip Generation**

		AM In	AM Out	AM Total	PM In	PM Out	PM Total	ADT
<b>Fast Food With Drive-Thru</b>	<b>8.8 TSF</b>	180	173	353	149	138	287	4,144
Less 35% AM, 35% PM, 35% Daily Pass-by		-63	-61	-124	-52	-48	-100	-1,450
<i>Net Fast Food Trip Generation</i>		117	112	229	97	90	187	2,694
<b>High Turnover Sit-Down Restaurant (HTSDR)</b>	<b>4.5 TSF</b>	25	20	45	27	17	44	505
Less 25% PM Pass-by					-7	-4	-11	-11
<i>Net HTSDR Trip Generation</i>		25	20	45	20	13	33	494
<b>Retail</b>	<b>75.0 TSF</b>	45	27	72	137	148	285	2,831
Less 25% PM Pass-by					-34	-37	-71	-71
<i>Net Retail Trip Generation</i>		45	27	72	103	111	214	2,760
<b>Automated Car Wash</b>	<b>1 site (3,000 sf)</b>	29	29	58	67	67	134	944
Less 25% AM, 25% PM, 25% Daily Pass-by		-7	-7	-14	-17	-17	-34	-236
<i>Net Car Wash Trip Generation</i>		22	22	44	50	50	100	708
<b>Gas Station w/ Conv Market</b>	<b>16 VFP (5,000 sf)</b>	100	99	199	114	110	224	3,286
Less 50% AM, 45% PM, 45% Daily Pass-By		-50	-50	-100	-51	-50	-101	-1,479
<i>Net Gas Station Trip Generation</i>		50	49	99	63	60	123	1,807
<b>Total Project Gross Trips</b>		<b>379</b>	<b>348</b>	<b>727</b>	<b>494</b>	<b>481</b>	<b>975</b>	<b>11,710</b>
<b>Total Project Net Trips</b>		<b>259</b>	<b>230</b>	<b>489</b>	<b>333</b>	<b>324</b>	<b>657</b>	<b>8,463</b>

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

Notes: TSF = thousand square feet, VFP = vehicle fueling position.

#### 4.2.4.2 Project Trip Distribution

The trip distribution process establishes the directional orientation of traffic approaching and departing the site. Trip distribution is influenced by the location of the site in relation to nearby residential, employment and recreational opportunities, and proximity to the regional freeway system. Based on the trip distribution patterns, peak hour trips were assigned at Study Area intersections. Configurations of roadways and land uses within the Study Area would influence trip distribution characteristics over time. The

assumptions and methods used to determine the Project trip distribution characteristics are discussed in greater detail in TIA Section 4.3, *Project Trip Distribution*.

#### **4.2.4.3 Opening Year (2019) Traffic Conditions**

Consistent with direction provided by the Lead Agency, Opening Year (2019) Traffic Conditions without the Project reflect 2 years of background (ambient) traffic growth at 3 percent per year for the period 2017 – 2019. The assumed growth rate accounts for generalized ambient traffic growth and traffic that would be generated by related projects.

#### **4.2.4.4 Interim Year (2029/2030) Traffic Conditions**

Interim Year (2029/2030) Traffic Conditions without the Project have been derived by interpolating post-processed General Plan Buildout (2040) traffic volumes at the Study Area intersections and roadway segments based on model data provided by SANBAG. Since the Project is anticipated to be completed and generating trips in 2019, the interim year corresponds to roughly year 2029/2030, or approximately at the mid-point between the Opening Year (2019) and General Plan Buildout (2040) analysis scenarios.

#### **4.2.4.5 General Plan Buildout (2040) Traffic Conditions**

General Plan Buildout (2040) Traffic Conditions have been derived by calculating post-processed General Plan Buildout (2040) traffic volumes at the Study Area intersections and roadway segments based on model data provided by SANBAG. SANBAG model data and model post-processing worksheets are presented at TIA Appendix F.

### **4.2.5 PROJECT IMPROVEMENTS**

Project implementation would involve the construction of all necessary supporting access, roadway, and intersection improvements occurring within or adjacent to the Project site. Roadways adjacent to the Project site and site access improvements would be constructed in compliance with roadway classifications and respective cross-sections identified in the City of Victorville General Plan Circulation Element.

The Project would have two access points on SR-18 and two access points on US-395. Proposed site access and associated improvements are summarized below:

### **SR-18**

1) Full access to the Project would be provided by the existing traffic signal serving the shopping center on the northwest corner of the US-395/SR-18 intersection. The Project Applicant would be responsible for constructing the 4th (south) leg of this intersection and any necessary modifications to signal timing and intersection infrastructure.

2) Right-in/Right-out only access would be provided by the existing driveway serving the existing fast-food restaurant [Burger King] located at the southwest corner of the US-395/SR-18 intersection.

### **US-395**

1) Right-in/Right-out only access would be provided by the existing driveway serving the existing fast-food restaurant [Burger King] located at the southwest corner of the US-395/SR-18 intersection.

2) Proposed Signalized access to US-395 would be provided at the southerly boundary of the Project site. The Project Applicant would be responsible for constructing this intersection and traffic signal, including any necessary synchronization with the existing US-395/SR-18 intersection.

## **4.2.6 POTENTIAL IMPACTS AND MITIGATION MEASURES**

### **4.2.6.1 Introduction**

The following discussions focus on topical issues where it has been determined that the Project may result in potentially significant transportation/traffic impacts, based comments received through the NOP process, the analysis presented in this Section and included in the Initial Study. Standards of significance, potentially significant impacts (if any), proposed mitigation (if any), and impact significance are identified under each topical discussion.

#### **4.2.6.2 Impact Considerations/Significance Criteria**

Study Area traffic conditions without and with the Project are summarized within the subsequent discussions, followed by identification of the Project's potential impacts to Study Area transportation/circulation systems and facilities.

Under the CEQA topic: "Potential to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system . . ." potential impacts are identified for Existing, Opening Year, Interim, and General Plan Buildout Conditions. Sub-topics evaluated under each of these scenarios include:

- Intersection LOS Analysis; and
- Roadway Segment LOS Analysis.

Project traffic that would result in or contribute to transportation facility LOS deficiencies would be considered potentially significant impacts when considering the potential for the Project to "conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system." Within the Study Area, all facilities are under the jurisdictional control of either the City of Victorville or Caltrans. City of Victorville and Caltrans deficiency criteria are summarized below:

#### **City of Victorville Jurisdictional Facilities**

Project traffic would be considered to result in or cause deficiencies at facilities under jurisdictional control of the City of Victorville under the following conditions:

- The Project contributes traffic to an intersection operating at LOS D or better or a volume-to-capacity ratio of 0.95 or lower for without Project conditions, and the addition of Project traffic causes intersection LOS to degrade to LOS E or worse, or results in a volume-to-capacity greater than 0.95.
- The Project contributes additional traffic to an intersection already operating at a deficient LOS (LOS E or F) under without Project conditions.

- The Project contributes traffic to a roadway segment currently operating at LOS C, and the addition of Project traffic causes the roadway segment LOS to degrade to LOS D or worse.
- The Project contributes traffic to a roadway segment already operating at a deficient LOS (LOS D or worse) under without Project conditions.

### **Caltrans Jurisdictional Facilities**

Project traffic would be considered to result in or cause deficiencies at facilities under jurisdictional control of the Caltrans if Project traffic causes the LOS of a State Highway intersection or roadway segment to degrade from LOS D or better to LOS E or F.

Under the CEQA topic: “Conflict with an applicable congestion management program [CMP] but not limited to a level of service standards and travel demand measures . . .” CMP facilities within the Study Area are identified, and potentially significant Project impacts affecting these facilities are summarized. Project impacts at Study Area CMP facilities are coincident with impacts identified under analyses of Intersection LOS and Roadway Segment LOS presented in this Section. Per the CMP, “[t]he adopted LOS standards for the CMP system are the minimum standards allowed in California Government Code Section 65089(b)(1)(B): LOS E for all segments and intersections except those designated LOS F in Chapter 2 of the CMP. In addition, a provision is made for any LOS F facility not to deteriorate greater than 10 percent below its LOS value at the time of initial CMP adoption” (CMP, p. 1- 6). None of the Study Area CMP facilities comprise those listed at Chapter 2 of the CMP. Project traffic would be considered to result in or cause deficiencies at CMP facilities if Project traffic causes the LOS of a CMP intersection or roadway segment to degrade from LOS E or better to LOS F.

Under the CEQA topics: “Substantially increase hazards to a design feature . . .” and “Result in inadequate emergency access . . .” the analysis presented summarizes Project design and operational concepts that act to avoid hazardous conditions and ensure adequate emergency access. If the Project would substantially increase hazards to a

design feature or result in inadequate emergency access, impacts would be considered potentially significant.

Under the CEQA topic: “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” the analysis presented in the EIR Initial Study (IS) substantiates that the Project would not result in potentially significant impacts to public transit, bicycle, or pedestrian facilities. This topic is therefore not further addressed in this Section. Please refer also to IS Checklist Item XVI., c.

Under the CEQA topic: “Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities . . .” the analysis presented in the IS substantiates that the Project would not result in potentially significant impacts to public transit, bicycle, or pedestrian facilities. This topic is therefore not further addressed in this Section. Please refer also to IS Checklist Item XVI., f.

#### **4.2.6.3 Mitigation Considerations**

The Applicant’s mitigation responsibilities for potentially significant transportation/traffic impacts resulting from the Project would be fulfilled by construction of necessary improvements and/or fee payments that would be assigned to construction of required improvements.

#### **Improvements Constructed as Part of the Project**

Certain improvements necessary to ensure safe and efficient access and operating conditions along adjacent roadways and at adjacent intersections would be constructed as part of the Project. Consistent with City Conditions of Approval, the Project would construct all necessary access, roadway, and intersection improvements occurring within or adjacent to the Project site.

### **Other Required Improvements Funded by Fee Assessments and Constructed Consistent with Capital Improvements Programs and in Response to Demonstrated Demands**

The Project would also pay all requisite fees directed to the completion of other necessary Study Area traffic improvements at locations where Project traffic would contribute to existing or projected circulation system deficiencies.

- For required City of Victorville jurisdictional improvements listed on the City's Capital Improvements Program or other adopted improvements plan, payment of Development Impact Fees (DIF) [Traffic Impact Fee Program component] would fulfill the Applicant's transportation/traffic impact mitigation responsibilities. Similarly, for required extra-jurisdictional improvements identified on the CMP/Measure I exhibit(s), payment of DIF would fulfill the Applicant's mitigation responsibilities. DIF collected by the City of Victorville would be allocated for regional traffic improvements as provided for under Measure I. Additionally, area-serving transportation system improvements are funded generally through sales taxes collected under Measure I.
- For required City of Victorville jurisdictional improvements that are not identified on the City's Capital Improvements Program or other adopted improvements plan, but are consistent with the General Plan Circulation Element, fair share participation in improvements funding would fulfill the Applicant's transportation/traffic impact mitigation responsibilities.

Required Study Area improvements and associated fee payments are identified for each of the analysis timeframes (Existing, Opening Year, Interim Year, and General Plan Buildout). Required fees would be assessed prior to issuance of a building permit for each Project building, and would be collected prior to issuance of a Certificate of Occupancy for each Project building.

Improvements under each of the analysis scenarios (Existing, Opening Year, Interim Year, and General Plan Buildout) tier off the preceding scenario. That is, Opening Year

improvements reflect improvements required under Existing Conditions, plus any additional improvements addressing increased traffic demands under Opening Year Conditions. Similarly, Interim Year improvements reflect improvements required under Opening Year Conditions, plus any additional improvements addressing increased traffic demands under Interim Year Conditions; General Plan Buildout improvements reflect improvements required under Interim Year Conditions, plus any additional improvements addressing increased traffic demands under General Plan Buildout Conditions. This structure provides the City with an estimated scope of required improvements and an approximate timeframe for their implementation. The final configuration and timing for implementation of improvements identified herein is, however, subject to priorities of the City and other affected jurisdictions.

### **Fee Assessment Mechanisms and Fee Programs**

The Applicant would comply with all fee assessment requirements and fee programs. However, payment of fees would not ensure timely completion of required improvements. Within these discussions, potentially significant transportation/traffic impacts that are addressed through fee payments are considered to remain cumulatively significant and unavoidable pending completion of required improvements. Transportation/traffic impact fees that would be assessed of the Project and descriptions of fee programs assessment and fee assignment mechanisms are summarized below.

#### ***City of Victorville Development Impact Fee Program/Traffic Impact Fee Program***

To facilitate and fund the construction of roadway improvements, and thereby reduce potential impacts on the City's circulation system, the City of Victorville currently implements a qualified Traffic Impact Fee Program through which the City assesses and collects fees from new development. The Traffic Impact Fee, which is part of the City's larger Development Impact Fee (DIF) Program,<sup>5</sup> is assessed on new development to pay for the development's share of improvements needed to maintain adequate levels of

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<sup>5</sup> The City's commercial DIF as of 2018 is \$9.28 per square foot. Building Fees- Commercial (City of Victorville Development Department) Updated 12/10/2018.

See also: <https://www.victorvilleca.gov/government/city-departments/development/permit-center/fees-forms/fee-schedules>

service and to prevent further degradation of roadway facilities that may be currently operating at deficient levels. The City's Traffic Impact Fee Program is consistent with the provisions of the California Mitigation Fee Act, Government Code, and Section 66000, et seq.

In compliance with the Mitigation Fee Act, impact mitigation fees collected by the City under the DIF program are deposited into a separate capital facilities account to avoid any co-mingling of the fees with other City revenues and funds. The impact mitigation fees, and any interest thereon, must be expended solely for the purpose for which the fees were collected. The City's DIF Program thereby creates a mechanism for charging fees for new development for purposes of defraying the cost of transportation/traffic improvements related to such development. The City's DIF Program is a result of a comprehensive analysis of the need for future roadway infrastructure improvements and it allows the City to deal logically and reasonably with the cumulative impacts of development.

The timing of required traffic/transportation improvements is established through the City's Capital Improvement Program ("CIP"). The CIP is overseen by the City's Public Works Department and is amended on a periodic basis to add projects that the City identifies as required to maintain adequate operation of City roadway facilities or to remove improvements projects which have been fully funded, constructed and completed, or are determined to no longer be required. The roadway improvements identified in the CIP are consistent with the City's General Plan Circulation Element. Periodically (i.e., each year), the City conducts traffic counts, reviews traffic accident reports and reviews traffic trends throughout the City. The City uses this data to determine necessary roadway improvements and to ensure that construction of needed improvements occurs prior to, or concurrent with, the time they are necessary to maintain performance levels established by the City. The City has an established, proven record of accomplishment in implementing the DIF Program and improvements are typically constructed before roadway operations degrade beyond one of the City's performance standards.

Consistent with City of Victorville Municipal Code requirements, the Project Applicant would pay the requisite City DIF at the rate(s) then in effect consistent with the City's DIF Ordinance. DIF would be calculated at issuance of building permit(s) and would be collected at the time of final inspection for development (at issuance of final Certificate[s] of Occupancy).

### *City of Victorville Fair Share Traffic Fees*

In addition to its DIF Program, the City collects fair share traffic fees for improvements that are not programmed into the City's current CIP. These fees are assessed on a project-by-project basis as identified by each project's traffic impact analysis, to ensure that sufficient funds are available for construction of such roadway improvements if and when necessary. As with the City's DIF Program, these fair share fees are placed in a separate interest-bearing account in accordance with the requirements of the Mitigation Fee Act. As stated above, the City conducts periodic traffic counts, reviews traffic accidents and traffic trends throughout the City to determine the appropriate timing of roadway improvements. Based on this data, the City adds the identified improvements to the City's Capital Improvement Program and ensures that needed City improvements are constructed prior to the time at which the facilities are forecast to fail to achieve performance levels.

The Project's greatest traffic volume contributions represent the Project's proportional impacts at affected facilities, and would be the basis for fair share fee assessments. Fair share fees would be assessed in instances where the costs of improvements are not otherwise funded through Project payment of other established fee assessment mechanisms. Fair share fees would be calculated at issuance of building permit(s) and would be collected at the time of final inspection for development (at issuance of final Certificate[s] of Occupancy).

- Project "fair share" traffic contributions at extra-jurisdictional locations have also been identified. These fair share calculations represent the Project's proportional contributions to extra-jurisdictional impacts rather than monies that would be assessed of the Project for construction of extra-jurisdictional improvements. For

required extra-jurisdictional improvements identified on the CMP/Measure I exhibit(s), payment of DIF would fulfill the Applicant's mitigation responsibilities. DIF collected by the City of Victorville would be allocated for regional traffic improvements as provided for under Measure I. Additionally, area-serving transportation system improvements are funded generally through sales taxes collected under Measure I.

### ***County of San Bernardino Measure I***

Measure I is a San Bernardino County 20-year half-cent sales tax, which was approved by the San Bernardino County voters in 1989. It is designated for transportation planning, design, construction, operation, and maintenance of regional roadway facilities throughout portions of San Bernardino County. The improvements funded through Measure I include installation of traffic signals, road maintenance efforts, storm drain facilities, bridges, upgrades to meet American Disabilities Act (ADA) standards and other projects related to local transportation, and transit service improvements. In November 2004, voters extended Measure I through year 2031, and several transportation projects in the vicinity of the Project are included for planning, design, right-of-way acquisitions and/or construction efforts over the next 30 years.

Funds collected through the Measure I program are distributed among County jurisdictions in accordance with the Measure I Expenditure Plan. Pursuant to Measure I, 65 percent of Measure I funds are used for improvements to city streets that function as major arteries in the region, while 30 percent is earmarked for improvements to local streets. The remaining 5 percent is designated for public transit.

Measure I funds are not to be used for construction of roadway facilities necessitated by new development. The existence of Measure I does not relieve a municipality from requiring new development to contribute for the cost of roadway improvements necessitated by such development. Under Measure I, each local agency is required to adopt a development financing mechanism requiring all future development to pay its fair share for needed transportation facilities as a result of new development. This

provision of Measure I is included in the San Bernardino County Congestion Management Program as implemented by SANBAG.

In accordance with Measure I and San Bernardino County CMP, SANBAG prepared a Development Mitigation Nexus Study to identify fair share contributions for new development in support of regional transportation improvements (freeway interchanges, railroad grade separations, and regional arterial highways). The Nexus Study identifies an estimate of fair share development contributions for regional transportation improvements by local jurisdiction. The calculated fair share targets for each local jurisdiction provide the basis for fair share contribution that must be collected through each jurisdiction's Development Impact Fee Program.

The City of Victorville is in compliance with the requirements of Measure I and the San Bernardino County CMP through its current DIF Program. Accordingly, SANBAG has determined that the City's DIF Program is sufficient to fund the City's fair share of the regional improvements included within the CMP Nexus Study, as well as the improvements within the City necessitated by new development.

#### **4.2.6.4 Impact Statements**

**Potential Impact:** *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.*

## Impact Analysis:

### Existing (2017), Opening Year (2019), Interim Year (2029/2030), and General Plan Buildout (2040) Traffic Conditions

#### OVERVIEW

The following discussions summarize traffic conditions within the Study Area reflecting implementation of the Project under Existing Conditions, Opening Year Conditions, Interim Year Conditions, and General Plan Buildout Conditions. For each of the considered scenarios, potentially significant traffic impacts (deficient conditions) are identified. Less-than-significant impacts are noted, and mitigation measures are proposed for those impacts determined to be potentially significant.

#### **EXISTING CONDITIONS (2017) TRAFFIC ANALYSIS**

Existing Conditions traffic volumes are based on 2017 traffic counts conducted as part of the TIA. Existing lane configurations and traffic controls reflect 2017 conditions. Existing With-Project Conditions traffic volumes consist of the addition of Project-generated trips to existing traffic volumes. The Existing With-Project Condition reflects full buildout of the Project site. Lane configurations and traffic controls assumed to be in place for the Existing With-Project Condition are consistent with 2017 conditions. Driveways, frontage right-of-way improvements, signalization, and other facilities to be constructed by the Project are assumed to be in place.

Under the analysis of Existing Conditions, the following subtopics are discussed:

- Intersection LOS Analysis; and
- Roadway Segment LOS Analysis.

#### **Intersection LOS Analysis: Existing With-Project Conditions**

Intersections with identified deficiencies under Existing or Existing With-Project Conditions are presented at Table 4.2-9. Applicable jurisdictional LOS standards are also noted.

**Table 4.2-9**  
**Intersection Operations**  
**Existing Conditions and Existing Conditions With-Project**

ID #	Intersection	Control	Existing Conditions				Existing Conditions With-Project				Jurisdiction(s)/ LOS Std.
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
1	Pearmain St./SR-18	Signal	<b>104.2</b>	<b>F</b>	<b>75.3</b>	<b>F</b>	<b>131.1</b>	<b>F</b>	<b>99.2</b>	<b>F</b>	Caltrans/D
2	Project Signalized Access/SR-18	Signal	6.4	A	10.7	B	10.0	A *	18.7	B *	Caltrans/D
3	US-395/Seneca Rd.	TWSC	<b>46.9</b>	<b>E</b>	<b>49.6</b>	<b>E</b>	<b>56.8</b>	<b>F</b>	<b>59.8</b>	<b>F</b>	Caltrans/D
4	US-395/SR-18	Signal	53.3	D	40.0	D	<b>56.7</b>	<b>E</b>	44.0	D	Caltrans/D
5	US-395/ Project Signalized Access	<i>Analyzed for With-Project Conditions Only</i>					13.8	B *	26.9	C *	Caltrans/D
6	US-395/Dos Palmas Rd.	Signal	33.1	C	20.9	C	44.2	D	28.4	C	Caltrans/D
7	US-395/Luna Rd.	Signal	29.0	C	19.9	B	44.5	D	28.3	C	Caltrans/D
8	US-395/La Mesa Rd.	<b>Future Intersection</b>									
9	US-395/Bear Valley Rd.	Signal	29.0	C	25.7	C	32.3	C	28.0	C	Caltrans/D
10	Cantina St./SR-18	Signal	14.2	B	12.6	B	14.3	B	13.1	B	Caltrans/D
11	Mesa Linda Rd./ Dos Palmas Rd.	TWSC	17.9	C	11.8	B	27.5	D	12.8	B	City of Victorville/D
12	Mesa Linda Rd./Luna Rd.	AWSC	15.5	C	9.5	A	29.6	C	10.9	B	City of Victorville/D
13	Mesa Linda Rd./ La Mesa Rd.	AWSC	13.7	B	9.4	A	15.5	B	10.1	B	City of Victorville/D
14	Topaz Rd./Luna Rd.	AWSC	23.1	C	9.7	A	29.2	D	10.5	B	City of Victorville/D
15	Topaz Rd./La Mesa Rd.	AWSC	21.3	C	10.4	B	23.6	C	10.9	B	City of Victorville/D
16	Topaz Rd./Bear Valley Rd.	Signal	18.6	B	21.9	C	18.7	B	22.0	C	City of Victorville/D
17	Cobalt Rd./SR-18	Signal	29.2	C	30.6	C	30.5	C	34.2	C	Caltrans/D
18	Cobalt Rd./Luna Rd.	AWSC	19.5	C	9.4	A	23.0	C	10.0	A	City of Victorville/D
19	Amethyst Rd./SR-18	Signal	31.2	C	37.6	D	35.1	D	43.2	D	Caltrans/D
20	Amethyst Rd./Luna Rd.	Signal	21.9	C	18.7	B	22.7	C	20.6	C	City of Victorville/D
21	El Evado Rd./SR-18	Signal	41.1	D	38.3	D	45.8	D	41.1	D	Caltrans/D
22	Amargosa Rd./SR-18	Signal	37.1	D	41.9	D	38.2	D	43.4	D	Caltrans/D
23	Existing Dwy./SR-18	<i>Analyzed for With-Project Conditions Only</i>					13.9	B	12.8	B	Caltrans/D
24	Existing Dwy./US-395	<i>Analyzed for With-Project Conditions Only</i>					13.4	B	15.2	C	Caltrans/D
25	US-395/Crossroads	Signal	14.0	B	20.0	B	14.0	B	20.2	C	Caltrans/D

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.), March 13, 2019.

**Notes:** Delay and LOS deficiencies identified in **BOLD**. \*Reflects Project construction of required improvements.

**Level of Significance: Potentially Cumulatively Significant.** Under Existing With-Project Conditions, traffic generated by the Project in combination with existing traffic volumes would result in intersection LOS deficiencies listed at Table 4.2-9. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for intersection improvements identified at Table 4.2-10.

**Table 4.2-10  
Summary of Required Intersection Improvements: Existing Conditions With-Project**

ID #	Intersection Location	Jurisdiction	Required Improvements	Project Fair Share %
			Existing Conditions With-Project	
1	Pearmain St./SR-18	Caltrans	Signalize Intersection	1.43
3	US-395/Seneca Rd.	Caltrans	Signalize Intersection	0.97
4	US-395/SR-18	Caltrans	Install eastbound right-turn overlap phase. Restrict U-turn movements from northbound US-395 to southbound US-395.	10.92

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

**Notes:** Project "fair share" represents the Project's greatest percentage of total new traffic under the TIA analytic scenarios.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance, these requirements are not considered mitigation.

**Mitigation Measure:** No feasible mitigation measures. Construction of the improvements listed at Table 4.2-10 would successfully mitigate potentially significant intersection LOS impacts under Existing With-Project Conditions. Table 4.2-11 presents a summary of Intersection Operations under Existing With-Project Conditions without improvements, and Existing With-Project Conditions with required improvements.

**Table 4.2-11  
Intersection Operations  
Existing Conditions With-Project w/o Improvements,  
Existing Conditions With-Project w/Improvements**

ID #	Intersection Location	Existing Conditions With-Project w/o Improvements				Existing Conditions With-Project w/Improvements			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Pearmain St./SR-18	<b>131.1</b>	<b>F</b>	<b>99.2</b>	<b>F</b>	6.7	A	6.3	A
3	US-395/Seneca Rd.	<b>56.8</b>	<b>F</b>	<b>59.8</b>	<b>F</b>	14.2	B	39.7	D
4	US-395/SR-18	<b>56.7</b>	<b>E</b>	44.0	D	33.4	C	36.8	D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.  
Notes: Delay and LOS deficiencies identified in **BOLD**.

As indicated at Table 4.2-11, completion of the identified improvements would achieve acceptable intersection LOS conditions under Existing With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project’s proportional contributions to traffic impacts projected to occur under Existing With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. Mandated DIF would be paid pursuant to the City DIF Ordinance; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

Notwithstanding, fees paid consistent with City DIF mandates, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-10 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.

**Level of Significance After Mitigation: *Significant and Unavoidable*.** Based on the preceding, pending completion of the required improvements, Project contributions to intersection LOS deficiencies under Existing With-Project Conditions are recognized as

significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-9.

### Roadway Segment LOS Analysis: Existing With-Project Conditions

Roadway segments with identified deficiencies under Existing or Existing With-Project Conditions are indicated at Table 4.2-12 together with applicable jurisdictional LOS standards.

**Table 4.2-12  
Roadway Segment Operations  
Existing Conditions and Existing Conditions With-Project**

ID #	Rdwy.	Segment Limits	Existing Conditions					Existing Conditions With-Project						Jurisdiction/ LOS Std.
			Section (Lanes)	Capacity	ADT	V/C	LOS	Section (Lanes)	Capacity	ADT	V/C	LOS	Change in V/C	
1	Luna Rd.	US-395 to Mesa Linda Ave.	2	12,500	4,999	0.400	A	2	12,500	7,453	0.596	A	0.196	Victorville/C
2	SR-18	Pearmain Rd. to US-395	4	37,500	24,446	0.652	B	4	37,500	25,715	0.686	B	0.034	Caltrans/D
3	SR-18	US-395 to Cobalt Rd.	4	37,500	22,045	0.588	A	4	37,500	24,161	0.644	B	0.056	Caltrans/D
4	SR-18	Cobalt Rd. to Amethyst Rd.	4	37,500	22,967	0.612	B	4	37,500	24,744	0.660	B	0.048	Caltrans/D
5	SR-18	Amethyst Rd. to El Evado Rd.	4	37,500	22,660	0.604	B	4	37,500	24,099	0.643	B	0.039	Caltrans/D
6	US-395	Seneca Rd. to SR-18	4	37,500	30,207	0.806	D	4	37,500	30,969	0.826	D	0.020	Caltrans/D
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	33,838	0.902	E	4	37,500	38,493	<b>1.026</b>	<b>F</b>	<b>0.124</b>	Caltrans/D
8	US-395	Dos Palmas Rd. to Luna Rd.	4	37,500	28,964	0.772	C	4	37,500	32,603	0.869	D	0.097	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	27,295	<b>1.456</b>	<b>F</b>	2	18,750	28,311	<b>1.510</b>	<b>F</b>	<b>0.054</b>	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	24,763	<b>1.321</b>	<b>F</b>	2	18,750	25,355	<b>1.352</b>	<b>F</b>	<b>0.031</b>	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: V/C and LOS Deficiencies identified in **BOLD**. Notes: For purposes of the TIA, where roadways are not constructed to ultimate configurations, roadway capacities reflect approximate proportional lane capacities for each roadway classification.

**Level of Significance: Potentially Cumulatively Significant.** Under Existing With-Project Conditions, traffic generated by the Project in combination with existing traffic volumes would result in roadway segment LOS deficiencies listed at Table 4.2-12. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for roadway segment improvements identified at Table 4.2-13.

**Table 4.2-13  
Summary of Required Roadway Segment Improvements  
Existing Conditions With-Project**

ID #	Rdwy.	Segment Limits	Jurisdiction	Required Improvements Existing Conditions With-Project	Project Fair Share %
7	US-395	SR-18 to Dos Palmas Rd.	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	17.04
9	US-395	Luna Rd. to La Mesa Rd.	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	3.32
10	US-395	La Mesa Rd. to Bear Valley Rd.	Caltrans	Add northbound and southbound travel lane (1.0 miles of widening)	2.15

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

**Notes:** Project “fair share” represents the Project’s greatest percentage of total new traffic under the TIA analytic scenarios.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance, these requirements are not considered mitigation.

**Mitigation Measure:** No feasible mitigation measures. Construction of the improvements listed at Table 4.2-13 would successfully mitigate potentially significant roadway segment LOS impacts under Existing With-Project Conditions. Table 4.2-14 presents a summary of Roadway Segment Operations under Existing With-Project Conditions without improvements, and Existing With-Project Conditions with required improvements.

**Table 4.2-14  
Roadway Segment Operations  
Existing Conditions With-Project w/o Improvements,  
Existing Conditions With-Project w/Improvements**

			Existing Conditions With-Project w/o Improvements					Existing Conditions With-Project w/Improvements					Jurisdiction/ LOS Std.	
			Section (Lanes)	Capacity	ADT	V/C	LOS	Section (Lanes)	Capacity	ADT	V/C	LOS		Change in V/C
ID #	Rdwy.	Segment Limits												
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	38,493	<b>1.026</b>	F	<u>6</u>	56,300	38,493	0.684	B	-0.342	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	28,311	<b>1.510</b>	F	<u>4</u>	37,500	28,311	0.755	C	-0.755	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	25,355	<b>1.352</b>	F	<u>4</u>	37,500	25,355	0.676	B	-0.676	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

Notes: V/C and LOS Deficiencies identified in BOLD. 6, 4 = improvement.

As indicated at Table 4.2-14, completion of the identified improvements would achieve acceptable roadway segment LOS conditions under Existing With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project’s proportional contributions to traffic impacts projected to occur under Existing With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. To these ends, mandated DIF would be paid pursuant to the City DIF Ordinance; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

Notwithstanding, fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-13 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.

**Level of Significance After Mitigation: Significant and Unavoidable.** Based on the preceding, pending completion of the required improvements, Project contributions to

roadway segment LOS deficiencies under Existing With-Project Conditions are recognized as significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-12.

### **OPENING YEAR (2019) TRAFFIC ANALYSIS**

Opening Year (2019) background traffic volumes and levels of service reflect anticipated conditions at Project completion and opening in the year 2019. Consistent with direction provided by the Lead Agency, Opening Year (2019) Conditions without the Project reflect 2 years of background traffic growth at 3 percent per year for the period 2017 – 2019. The assumed growth rate accounts for generalized ambient traffic growth and traffic that would be generated by related projects.

The lane configurations and traffic controls assumed to be in place for the Opening Year Condition are consistent with Existing Conditions plus the following additional improvements:

- Completion of the planned connecting E – W segment of La Mesa Road at US-395 and signalization of the US-395/La Mesa Road intersection.

Opening Year With-Project traffic volumes comprise 2019 background traffic volumes, plus traffic generated by the Project. The analysis of Opening Year With-Project Conditions evaluates the following subtopics:

- Intersection LOS Analysis; and
- Roadway Segment LOS Analysis.

#### **Intersection LOS Analysis: Opening Year With-Project Conditions**

Intersections with identified deficiencies under Opening Year Without-Project and Opening Year With-Project Conditions are identified at Table 4.2-15. Applicable jurisdictional LOS standards are also noted.

**Table 4.2-15**  
**Intersection Operations**  
**Opening Year Conditions and Opening Year Conditions With-Project**

ID #	Intersection	Control	Opening Year				Opening Year With-Project				Jurisdiction(s)/ LOS Std.	
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Pearmain St./SR-18	TWSC	<b>160.0</b>	F	<b>109.9</b>	F	<b>201.2</b>	F	<b>145.4</b>	F	Caltrans/D	
2	Project Signalized Access/ SR-18	Signal	6.6	A	12.0	B	10.2	B	19.5	B	Caltrans/D	
3	US-395/Seneca Rd.	TWSC	<b>72.9</b>	F	<b>75.3</b>	F	<b>87.3</b>	F	<b>93.3</b>	F	Caltrans/D	
4	US-395/SR-18	Signal	<b>56.8</b>	E	43.9	D	<b>59.2</b>	E	48.3	D	Caltrans/D	
5	US-395/ Project Signalized Access	<i>Analyzed for With-Project Conditions Only</i>					13.8	B	27.5	C	Caltrans/D	
6	US-395/Dos Palmas Rd.	Signal	38.1	C	22.8	C	54.2	D	32.1	C	Caltrans/D	
7	US-395/Luna Rd.	Signal	33.7	C	21.7	C	50.9	D	32.1	C	Caltrans/D	
8	US-395/La Mesa Rd.	Signal	0.5	A	0.5	A	1.7	A	2.9	A	Caltrans/D	
9	US-395/Bear Valley Rd.	Signal	31.9	C	27.8	C	35.5	D	30.5	C	Caltrans/D	
10	Cantina St./SR-18	Signal	14.3	B	12.6	B	14.4	B	13.5	B	Caltrans/D	
11	Mesa Linda Rd./ Dos Palmas Rd.	TWSC	27.8	D	12.9	B	<b>35.0</b>	E	13.3	B	City of Victorville/D	
12	Mesa Linda Rd./Luna Rd.	AWSC	17.2	C	9.7	A	22.3	C	11.2	B	City of Victorville/D	
13	Mesa Linda Rd./ La Mesa Rd.	AWSC	14.7	B	9.6	A	16.7	C	10.3	B	City of Victorville/D	
14	Topaz Rd./Luna Rd.	AWSC	28.0	D	9.9	A	<b>38.8</b>	E	11.8	B	City of Victorville/D	
15	Topaz Rd./La Mesa Rd.	AWSC	24.9	C	10.8	B	28.5	D	11.3	B	City of Victorville/D	
16	Topaz Rd./ Bear Valley Rd.	Signal	18.9	B	22.2	C	19.1	B	22.5	C	City of Victorville/D	
17	Cobalt Rd./SR-18	Signal	33.1	C	33.9	C	34.7	C	39.5	D	Caltrans/D	
18	Cobalt Rd./Luna Rd.	AWSC	23.3	C	9.7	A	28.8	D	10.3	B	City of Victorville/D	
19	Amethyst Rd./SR-18	Signal	36.7	D	42.8	D	42.1	D	52.2	D	Caltrans/D	
20	Amethyst Rd./Luna Rd.	Signal	22.8	C	19.7	B	23.6	C	22.1	C	City of Victorville/D	
21	El Evado Rd./SR-18	Signal	46.9	D	41.1	D	52.3	D	44.2	D	Caltrans/D	
22	Amargosa Rd./SR-18	Signal	42.6	D	47.3	D	44.6	D	49.8	D	Caltrans/D	
23	Existing Dwy./SR-18	<i>Analyzed for With-Project Conditions Only</i>					14.4	B	14.4	B	Caltrans/D	
24	Existing Dwy./US-395						13.9	B	15.9	C	Caltrans/D	
25	US-395/Crossroads	Signal	14.3	B	21.1	C	14.3	B	21.3	C	Caltrans/D	

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: Delay and LOS deficiencies identified in **BOLD**.

**Level of Significance: Potentially Cumulatively Significant.** Under Opening Year With-Project Conditions, traffic generated by the Project in combination with Opening Year background traffic volumes and traffic generated by identified related projects would result in intersection LOS deficiencies listed at Table 4.2-15. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for intersection improvements identified at Table 4.2-16.

**Table 4.2-16  
Summary of Required Intersection Improvements  
Opening Year Conditions With-Project**

<b>ID #</b>	<b>Intersection Location</b>	<b>Jurisdiction</b>	<b>Required Improvements Opening Year Conditions With-Project</b>	<b>Project Fair Share %</b>
1	Pearmain St./SR-18	Caltrans	Signalize Intersection	1.43
3	US-395/Seneca Rd.	Caltrans	Signalize Intersection	0.97
4	US-395/SR-18	Caltrans	Install eastbound right-turn overlap phase. Restrict U-turn movements from northbound US-395 to southbound US-395.	8.28
11	Mesa Linda Rd./Dos Palmas Rd.	City of Victorville	Install stop signs on the eastbound and westbound Dos Palmas Road approaches	10.92
14	Topaz Rd./Luna Rd.	City of Victorville	Add eastbound through lane	42.99

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

**Notes:** Project "fair share" represents the Project's greatest percentage of total new traffic under the TIA analytic scenarios.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance these requirements are not considered mitigation.

In addition to payment of DIF, the Applicant shall pay fair share fees pursuant to Mitigation Measure 4.2.1 toward those Table 4.2-16 improvements under the jurisdiction of the City not reflected in the City's current CIP.

**Mitigation Measure:**

4.2.1 *The Applicant shall pay fair share fees toward those Table 4.2-16 improvements under the jurisdiction of the City not reflected in the City's current CIP. Prior to building permit issuance for each building, fair share fees for that building shall be calculated by the City. Prior to issuance of a Certificate of Occupancy for the considered building, the Project Applicant shall pay that building's required fair share fee amounts. Where intersection improvements require additional through lanes, fair share fees shall also be applied to construction of required through lane/roadway segment improvements.*

Table 4.2-17 presents a summary of Intersection Operations under Opening Year With-Project Conditions without improvements, and Opening Year With-Project Conditions with required improvements.

As indicated at Table 4.2-17, completion of the identified improvements would achieve acceptable intersection LOS conditions under Opening Year With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project's proportional contributions to traffic impacts projected to occur under Opening Year With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. To these ends, mandated DIF would be paid pursuant to the City DIF Ordinance; Fair Share Fees would be paid pursuant to Mitigation Measure 4.2.1; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

**Table 4.2-17  
Intersection Operations  
Opening Year Conditions With-Project w/o Improvements,  
Opening Year Conditions With-Project w/Improvements**

ID #	Intersection Location	Opening Year Conditions With-Project w/o Improvements				Opening Year Conditions With-Project w/Improvements			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Pearmain St./SR-18	<b>201.2</b>	<b>F</b>	<b>145.4</b>	<b>F</b>	7.2	A	6.3	A
3	US-395/Seneca Rd.	<b>87.3</b>	<b>F</b>	<b>93.3</b>	<b>F</b>	15.8	B	50.1	D
4	US-395/SR-18	<b>59.2</b>	<b>E</b>	48.3	D	35.8	D	41.2	D
11	Mesa Linda Rd./ Dos Palmas Rd.	<b>35.0</b>	<b>E</b>	13.3	B	14.0	B	9.0	A
14	Topaz Rd./Luna Rd.	<b>38.8</b>	<b>E</b>	11.8	B	24.9	C	10.0	A

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: Delay and LOS deficiencies identified in **BOLD**.

Notwithstanding, fees paid consistent with City DIF mandates, Fair Share Fees paid pursuant to Mitigation Measure 4.2.1, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-16 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.

**Level of Significance After Mitigation:** *Significant and Unavoidable*. Based on the preceding, pending completion of the required improvements, Project contributions to intersection LOS deficiencies under Opening Year With-Project Conditions are recognized as significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-15.

**Roadway Segment LOS Analysis, Opening Year With-Project Conditions**

Roadway segments with identified deficiencies under Opening Year or Opening Year With-Project Conditions are indicated at Table 4.2-18 together with applicable jurisdictional LOS standards.

**Table 4.2-18**  
**Roadway Segment Operations**  
**Opening Year Conditions and Opening Year Conditions With-Project**

			Opening Year Conditions					Opening Year Conditions With-Project						Jurisdiction/ LOS Std.
ID #	Rdwy.	Segment Limits	Section (Lanes)	Capacity	ADT	V/C	LOS	Section (Lanes)	Capacity	ADT	V/C	LOS	Change in V/C	
1	Luna Rd.	US-395 to Mesa Linda Ave.	2	12,500	5,300	0.424	A	2	12,500	7,754	0.620	B	0.196	Victorville/C
2	SR-18	Pearmain Rd. to US-395	4	37,500	25,930	0.691	B	4	37,500	27,199	0.725	C	0.034	Caltrans/D
3	SR-18	US-395 to Cobalt Rd.	4	37,500	23,390	0.624	B	4	37,500	25,506	0.680	B	0.056	Caltrans/D
4	SR-18	Cobalt Rd. to Amethyst Rd.	4	37,500	24,370	0.650	B	4	37,500	26,147	0.697	B	0.047	Caltrans/D
5	SR-18	Amethyst Rd. to El Evado Rd.	4	37,500	24,040	0.641	B	4	37,500	25,479	0.679	B	0.038	Caltrans/D
6	US-395	Seneca Rd. to SR-18	4	37,500	32,050	0.855	D	4	37,500	32,812	0.875	D	0.020	Caltrans/D
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	35,900	<b>0.957</b>	E	4	37,500	40,555	<b>1.081</b>	F	0.124	Caltrans/D
8	US-395	Dos Palmas Rd. to Luna Rd.	4	37,500	30,730	0.819	D	4	37,500	34,369	<b>0.917</b>	E	0.098	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	28,960	<b>1.545</b>	F	2	18,750	29,976	<b>1.599</b>	F	0.054	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	26,270	<b>1.401</b>	F	2	18,750	26,862	<b>1.433</b>	F	0.032	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: V/C and LOS Deficiencies identified in **BOLD**. Notes: For purposes of the TIA, where roadways are not constructed to ultimate configurations, roadway capacities reflect approximate proportional lane capacities for each roadway classification.

**Level of Significance: Potentially Cumulatively Significant.** Under Opening Year With-Project Conditions, traffic generated by the Project in combination with Opening Year background traffic volumes and traffic generated by identified related projects would result in roadway segment LOS deficiencies identified at Table 4.2-18. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for roadway segment improvements identified at Table 4.2-19.

**Table 4.2-19**  
**Summary of Required Roadway Segment Improvements**  
**Opening Year Conditions With-Project**

ID #	Rdwy.	Segment Limits	Jurisdiction	Required Improvements Existing Conditions With-Project	Project Fair Share %
7	US-395	SR-18 to Dos Palmas Rd.	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	17.04
8	US-395	Dos Palmas Rd. to Luna Rd.	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	11.52
9	US-395	Luna Rd. to La Mesa Rd.	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	3.32
10	US-395	La Mesa Rd. to Bear Valley Rd.	Caltrans	Add northbound and southbound travel lane (1.0 miles of widening)	2.15

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

**Notes:** Project "fair share" represents the Project's greatest percentage of total new traffic under the TIA analytic scenarios.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance, these requirements are not considered mitigation.

**Mitigation Measures:** No feasible mitigation measures. Construction of the improvements listed at Table 4.2-19 would successfully mitigate potentially significant roadway segment LOS impacts under Opening Year With-Project Conditions. Table 4.2-20 presents a summary of Roadway Segment Operations under Opening Year With-Project Conditions without improvements, and Existing With-Project Conditions with required improvements.

**Table 4.2-20**  
**Roadway Segment Operations**  
**Opening Year Conditions With-Project w/o Improvements,**  
**Opening Year Conditions With-Project w/Improvements**

			Opening Year Conditions With-Project w/o Improvements					Opening Year Conditions With-Project w/Improvements					Jurisdiction/ LOS Std.	
			Lanes	Capacity	ADT	V/C	LOS	Lanes	Capacity	ADT	V/C	LOS		Change in V/C
ID #	Rdwy.	Segment Limits												
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	40,555	<b>1.081</b>	F	<u>6</u>	56,300	40,555	0.720	C	-0.361	Caltrans/D
8	US-395	Dos Palmas Rd. to Luna Rd.	4	37,500	34,369	<b>0.917</b>	E	<u>6</u>	56,300	34,369	0.610	B	-0.307	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	29,976	<b>1.599</b>	F	<u>4</u>	37,500	29,976	0.799	C	-0.800	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	26,862	<b>1.433</b>	F	<u>4</u>	37,500	26,862	0.716	C	-0.717	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

Notes: V/C and LOS Deficiencies identified in **BOLD**. 6, 4 = improvement.

As indicated at Table 4.2-20, completion of the identified improvements would achieve acceptable roadway segment LOS conditions under Opening Year With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project's proportional contributions to traffic impacts projected to occur under Opening Year With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. To these ends mandated DIF would be paid pursuant to the City DIF Ordinance; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

Notwithstanding, fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-19 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured.

**Level of Significance After Mitigation: Significant and Unavoidable.** Based on the preceding, pending completion of the required improvements, Project contributions to roadway segment LOS deficiencies under Opening Year With-Project Conditions are

recognized as significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-18.

### **INTERIM YEAR (2029/2030) TRAFFIC ANALYSIS**

Since the Project is anticipated to be completed and generating trips in 2019, the interim year corresponds to roughly year 2029/2030. Traffic volumes for Interim Year (2029/2030) Traffic Conditions without the Project have been derived by interpolating post-processed General Plan Buildout (2040) traffic volumes at the Study Area intersections and roadway segments based on model data provided by SANBAG.

The lane configurations and traffic controls assumed to be in place for the Interim Year Condition include those provided under Existing Conditions, plus the following additional improvements:

- Construction of the east and west legs and signalization of the US-395/La Mesa Road intersection;
- Construction of the west leg of the US-395/Seneca Road intersection;
- Construction of the south leg and signalization of the Pearmain Street/SR-18 intersection;
- Construction of the south leg of the Cantina Street/SR-18 intersection.

In the following analysis of Interim Year Conditions, the following subtopics are discussed:

- Intersection LOS Analysis; and
- Roadway Segment LOS Analysis.

#### **Intersection LOS Analysis: Interim Year and Interim Year With-Project Conditions**

Intersections with identified deficiencies under Interim Year Without-Project and Interim Year With-Project Conditions are identified at Table 4.2-21. Applicable jurisdictional LOS standards are also noted.

**Table 4.2-21**  
**Intersection Operations**  
**Interim Year Conditions and Interim Year Conditions With-Project**

ID #	Intersection	Control	Interim Year				Interim Year With-Project				Jurisdiction(s)/ LOS Std.
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
1	Pearmain St./SR-18	Signal	26.5	C	25.1	C	27.0	C	25.7	C	Caltrans/D
2	Project Signalized Access/ SR-18	Signal	28.3	C	29.5	C	25.7	C	37.4	D	Caltrans/D
3	US-395/Seneca Rd.	TWSC	>999.9	F	>999.9	F	>999.9	F	>999.9	F	Caltrans/D
4	US-395/SR-18	Signal	<b>71.6</b>	E	<b>68.7</b>	E	<b>70.1</b>	E	<b>75.3</b>	E	Caltrans/D
5	US-395/ Project Signalized Access	<i>Analyzed for With-Project Conditions Only</i>					6.0	A	16.0	B	Caltrans/D
6	US-395/Dos Palmas Rd.	Signal	<b>60.2</b>	E	52.3	D	<b>76.9</b>	E	<b>74.4</b>	E	Caltrans/D
7	US-395/Luna Rd.	Signal	26.0	C	32.8	C	29.9	C	50.4	D	Caltrans/D
8	US-395/La Mesa Rd.	Signal	3.8	A	5.4	A	3.9	A	5.5	A	Caltrans/D
9	US-395/Bear Valley Rd.	Signal	51.2	D	50.1	D	51.5	D	54.2	D	Caltrans/D
10	Cantina St./SR-18	Signal	30.5	C	30.3	C	29.5	C	28.9	C	Caltrans/D
11	Mesa Linda Rd./ Dos Palmas Rd.	TWSC	29.7	D	18.4	C	<b>36.7</b>	E	21.3	C	City of Victorville/D
12	Mesa Linda Rd./Luna Rd.	AWSC	14.2	C	11.8	B	16.7	C	14.4	B	City of Victorville/D
13	Mesa Linda Rd./ La Mesa Rd.	AWSC	13.3	B	11.7	B	14.6	B	13.0	B	City of Victorville/D
14	Topaz Rd./Luna Rd.	AWSC	21.8	C	9.8	A	26.4	D	10.6	B	City of Victorville/D
15	Topaz Rd./La Mesa Rd.	AWSC	21.2	C	14.1	B	23.1	C	15.2	C	City of Victorville/D
16	Topaz Rd./ Bear Valley Rd.	Signal	38.3	D	38.6	D	39.3	D	38.5	D	City of Victorville/D
17	Cobalt Rd./SR-18	Signal	32.9	C	30.2	C	33.5	C	30.6	C	Caltrans/D
18	Cobalt Rd./Luna Rd.	AWSC	18.6	C	9.7	A	21.4	C	10.4	B	City of Victorville/D
19	Amethyst Rd./SR-18	Signal	39.6	D	40.1	D	40.0	D	40.6	D	Caltrans/D
20	Amethyst Rd./Luna Rd.	Signal	33.1	C	26.9	C	34.4	C	28.0	C	City of Victorville/D
21	El Evado Rd./SR-18	Signal	37.0	D	41.5	D	37.3	D	43.8	D	Caltrans/D
22	Amargosa Rd./SR-18	Signal	40.6	D	45.7	D	40.5	D	46.1	D	Caltrans/D
23	Existing Dwy./SR-18	<i>Analyzed for With-Project Conditions Only</i>					14.4	B	15.3	C	
24	Existing Dwy./US-395						17.2	C	21.3	C	Caltrans/D
25	US-395/Crossroads	Signal	15.7	B	33.6	C	15.8	B	34.5	C	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: Delay and LOS deficiencies identified in **BOLD**.

**Level of Significance: Potentially Cumulatively Significant.** Under Interim Year With-Project Conditions, traffic generated by the Project in combination with interpolated Interim Year background traffic volumes would result in intersection LOS deficiencies listed at Table 4.2-21. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for intersection improvements identified at Table 4.2-22.

**Table 4.2-22  
Summary of Required Intersection Improvements  
Interim Year Conditions With-Project**

<b>ID #</b>	<b>Intersection Location</b>	<b>Jurisdiction</b>	<b>Required Improvements Interim Year Conditions With-Project</b>	<b>Project Fair Share %</b>
3	US-395/Seneca Rd.	Caltrans	-Signalize Intersection -Add northbound through lane -Add southbound through lane	0.97
4	US-395/SR-18	Caltrans	-Install eastbound right-turn overlap phase. Restrict U-turn movements from northbound US- 395 to southbound US-395 -Add a northbound left-turn lane	8.28
6	US-395/Dos Palmas Rd.	Caltrans	-Add westbound right-turn lane -Add southbound right-turn lane -Install westbound right-turn overlap phase. Restrict U-turn movements from southbound US- 395 to northbound US-395	11.89
11	Mesa Linda Rd./Dos Palmas Rd.	City of Victorville	-Install stop signs on the eastbound and westbound Dos Palmas Road approaches	10.92

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

**Notes:** Project “fair share” represents the Project’s greatest percentage of total new traffic under the TIA analytic scenarios.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance these requirements are not considered mitigation.

In addition to payment of DIF, the Applicant shall pay fair share fees pursuant to Mitigation Measure 4.2.2 toward those Table 4.2-22 improvements under the jurisdiction of the City not reflected in the City’s current CIP.

**Mitigation Measure:**

4.2.2 *The Applicant shall pay fair share fees toward those Table 4.2-22 improvements under the jurisdiction of the City not reflected in the City’s current CIP. Prior to building permit issuance for each building, fair share fees for that building shall be calculated by the City. Prior to issuance of a Certificate of Occupancy for the considered building, the Project Applicant shall pay that building’s required fair share fee amounts. Where intersection improvements require additional through lanes, fair share fees shall also be applied to construction of required through lane/roadway segment improvements.*

Table 4.2-23 presents a summary of Intersection Operations under Interim Year With-Project Conditions without improvements, and Interim Year With-Project Conditions with required improvements.

**Table 4.2-23  
Intersection Operations  
Interim Year Conditions With-Project w/o Improvements,  
Interim Year Conditions With-Project w/Improvements**

ID #	Intersection Location	Interim Year Conditions With-Project w/o Improvements				Interim Year Conditions With-Project w/Improvements			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
3	US-395/Seneca Rd.	>999.9	F	>999.9	F	19.8	B	49.9	D
4	US-395/SR-18	70.1	E	75.3	E	32.7	D	47.8	D
6	US-395/Dos Palmas Rd.	76.9	E	74.4	E	51.4	D	47.2	D
11	Mesa Linda Rd./ Dos Palmas Rd.	36.7	E	21.3	C	13.8	B	10.7	B

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: Delay and LOS deficiencies identified in **BOLD**.

As indicated at Table 4.2-23, completion of the identified improvements would achieve acceptable intersection LOS conditions under Interim Year With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project’s proportional contributions to traffic impacts projected to occur under Interim Year With-Project Conditions, thereby fulfilling the

Applicant mitigation responsibilities. To these ends, mandated DIF would be paid pursuant to the City DIF Ordinance; Fair Share Fees would be paid pursuant to Mitigation Measure 4.2.2; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

Notwithstanding, fees paid consistent with City DIF mandates, Fair Share Fees paid pursuant to Mitigation Measure 4.2.2, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-22 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.

**Level of Significance After Mitigation:** *Significant and Unavoidable*. Based on the preceding, pending completion of the required improvements, Project contributions to intersection LOS deficiencies under Interim Year With-Project Conditions are recognized as significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-21.

**Roadway Segment LOS Analysis: Interim Year With-Project Conditions**

Roadway segments with identified deficiencies under Interim Year or Interim Year With-Project Conditions are presented at Table 4.2-24. Applicable jurisdictional LOS standards are also identified.

**Table 4.2-24**  
**Roadway Segment Operations**  
**Interim Year Conditions and Interim Year Conditions With-Project**

			Interim Year Conditions					Interim Year Conditions With-Project						Jurisdiction/ LOS Std.
ID #	Rdwy.	Segment Limits	Section (Lanes)	Capacity	ADT	V/C	LOS	Section (Lanes)	Capacity	ADT	V/C	LOS	Change in V/C	
1	Luna Rd.	US-395 to Mesa Linda Ave.	2	12,500	5,200	0.416	A	2	12,500	7,654	0.612	B	0.196	Victorville/C
2	SR-18	Pearmain Rd. to US-395	4	37,500	25,800	0.688	B	4	37,500	27,069	0.722	C	0.034	Caltrans/D
3	SR-18	US-395 to Cobalt Rd.	4	37,500	25,600	0.683	B	4	37,500	27,716	0.739	C	0.056	Caltrans/D
4	SR-18	Cobalt Rd. to Amethyst Rd.	4	37,500	26,800	0.715	C	4	37,500	28,577	0.762	C	0.047	Caltrans/D
5	SR-18	Amethyst Rd. to El Evado Rd.	4	37,500	26,200	0.699	B	4	37,500	27,639	0.737	C	0.038	Caltrans/D
6	US-395	Seneca Rd. to SR-18	4	37,500	42,900	<b>1.144</b>	F	4	37,500	43,662	<b>1.164</b>	F	0.020	Caltrans/D
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	45,200	<b>1.205</b>	F	4	37,500	49,855	<b>1.329</b>	F	0.124	Caltrans/D
8	US-395	Dos Palmas Rd. to Luna Rd.	4	37,500	42,900	<b>1.144</b>	F	4	37,500	46,539	<b>1.241</b>	F	0.097	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	42,100	<b>2.245</b>	F	2	18,750	43,116	<b>2.300</b>	F	0.055	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	38,200	<b>2.037</b>	F	2	18,750	38,792	<b>2.069</b>	F	0.032	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: V/C and LOS Deficiencies identified in **BOLD**. Notes: For purposes of the TIA, where roadways are not constructed to ultimate configurations, roadway capacities reflect approximate proportional lane capacities for each roadway classification.

**Level of Significance: Potentially Cumulatively Significant.** Under Interim Year With-Project Conditions, traffic generated by the Project in combination with interpolated Interim Year background traffic volumes would result in roadway segment LOS deficiencies identified at Table 4.2-24. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for roadway segment improvements identified at Table 4.2-25.

**Table 4.2-25  
Summary of Required Roadway Segment Improvements  
Interim Year Conditions With-Project**

ID #	Rdwy.	Segment Limits	Jurisdiction	Required Improvements Existing Conditions With-Project	Project Fair Share %
6	US-395	Seneca Rd. to SR-18	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	2.92
7	US-395	SR-18 to Dos Palmas Rd.	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	17.04
8	US-395	Dos Palmas Rd. to Luna Rd.	Caltrans	Add northbound and southbound travel lane (0.50 miles of widening)	11.52
9	US-395	Luna Rd. to La Mesa Rd.	Caltrans	Add two northbound and southbound travel lanes (0.50 miles of widening)	3.32
10	US-395	La Mesa Rd. to Bear Valley Rd.	Caltrans	Add two northbound and southbound travel lanes (1.0 miles of widening)	2.15

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

**Notes:** Project “fair share” represents the Project’s greatest percentage of total new traffic under the TIA analytic scenarios.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance, these requirements are not considered mitigation.

**Mitigation Measures:** No feasible mitigation measures. Construction of the improvements listed at Table 4.2-25 would successfully mitigate potentially significant roadway segment LOS impacts under Interim Year With-Project Conditions. Table 4.2-26 presents a summary of Roadway Segment Operations under Interim Year With-Project Conditions without improvements, and Interim Year With-Project Conditions with required improvements.

**Table 4.2-26  
Roadway Segment Operations  
Interim Year Conditions With-Project w/o Improvements,  
Interim Year Conditions With-Project w/Improvements**

ID #	Rdwy.	Segment Limits	Interim Year Conditions With-Project w/o Improvements					Interim Year Conditions With-Project w/Improvements					Jurisdiction/ LOS Std.	
			Lanes	Capacity	ADT	V/C	LOS	Lanes	Capacity	ADT	V/C	LOS		Change in V/C
6	US-395	Seneca Rd. to SR-18	4	37,500	46,662	<b>1.164</b>	F	<u>6</u>	56,300	43,662	0.776	C	-0.388	Caltrans/D
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	49,855	<b>1.329</b>	F	<u>6</u>	56,300	49,855	0.886	D	-0.443	Caltrans/D
8	US-395	Dos Palmas Rd. to Luna Rd.	4	37,500	46,539	<b>1.241</b>	F	<u>6</u>	56,300	46,539	0.827	D	0.414	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	43,116	<b>2.300</b>	F	<u>6</u>	56,300	43,116	0.766	C	-1.534	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	38,792	<b>2.069</b>	F	<u>6</u>	56,300	38,792	0.689	B	-1.38	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

Notes: V/C and LOS Deficiencies identified in **BOLD**. 6 = improvement.

As indicated at Table 4.2-26, completion of the identified improvements would achieve acceptable roadway segment LOS conditions under Interim Year With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project’s proportional contributions to traffic impacts projected to occur under Interim Year With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. To these ends mandated DIF would be paid pursuant to the City DIF Ordinance; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

Notwithstanding, fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-26 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured.

**Level of Significance After Mitigation:** *Significant and Unavoidable*. Based on the preceding, pending completion of the required improvements, Project contributions to

roadway segment LOS deficiencies under Interim Year With-Project Conditions are recognized as significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-24.

### **GENERAL PLAN BUILDOUT (2040) TRAFFIC ANALYSIS**

General Plan Buildout (2040) Traffic Conditions have been derived by calculating post-processed General Plan Buildout (2040) traffic volumes at the Study Area intersections and roadway segments based on model data provided by SANBAG. SANBAG model data and model post-processing worksheets are presented at TIA Appendix F.

The lane configurations and traffic controls assumed to be in place for the General Plan Buildout Conditions include those provided under Existing Conditions, plus the following additional improvements:

- Construction of the east and west legs and signalization of the US-395/La Mesa Road intersection;
- Construction of the west leg of the US-395/Seneca Road intersection;
- Construction of the south leg and signalization of the Pearmain Street/SR-18 intersection;
- Construction of the south leg of the Cantina Street/SR-18 intersection.

General Plan Buildout With-Project Condition traffic volumes comprise SANBAG-modeled background General Plan Buildout Condition traffic volumes, plus Project-generated traffic.

In the following analysis of General Plan Buildout Conditions, the following subtopics are discussed:

- Intersection LOS Analysis; and
- Roadway Segment LOS Analysis.

### Intersection LOS Analysis: General Plan Buildout With-Project Conditions

Intersections with identified deficiencies under General Plan Buildout and General Plan Buildout With-Project Conditions are presented at Table 4.2-27. Applicable jurisdictional LOS standards are also identified.

**Table 4.2-27**  
**Intersection Operations**  
**General Plan Buildout Conditions and General Plan Buildout Conditions With-Project**

ID #	Intersection	Control	General Plan Buildout				General Plan Buildout With-Project				Jurisdiction(s)/ LOS Std.
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
1	Pearmain St./SR-18	Signal	39.1	D	31.8	C	30.9	C	27.9	C	Caltrans/D
2	Project Signalized Access/ SR-18	Signal	34.0	C	34.3	C	34.5	C	34.5	C	Caltrans/D
3	US-395/Seneca Rd.	TWSC	>999.9	F	>999.9	F	>999.9	F	>999.9	F	Caltrans/D
4	US-395/SR-18	Signal	98.6	F	68.7	E	116.4	F	136.9	F	Caltrans/D
5	US-395/ Project Signalized Access	<i>Analyzed for With-Project Conditions Only</i>					21.1	C	40.3	D	Caltrans/D
6	US-395/Dos Palmas Rd.	Signal	107.1	F	124.2	F	100.4	F	182.8	F	Caltrans/D
7	US-395/Luna Rd.	Signal	60.7	E	85.8	F	84.4	F	130.2	F	Caltrans/D
8	US-395/La Mesa Rd.	Signal	5.4	A	7.6	A	5.5	A	9.5	A	Caltrans/D
9	US-395/Bear Valley Rd.	Signal	81.1	F	108.8	F	96.2	F	114.0	F	Caltrans/D
10	Cantina St./SR-18	Signal	35.7	D	37.3	D	29.0	C	36.2	D	Caltrans/D
11	Mesa Linda Rd./ Dos Palmas Rd.	TWSC	77.4	F	75.5	F	108.2	F	116.5	F	City of Victorville/D
12	Mesa Linda Rd./Luna Rd.	AWSC	16.6	C	16.1	C	19.7	C	20.3	C	City of Victorville/D
13	Mesa Linda Rd./ La Mesa Rd.	AWSC	16.1	C	15.5	C	18.3	C	18.5	C	City of Victorville/D
14	Topaz Rd./Luna Rd.	AWSC	24.3	C	10.0	A	30.7	D	10.9	A	City of Victorville/D
15	Topaz Rd./La Mesa Rd.	AWSC	29.8	D	17.7	C	33.6	D	19.5	C	City of Victorville/D
16	Topaz Rd./ Bear Valley Rd.	Signal	37.1	D	40.9	D	38.6	D	40.4	D	City of Victorville/D
17	Cobalt Rd./SR-18	Signal	36.5	D	31.5	C	36.8	D	31.7	C	Caltrans/D
18	Cobalt Rd./Luna Rd.	AWSC	21.3	C	10.1	B	25.4	D	10.8	B	City of Victorville/D
19	Amethyst Rd./SR-18	Signal	38.5	D	47.8	D	38.6	D	49.2	D	Caltrans/D
20	Amethyst Rd./Luna Rd.	Signal	35.6	D	38.6	C	39.4	D	30.3	C	City of Victorville/D
21	El Evado Rd./SR-18	Signal	41.2	D	44.6	D	41.2	D	46.0	D	Caltrans/D
22	Amargosa Rd./SR-18	Signal	44.3	D	51.2	D	43.8	D	51.8	D	Caltrans/D

**Table 4.2-27  
Intersection Operations  
General Plan Buildout Conditions and General Plan Buildout Conditions With-Project**

ID #	Intersection	Control	General Plan Buildout				General Plan Buildout With-Project				Jurisdiction(s)/ LOS Std.
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
23	Existing Dwy./SR-18	<i>Analyzed for With-Project Conditions Only</i>					15.1	C	15.8	C	Caltrans/D
24	Existing Dwy./US-395						22.8	C	31.5	D	Caltrans/D
25	US-395/Crossroads	Signal	21.5	C	<b>66.7</b>	<b>E</b>	21.9	C	<b>69.6</b>	<b>E</b>	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: Delay and LOS deficiencies identified in **BOLD**.

**Level of Significance: Potentially Cumulatively Significant.** Under General Plan Buildout With-Project Conditions, traffic generated by the Project in combination with SANBAG-modeled background General Plan Buildout Condition traffic volumes would result in intersection LOS deficiencies listed at Table 4.2-27. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for intersection improvements identified at Table 4.2-28.

**Table 4.2-28  
Summary of Required Intersection Improvements  
General Plan Buildout Conditions With-Project**

ID #	Intersection Location	Jurisdiction	Required Improvements General Plan Buildout Conditions With-Project	Project Fair Share %
3	US-395/Seneca Rd.	Caltrans	-Signalize Intersection -Add two northbound through lanes* -Add two southbound through lanes* -Add a northbound left-turn lane	0.97  1.86
4	US-395/SR-18	Caltrans	-Install eastbound right-turn overlap phase. -Restrict U-turn movements from northbound US-395 to southbound US-395 -Add a northbound left-turn lane -Add a northbound through lane* -Add a southbound through lane* -Add an eastbound left-turn lane -Add a southbound left-turn lane	8.28
6	US-395/Dos Palmas Rd.	Caltrans	-Add westbound right-turn lane -Add southbound right-turn lane -Add northbound through lane*	11.89

**Table 4.2-28  
Summary of Required Intersection Improvements  
General Plan Buildout Conditions With-Project**

ID #	Intersection Location	Jurisdiction	Required Improvements General Plan Buildout Conditions With-Project	Project Fair Share %
			-Add southbound through lane* -Install westbound right-turn overlap phase. -Restrict U-turn movements from southbound US-395 to northbound US-395	
7	US-395/Luna Rd.	Caltrans	-Add a northbound through lane* -Add a southbound through lane* -Add a westbound right-turn lane	10.37
9	US-395/Bear Valley Rd.	Caltrans	-Add a northbound through lane* -Add a southbound through lane* -Add a westbound left-turn lane -Add a northbound left-turn lane -Add a southbound left-turn lane	2.33
11	Mesa Linda Rd./ Dos Palmas Rd.	City of Victorville	-Install stop signs on the eastbound and westbound Dos Palmas Road approaches	10.92
25	US-395/Crossroads	Caltrans	-Add a southbound through lane*	1.77

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

**Notes:** Project “fair share” represents the Project’s greatest percentage of total new traffic under the TIA analytic scenarios. \* Included as part of US-395 widening.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance these requirements are not considered mitigation.

In addition to payment of DIF, the Applicant shall pay fair share fees pursuant to Mitigation Measure 4.2.3 toward those Table 4.2-28 improvements under the jurisdiction of the City not reflected in the City’s current CIP.

**Mitigation Measure:**

*4.2.3 Prior to building permit issuance for each building, the Project Applicant shall pay that building’s required fair share fee amounts toward the construction of City of Victorville improvements required under Opening Year With-Project Conditions, listed at EIR Table 4.2-28 and not included in the City’s current CIP. Where intersection improvements*

require additional through lanes, fair share fees shall also be applied to construction of required through lane/roadway segment improvements.

Table 4.2-29 presents a summary of Intersection Operations under General Plan Buildout With-Project Conditions without improvements, and General Plan Buildout With-Project Conditions with required improvements.

**Table 4.2-29**  
**Intersection Operations**  
**General Plan Buildout Conditions With-Project w/o Improvements,**  
**General Plan Buildout Conditions With-Project w/ Improvements**

ID #	Intersection Location	Conditions				General Plan Buildout Conditions			
		General Plan Buildout With-Project w/o Improvements		General Plan Buildout With-Project w/ Improvements		General Plan Buildout With-Project w/o Improvements		General Plan Buildout With-Project w/ Improvements	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
3	US-395/Seneca Rd.	>999.9	F	>999.9	F	19.0	B	43.9	D
4	US-395/SR-18	116.4	F	136.9	F	52.2	D	42.6	D
6	US-395/Dos Palmas Rd.	100.4	F	182.8	F	33.6	C	34.3	C
7	US-395/Luna Rd.	84.4	F	130.2	F	50.8	D	44.3	D
9	US-395/Bear Valley Rd.	96.2	F	114.0	F	41.6	D	43.1	D
11	Mesa Linda Rd./Dos Palmas Rd.	108.2	F	116.5	F	18.4	C	15.7	C
25	US-395/Crossroads	21.9	C	69.6	E	18.2	B	45.5	D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: Delay and LOS deficiencies identified in **BOLD**.

As indicated at Table 4.2-29, completion of the identified improvements would achieve acceptable intersection LOS conditions under General Plan Buildout With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project’s proportional contributions to traffic impacts projected to occur under General Plan Buildout With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. To these ends, mandated DIF would be paid pursuant to the City DIF Ordinance; Fair Share Fees would be paid pursuant to Mitigation Measure 4.2.3; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

Notwithstanding, fees paid consistent with City DIF mandates, Fair Share Fees paid pursuant to Mitigation Measure 4.2.3, and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-28 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured, and impacts would remain cumulatively significant until such time as the required improvements are completed.

**Level of Significance After Mitigation:** *Significant and Unavoidable*. Based on the preceding, pending completion of the required improvements, Project contributions to intersection LOS deficiencies under General Plan Buildout With-Project Conditions are recognized as significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-27.

**Roadway Segment LOS Analysis: General Plan Buildout With-Project Conditions**

Roadway segments with identified deficiencies under General Plan Buildout or General Plan Buildout With-Project Conditions are presented at Table 4.2-30. Applicable jurisdictional LOS standards are also identified.

**Table 4.2-30  
Roadway Segment Operations  
General Plan Buildout Conditions and General Plan Buildout Conditions With-Project**

ID #	Rdwy.	Segment Limits	General Plan Buildout Conditions					General Plan Buildout Conditions With-Project					Jurisdiction/ LOS Std.	
			Section (Lanes)	Capacity	ADT	V/C	LOS	Section (Lanes)	Capacity	ADT	V/C	LOS		Change in V/C
1	Luna Rd.	US-395 to Mesa Linda Ave.	2	12,500	5,500	0.440	A	2	12,500	7,954	0.636	B	0.196	Victorville/C
2	SR-18	Pearmain Rd. to US-395	4	37,500	27,100	0.723	C	4	37,500	28,369	0.757	C	0.034	Caltrans/D
3	SR-18	US-395 to Cobalt Rd.	4	37,500	29,200	0.779	C	4	37,500	31,316	0.835	D	0.056	Caltrans/D
4	SR-18	Cobalt Rd. to Amethyst Rd.	4	37,500	30,700	0.819	D	4	37,500	32,477	0.866	D	0.047	Caltrans/D
5	SR-18	Amethyst Rd. to	4	37,500	29,700	0.792	C	4	37,500	31,139	0.830	D	0.038	Caltrans/D

**Table 4.2-30  
Roadway Segment Operations  
General Plan Buildout Conditions and General Plan Buildout Conditions With-Project**

ID #	Rdwy.	Segment Limits	General Plan Buildout Conditions					General Plan Buildout Conditions With-Project					Jurisdiction/ LOS Std.	
			Section (Lanes)	Capacity	ADT	V/C	LOS	Section (Lanes)	Capacity	ADT	V/C	LOS		Change in V/C
		El Evado Rd.												
6	US-395	Seneca Rd. to SR-18	4	37,500	55,500	<b>1.480</b>	F	4	37,500	56,262	<b>1.500</b>	F	0.020	Caltrans/D
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	56,500	<b>1.507</b>	F	4	37,500	61,155	<b>1.631</b>	F	0.124	Caltrans/D
8	US-395	Dos Palmas Rd. to Luna Rd.	4	37,500	56,900	<b>1.517</b>	F	4	37,500	60,539	<b>1.614</b>	F	0.097	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	56,900	<b>3.035</b>	F	2	18,750	57,916	<b>3.089</b>	F	0.054	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	51,700	<b>2.757</b>	F	2	18,750	52,292	<b>2.789</b>	F	0.032	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

Notes: V/C and LOS Deficiencies identified in **BOLD**. Notes: For purposes of the TIA, where roadways are not constructed to ultimate configurations, roadway capacities reflect approximate proportional lane capacities for each roadway classification.

**Level of Significance: Potentially Cumulatively Significant.** Under General Plan Buildout With-Project Conditions, traffic generated by the Project in combination with SANBAG-modeled background General Plan Buildout Condition traffic volumes would result in roadway segment LOS deficiencies identified at Table 4.2-29. These deficiencies are potentially significant cumulative impacts. The Applicant would pay all requisite DIF, a portion of which would be allocated by the City for roadway segment improvements identified at Table 4.2-31.

**Table 4.2-31  
Summary of Required Roadway Segment Improvements  
General Plan Buildout Conditions With-Project**

ID #	Rdwy.	Segment Limits	Jurisdiction	Required Improvements Existing Conditions With-Project	Project Fair Share %
6	US-395	Seneca Rd. to SR-18	Caltrans	Add two northbound and two southbound travel lanes (0.50 miles of widening)	2.92
7	US-395	SR-18 to Dos Palmas Rd.	Caltrans	Add two northbound and two southbound travel lanes (0.50 miles of widening)	17.04

**Table 4.2-31  
Summary of Required Roadway Segment Improvements  
General Plan Buildout Conditions With-Project**

ID #	Rdwy.	Segment Limits	Jurisdiction	Required Improvements Existing Conditions With-Project	Project Fair Share %
8	US-395	Dos Palmas Rd. to Luna Rd.	Caltrans	Add two northbound and two southbound travel lanes (0.50 miles of widening)	11.52
9	US-395	Luna Rd. to La Mesa Rd.	Caltrans	Add three northbound and three southbound travel lanes (0.50 miles of widening)	3.32
10	US-395	La Mesa Rd. to Bear Valley Rd.	Caltrans	Add three northbound and three southbound travel lanes (1.0 miles of widening)	2.15

**Source:** SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.) March 13, 2019.

**Notes:** Project "fair share" represents the Project's greatest percentage of total new traffic under the TIA analytic scenarios.

Additionally, Measure I funds would be allocated for eligible improvements per the incumbent Measure I Expenditure Plan. Because payment of DIF and collection of Measure I funds are mandated by Ordinance, these requirements are not considered mitigation.

**Mitigation Measures:** No feasible mitigation measures. Construction of the improvements listed at Table 4.2-31 would successfully mitigate potentially significant roadway segment LOS impacts under General Plan Buildout With-Project Conditions. Table 4.2-32 presents a summary of Roadway Segment Operations under General Plan Buildout With-Project Conditions without improvements, and General Plan Buildout With-Project Conditions with required improvements.

**Table 4.2-32  
Roadway Segment Operations  
General Plan Buildout Conditions With-Project w/o Improvements,  
General Plan Buildout Conditions With-Project w/Improvements**

			General Plan Buildout Conditions With-Project w/o Improvements					General Plan Buildout Conditions With-Project w/Improvements					Jurisdiction/ LOS Std.	
ID #	Rdwy.	Segment Limits	Lanes	Capacity	ADT	V/C	LOS	Lanes	Capacity	ADT	V/C	LOS		Change in V/C
6	US-395	Seneca Rd. to SR-18	4	37,500	52,262	<b>1.500</b>	F	<u>g</u>	75,000	52,262	0.750	C	-0.750	Caltrans/D
7	US-395	SR-18 to Dos Palmas Rd.	4	37,500	61,155	<b>1.631</b>	F	<u>g</u>	75,000	61,155	0.815	D	-0.816	Caltrans/D
8	US-395	Dos Palmas Rd. to Luna Rd.	4	37,500	60,539	<b>1.614</b>	F	<u>g</u>	75,000	60,539	0.807	D	0.807	Caltrans/D
9	US-395	Luna Rd. to La Mesa Rd.	2	18,750	57,916	<b>3.089</b>	F	<u>g</u>	75,000	57,916	0.772	C	-2.317	Caltrans/D
10	US-395	La Mesa Rd. to Bear Valley Rd.	2	18,750	52,292	<b>2.789</b>	F	<u>g</u>	75,000	52,292	0.697	B	-2.092	Caltrans/D

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

Notes: V/C and LOS Deficiencies identified in **BOLD**. g = improvement.

As indicated at Table 4.2-32, completion of the identified improvements would achieve acceptable roadway segment LOS conditions under General Plan Buildout With-Project Conditions. To address the identified potentially significant impacts, the Applicant would pay all requisite fees, offsetting the Project’s proportional contributions to traffic impacts projected to occur under General Plan Buildout With-Project Conditions, thereby fulfilling the Applicant mitigation responsibilities. To these ends mandated DIF would be paid pursuant to the City DIF Ordinance; and Measure I funds would be collected and allocated for eligible improvements per the incumbent Measure I Expenditure Plan.

Notwithstanding, fees paid consistent with City DIF mandates and assignment of eligible Measure I funds would not ensure timely completion of required improvements. Thus, while the physical improvements identified at Table 4.2-31 would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured.

**Level of Significance After Mitigation:** *Significant and Unavoidable.* Based on the preceding, pending completion of the required improvements, Project contributions to roadway segment LOS deficiencies under Opening Year With-Project Conditions are recognized as significant and unavoidable at the deficient Study Area intersections listed at previous Table 4.2-30.

#### **SUMMARY OF FEE-BASED MITIGATION REQUIREMENTS AND ASSOCIATED IMPROVEMENTS**

Required improvements are previously identified herein for each development/analytic scenario (Existing Conditions, Opening Year Conditions, Interim Year Conditions and General Plan Buildout Conditions). As applicable, DIF and Fair Share Fees paid by the Applicant, as well as Measure I fees collected by the city would be directed to fund the required improvements. Despite the incorporation of Mitigation Measures 4.2.1 and 4.2.2 and Project payment of all requisite fees, the Project's contribution to cumulative traffic impacts would be considered significant and unavoidable, as noted previously in these discussions.

**Potential Impact:** *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.*

#### **Impact Analysis:**

##### **CMP Roadways**

Within the Study Area, SR-395 and SR-18 are both state highways and are on the CMP roadway network. For these facilities, the SANBAG CMP controls the definition of deficiency and significant impact on roadway segments. The SANBAG CMP has established LOS E as the target acceptable LOS for all designated CMP intersections and roadway segments (*San Bernardino County Congestion Management Program, 2016 Update* [SANBAG] June 2016 [SANBAG CMP], p. 1-6 et al.). "If the LOS at an intersection or roadway segment drops below the adopted LOS standard (LOS E), or if the current LOS is F and the quantitative measure of LOS increases by 10 percent or more, local jurisdictions are required to prepare, adopt and implement a deficiency [plan] to

maintain conformance with the CMP and avoid loss of the increment of the local gas tax subvention added by Proposition 111 in 1990” (SANBAG CMP, p. C-2). Within this analysis, the more conservative Caltrans LOS D threshold is employed in determining roadway segment impact significance.

### **CMP Intersections**

Within the Study Area, the intersection of US 395 and SR-18 is a designated CMP intersection. Within this analysis, LOS D is the minimum required LOS to be maintained at all Study Area intersections, including the Study Area CMP intersections. Study Area intersections determined herein to operate at deficient LOS (LOS E, LOS F) would conflict applicable CMP LOS standard.

Potentially significant impacts occurring at Study Area CMP roadway segments and intersections are coincident with potentially significant impacts occurring within the Study Area generally as identified in this Section.

**Level of Significance: *Potentially Cumulatively Significant.***

### **Mitigation Measures:**

#### **CMP Roadway Segments**

Mitigation of roadway segment impacts (including CMP roadway segment deficiencies) are addressed through city-wide and regional improvements plans and programs. The Applicant would pay required DIF, a portion of which would be allocated for Study Area CMP roadway segment improvements. Payment of DIF would satisfy the Applicant’s mitigation responsibilities for incremental traffic impacts affecting Study Area CMP roadway segments under all TIA scenarios (Existing Conditions, Opening Year Conditions, Interim Year Conditions, and General Plan Buildout Conditions). There are no feasible measures that can be autonomously implemented by the Lead Agency or the Project Applicant that would reduce cumulatively significant impacts to Study Area CMP roadways segments to levels that would be less-than-significant. On this basis, Project

impacts to CMP roadway segments identified listed Table would be significant and unavoidable under one or more of the TIA scenarios.

**Table 4.2-33  
Summary of CMP Roadway Segment Significant and Unavoidable Impacts**

ID #	Rdwy.	Segment Limits
6	US-395	Seneca Rd.to SR-18
7	US-395	SR-18 to Dos Palmas Rd.
8	US-395	Dos Palmas Rd. to Luna Rd.
9	US-395	Luna Rd. to La Mesa Rd.
10	US-395	La Mesa Rd. to Bear Valley Rd.

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

**CMP Intersections**

Mitigation for CMP intersection deficiencies is coincident with intersection improvements identified herein. No additional mitigation is proposed or required.

***Level of Significance after Mitigation: Significant and Unavoidable.***

The Project would pay all requisite fees for improvements at Study Area CMP intersections. However, as discussed previously herein, fee payments would not ensure timely completion of improvements required for mitigation of cumulatively significant impacts affecting Study Area CMP intersections. Pending completion of required improvements, Project contributions to impacts affecting the Study Area CMP intersection listed at Table 4.2-34 would be significant and unavoidable under one or more of the TIA scenarios.

**Table 4.2-34  
Summary of CMP Intersection Significant and Unavoidable Impacts**

ID #	Intersection
6	US-395/SR-18

Source: SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis (TJW Engineering, Inc.). March 13, 2019.

**Potential Impact:** *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.*

**Impact Analysis:** To ensure appropriate design and implementation of all Project circulation improvements, the final design of the Project site plan, to include locations and design of proposed driveways, shall be reviewed and approved by the City Traffic Engineer. In addition, representatives of the City's Police and Fire Departments would review the Project's plans to ensure that emergency access is provided consistent with Department requirements. Efficient and safe access within, and access to, the Project is provided by the site plan design concept, site access improvements, and site adjacent roadway improvements included as components of the Project. On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the Project site. Sight distance at each project access point would be reviewed to ensure conformance with City sight distance standards at the time of preparation of final grading, landscape and street improvement plans. Based on the preceding, the implemented Project inclusive of the design features discussed herein would not substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.

It is also recognized that temporary and short-term traffic detours and traffic disruption could result during Project construction activities. Management and control of construction traffic would be addressed through the preparation of a construction area traffic management plan, to be submitted to the City prior to or concurrent with Project building plan review(s). The Project Construction Traffic Management Plan (Plan), summarized within the EIR Project Description identifies traffic controls for any street closures, detours, or other potential disruptions to traffic circulation during Project construction. The Plan would also be required to identify construction vehicle access routes, and hours of construction traffic. Please refer also to EIR Section 3.0, *Project Description*, 3.4.10 *Construction Traffic Management Plan*.

As supported by the preceding discussions, the potential for the Project to substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

## **4.3 AIR QUALITY**

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## 4.3 AIR QUALITY

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### *Abstract*

*This Section addresses the following potential air quality impacts that may result from construction and implementation of the Project:*

- Conflict with or obstruct implementation of an applicable air quality plan;*
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors;*
- Expose sensitive receptors to substantial pollutant concentrations; or*
- Create objectionable odors affecting a substantial number of people.*

*The Project is located in the Mojave Desert Air Basin (MDAB), under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD). As discussed here, the Project would result in, or would contribute considerably, to the following significant and unavoidable air quality impacts:*

- *Project operational-source Oxides of Nitrogen (NO<sub>x</sub>) emissions would exceed applicable MDAQMD regional thresholds.*
- *The Project is located within ozone and PM<sub>10</sub>/PM<sub>2.5</sub> nonattainment areas (NO<sub>x</sub> and PM<sub>10</sub>/PM<sub>2.5</sub> are ozone precursors). Project operational-source NO<sub>x</sub> emissions exceedances would result in a cumulatively considerable net increase in criteria pollutants (ozone and PM<sub>10</sub>/PM<sub>2.5</sub>) for which the Project region is nonattainment.*
- *Project operational-source NO<sub>x</sub> emissions exceedances have the potential to increase the frequency or severity of a violation in the federal or state ambient air quality standards. Project operational-source NO<sub>x</sub> emissions exceedances may delay or obstruct goals and strategies articulated in the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert (Attainment Plans). These Attainment Plans comprise the Air Quality Management Plan (AQMP) for the MDAB. On this basis, the Project would conflict with the referenced Attainment Plans and the governing AQMP.*

*Other potential air quality impacts of the Project would be less-than-significant.*

#### **4.3.1 INTRODUCTION**

This Section presents existing air quality conditions and identifies potential air quality impacts resulting from construction and operation of the Project. Local and regional climate, meteorology and air quality are discussed, as well as existing federal, state and regional air quality regulations. The information presented in this Section is summarized from *Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville* (Urban Crossroads, Inc.) March 13, 2019 (Project AQIA). The Project AQIA and supporting air quality modeling data are presented in their entirety at EIR Appendix C.

## 4.3.2 AIR QUALITY FUNDAMENTALS

Air pollution comprises many substances generated from a variety of sources, both man-made and natural. Industrialization occurring in the twentieth century, and especially activities relying on the burning of fossil fuels, creates air pollution. Most air pollutant contaminants are wasted energy in the form of unburned fuels or by-products of the combustion process.

Motor vehicles are by far the most significant source of air pollutants in urban areas, emitting photochemically reactive hydrocarbons (unburned fuel), carbon monoxide, and oxides of nitrogen. These primary pollutants chemically react in the atmosphere with sunlight and the passage of time to form secondary pollutants such as ozone.

Air pollutants are generally classified as either primary or secondary pollutants. Primary pollutants are generated daily and emitted directly from the source, whereas secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. Examples of primary pollutants include carbon monoxide (CO), oxides of nitrogen (NO<sub>2</sub> and NO), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and various hydrocarbons or reactive organic gases (ROGs). Examples of secondary pollutants include ozone (O<sub>3</sub>), which is a product of the reaction between NO<sub>x</sub> and ROGs in the presence of sunlight. Other secondary pollutants include photochemical aerosols.

To aid in the review of discussions presented subsequently in this Section, recurring terms, abbreviations, and acronyms are defined as follows: PPM - Parts per Million; µg/m<sup>3</sup> - Micrograms Per Cubic Meter; PM<sub>10</sub> - Particulate Matter Less Than 10 Microns In Diameter; PM<sub>2.5</sub> - Particulate Matter Less Than 2.5 Microns In Diameter.

### 4.3.2.1 Criteria Air Pollutants

Criteria air pollutants are those air contaminants for which air quality standards currently exist. Currently, state and federal air quality standards exist for ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, suspended particulate matter, and lead. California has also set standards for visibility, sulfates, hydrogen sulfide, and vinyl chloride. Evaluated

criteria air contaminants, or their precursors, typically also include reactive organic gases, oxides of nitrogen, sulfur oxides, and respirable particulate matter. Pollutant characteristics, mechanisms of pollutant origination and potential health effects of air pollutants are described below.

## **Carbon Monoxide**

### *Properties and Sources*

Carbon monoxide (CO) is a colorless, odorless, toxic gas formed by incomplete combustion of fossil fuels. CO levels tend to be highest during the winter mornings, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest CO concentrations are generally found near congested transportation corridors and intersections. Other sources include aircraft, off-road vehicles, stationary equipment (e.g., fuel-fired furnaces, gas water heaters, fireplaces, gas stoves, gas dryers, charcoal grills), and landscape maintenance equipment such as lawnmowers and leaf blowers.

### *Human Health Effects*

A consistent association between increased ambient CO levels and higher-than-average rates of hospital admissions for heart diseases (such as congestive heart failure) has been observed. Carbon monoxide can cause decreased exercise capacity, and adversely affects conditions with an increased demand for oxygen supply (fetal development, chronic hypoxemia, anemia, and diseases involving the heart and blood vessels). Exposure to CO can cause impairment of time interval estimation and visual function.

## **Ozone**

### *Properties and Sources*

Ozone (O<sub>3</sub>) is a highly reactive and unstable gas that is formed when volatile organic compounds and oxides of nitrogen, both of which are byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone

concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of the pollutant.

### ***Human Health Effects***

Short-term exposure to ozone can cause a decline in pulmonary function in healthy individuals including breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and immunological changes. Additionally, an increase in the frequency of asthma attacks, cough, chest discomfort and headache can result.

A correlation has been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality because of long-term ozone exposure. A risk to public health implied by altered connective tissue metabolism and host defense in animals has also been reported.

### **Oxides of Nitrogen**

#### ***Properties and Sources***

Oxides of nitrogen (NO<sub>x</sub>) are integral to the process of photochemical smog production. During combustion, oxygen reacts with nitrogen to produce NO<sub>x</sub>. Two major forms of NO<sub>x</sub> are nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). Natural causal sources or originators of NO<sub>x</sub> include lightning, soils, wildfires, stratospheric intrusion, and the oceans. Natural sources accounted for approximately seven percent of 1990 emissions of NO<sub>x</sub> for the United States (EPA 1997). Atmospheric deposition of NO<sub>x</sub> occurs when atmospheric or airborne nitrogen is transferred to water, vegetation, soil, or other materials. Acid deposition involves the deposition of nitrogen and/or sulfur acidic compounds that can harm natural resources and materials. The major source of NO<sub>x</sub> in the Basin is on-road vehicles. Stationary commercial and service source fuel combustion are other contributors.

### ***Human Health Effects***

Exposure to NO<sub>x</sub> may alter sensory responses or impair pulmonary function and may increase incidence of acute respiratory disease including infections and respiratory symptoms in children. Difficulty in breathing in healthy individuals as well as bronchitic groups may also occur. NO<sub>x</sub> is also a precursor to ozone and PM<sub>10</sub>/PM<sub>2.5</sub>. As noted above, health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

### **Sulfur Dioxide**

#### ***Properties and Sources***

Sulfur dioxide (SO<sub>2</sub>) is a colorless, pungent gas. At levels greater than 0.5 ppm, SO<sub>2</sub> has a strong odor. Sulfuric acid is formed from sulfur dioxide, which is an aerosol particle component that affects acid deposition. Anthropogenic, or human-caused, sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. SO<sub>2</sub> is a precursor to sulfates and PM<sub>10</sub>.

#### ***Human Health Effects***

Health effects of SO<sub>2</sub> include higher frequencies of acute respiratory symptoms (including airway constriction in some asthmatics and reduction in breathing capacity leading to severe difficulties) and diminished ventilatory function in children. Extreme exposure can cause lung edema (fluid accumulation), lung tissue damage, and damage to lining the respiratory tract.

### **Particulate Matter**

#### ***Properties and Sources***

Particulate matter is a generic term that defines a broad group of chemically and physically different particles (either liquid droplets or solids) that can exist over a wide range of sizes. Examples of atmospheric particles include those produced from

combustion (diesel soot or fly ash), light (urban haze), sea spray (salt particles), and soil-like particles from re-suspended dust. Fugitive dust is defined as “[t]hose solid Respirable Particulate Matter emissions that become airborne, other than those emitted from an exhaust stack, chimney, or vent. Fugitive emissions are directly or indirectly caused by the activities of man” (MDAQMD Rule 403.2). considered to be any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly because of human activities (Rule 403, Fugitive Dust, MDAQMD).

Particulate matter is categorized by diameter – PM<sub>10</sub> and PM<sub>2.5</sub>. PM<sub>10</sub> refers to particulate matter that is 10 microns or less in diameter (1 micron is one millionth of a meter, or one micrometer [ $\mu\text{m}$ ]). PM<sub>2.5</sub> refers to particulate matter that is 2.5 microns or less in diameter. The size of particles can determine the residence time of the material in the atmosphere. PM<sub>2.5</sub> has a longer atmospheric lifetime than PM<sub>10</sub> and, therefore, can be transported over longer distances.

Particulate matter originates from a variety of stationary and mobile sources. Stationary sources that generate particulate matter include: fuel combustion for electric utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal and recycling. Mobile or transportation-related sources that generate particulate matter include highway vehicles, non-road vehicles and fugitive dust from paved and unpaved roads.

### ***Human Health Effects***

A consistent correlation between elevated ambient PM<sub>10</sub> levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed.<sup>1</sup>

Diesel Particulate Matter (DPM), a subcategory of particulate matter, is a mixture of many exhaust particles and gases that is produced when an engine burns diesel fuel. Many compounds found in diesel exhaust are carcinogenic, including sixteen compounds that

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<sup>1</sup> [www.aqmd.gov/docs/default-source/planning/air-quality-guidance/appendix-c.pdf](http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/appendix-c.pdf)

are classified as possibly carcinogenic by the International Agency for Research on Cancer. DPM includes the particle-phase constituents in diesel exhaust. Some short-term (acute) effects of diesel exhaust include eye, nose, throat and lung irritation, as well as coughs, headaches, light-headedness and nausea. Diesel exhaust is a major source of ambient particulate matter pollution, and numerous studies have linked elevated particle levels in the air to increased hospital admission, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. DPM in the Basin poses the greatest cancer risk of all identified toxic air pollutants.

## **Reactive Organic Gases**

### *Properties and Sources*

Reactive Organic Gases (ROGs) (also termed Volatile Organic Compounds [VOCs]) are defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. There is no state or national ambient air quality standard for ROGs because they are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formulation of ozone. ROGs are also transformed into organic aerosols in the atmosphere, which contribute to higher PM<sub>10</sub> and lower visibility. The major sources of ROGs in the Basin are on-road motor vehicles and solvent evaporation. ROGs are also an ozone and PM<sub>10</sub>/PM<sub>2.5</sub> precursor.

### *Human Health Effects*

As described previously, health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Benzene is an ROG and a known carcinogen. Typical sources of benzene emissions include: gasoline service stations (fuel evaporation), motor vehicle exhaust, tobacco smoke, and oil and coal incineration. Benzene is also sometimes employed as a solvent for paints, inks, oils, waxes, plastic, and rubber. It is used in the extraction of oils from

seeds and nuts. It is also used in the manufacture of detergents, explosives, dyestuffs, and pharmaceuticals. Short-term (acute) exposure to high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, unconsciousness can occur. Long-term (chronic) occupational exposure to high doses by inhalation has caused blood disorders, including aplastic anemia and lower levels of red blood cells.

### 4.3.3 SETTING

#### 4.3.3.1 Local and Regional Climate

The Project site is located within the Mojave Desert Air Basin (MDAB), under the jurisdiction of the MDAQMD. The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions, and the blocking nature of the Sierra Nevada Mountains located to the north. Air masses pushed onshore in Southern California by differential heating are channeled through the MDAB. The MDAB is separated from the Southern California coastal and central California valley regions by mountains (highest elevation is approximately 10,000 feet), whose passes form the main channels for these air masses. The Mojave Desert is bordered on the southwest by the San Bernardino Mountains, and separated from the San Gabriels by the Cajon Pass (4,200 feet). A lesser pass lies between the San Bernardino Mountains and the Little San Bernardino Mountains in the Morongo Valley. The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley), whose primary channel is the San Gorgonio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains.

During the summer, the MDAB is generally influenced by a Pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from

the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inch of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate that at least three months have maximum average temperatures over 100.4° F.

Snow is common above 5,000 feet in elevation, resulting in moderate snowpack and limited spring runoff. Below 5,000 feet, any precipitation normally occurs as rainfall. Pacific storm fronts normally move into the area from the west, driven by prevailing winds from the west and southwest. During late summer, moist high-pressure systems from the Pacific collide with rising heated air from desert areas, resulting in brief, high-intensity thunderstorms that can cause high winds and localized flash flooding.

#### **4.3.3.2 Existing Air Quality**

Existing air quality is monitored and evaluated in the context of National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). These Standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. For further information regarding NAAQS and CAAQS currently in effect, please refer to the Project Air Quality Impact Analysis, Table 2-1, *Ambient Air Quality Standards*; and <http://www.arb.ca.gov/research/aaqs/aaqs.htm>. The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards.

#### **Regional Air Quality**

The MDAQMD monitors levels of various criteria pollutants at six monitoring stations throughout the air district. No areas of the MDAB exceed the federal or state standards for NO<sub>2</sub>, SO<sub>2</sub>, CO, sulfates or lead. Attainment designations for the MDAB are provided at Table 4.3-1.

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

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1 hour standard	Non-attainment	Non-attainment*
Ozone – 8 hour standard	Non-attainment	Non-attainment*
PM <sub>10</sub>	Non-attainment*	Non-attainment**
PM <sub>2.5</sub>	Non-attainment	Unclassified/Attainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment

**Source:** *Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.)* March 13, 2019.

\* Southwest corner of desert portion of San Bernardino County only.

\*\* San Bernardino County portion only.

### Local Air Quality

Relative to the Project site, the nearest long-term air quality monitoring site for O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> is the Mojave Desert Air Quality Management District Victorville-Park Avenue monitoring station, located approximately 4.23 miles easterly of the Project site. The most recent three years of O<sub>3</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> monitoring data available from the Victorville-Park Avenue monitoring station is reported at Table 4.3-2. Table 4.3-2 also reports CO monitoring data. CO monitoring data was obtained from the California Air Resources Board (CARB, ARB) Air Quality and Meteorological Information System (AQMIS).

Table 4.3-2 identifies the number of days ambient air quality standards were exceeded for the Study Area, which is considered to be representative of the local air quality in the Project area. Data for SO<sub>2</sub> has been omitted as attainment is regularly met in the Basin and few monitoring stations measure SO<sub>2</sub> concentrations.

**Table 4.3-2  
Ambient Air Quality Conditions**

Pollutant	Standard	Year		
		2015	2016	2017
Ozone				
Maximum Federal 1-Hour Concentration (ppm)		0.132	0.100	0.088
Maximum Federal 8-Hour Concentration (ppm)		0.105	0.085	0.081
Number of Days Exceeding Federal 1-Hour Standard		1	0	0
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	8	4	0
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	38	33	17
Number of Days Exceeding State 8-Hour Standard	> 0.070 ppm	39	35	19
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration	> 35 ppm	17.48	11.57	1.52
Nitrogen Dioxide (NO <sub>2</sub> )				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.118	0.097	0.057
Maximum State 1-Hour Concentration	> 0.18 ppm	0.118	0.097	0.057
Annual Federal Standard Design Value		11	10	13
Annual State Standard Design Value		14	13	12
Number of Days Exceeding Federal 1-Hour Standard	> 0.18 ppm	1	0	0
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM <sub>10</sub> )				
Maximum Federal 24-Hour Concentration (µg/m <sup>3</sup> )	> 150 µg/m <sup>3</sup>	96.1	226.5	182.5
Annual Federal Arithmetic Mean (µg/m <sup>3</sup> )		25.1	29.3	30.1
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m <sup>3</sup>	0	2	1
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )				
Maximum Federal 24-Hour Concentration (µg/m <sup>3</sup> )	> 35 µg/m <sup>3</sup>	50.2	41.5	27.2
Maximum State 24-Hour Concentration (µg/m <sup>3</sup> )		50.2	41.5	29.3
Annual Federal Arithmetic Mean (µg/m <sup>3</sup> )		--	7.4	8.7
Annual State Arithmetic Mean (µg/m <sup>3</sup> )		--	7.5	8.8
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m <sup>3</sup>	--	1	0

Source: Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.

## 4.3.4 REGULATORY BACKGROUND

### 4.3.4.1 Federal Regulations

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O<sub>3</sub>, CO, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955, and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures demonstrating how standards would be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, CO, PM<sub>2.5</sub>, and lead. The NAAQS were amended in July 1997 to include an additional standard for O<sub>3</sub> and to adopt a NAAQS for PM<sub>2.5</sub>.<sup>2</sup>

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<sup>2</sup> Current NAAQS are identified in the Project AQIA. See: Table 2-1, *Ambient Air Quality Standards*, or can be accessed at: <http://www.arb.ca.gov/research/aaqs/aaqs.htm>.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and nitrogen oxides (NO<sub>x</sub>). NO<sub>x</sub> is a collective term that includes all forms of nitrogen oxides (NO, NO<sub>2</sub>, NO<sub>3</sub>) which are emitted as byproducts of the combustion process.

#### **4.3.4.2 California Regulations**

The CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources to attain the state ambient air quality standards by the earliest practical date. The BRB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the MDAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the MDAQMD, regulate air emissions from commercial and light industrial facilities. All air pollution control districts have been formally designated as attainment or nonattainment for each CAAQS.

Serious nonattainment areas are required to prepare air quality management plans that include specified emission reduction strategies to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);

- A District-permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROG<sub>s</sub>, NO<sub>x</sub>, CO and PM<sub>10</sub>. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than five percent per year under certain circumstances.

#### **4.3.4.3 Regional Air Quality Management Planning**

Currently, certain NAAQS and CAAQS are exceeded in the MDAB. In regard to the NAAQS, the Project region is nonattainment for ozone (8-hour) and PM<sub>10</sub>. With respect to the CAAQS, the Project region is nonattainment for ozone (1-hour and 8-hour), PM<sub>10</sub>, and PM<sub>2.5</sub>. In response, and to achieve state and federal ambient air quality standards, the MDAQMD has adopted a series of Air Quality Management Plans (AQMPs). AQMPs are updated regularly to more effectively reduce emissions, accommodate growth, and to minimize potential negative fiscal aspects of air pollution control measures. Project consistency with the applicable AQMPs is presented subsequently at Section 4.3.6, *Potential Impacts and Mitigation Measures*.

#### **4.3.5 STANDARDS OF SIGNIFICANCE**

As identified within the *CEQA Guidelines*, air quality impacts would be considered potentially significant if the Project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors.
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

#### **4.3.5.1 MDAQMD Thresholds**

Air quality impact significance is determined by comparing air pollutant emissions generated by the Project with corresponding MDAQMD air pollution thresholds. If the Project's air pollutant emissions exceed applicable MDAQMD thresholds, then the impact is considered potentially significant. While the final determination of significance thresholds is within the purview of the Lead Agency (City of Victorville), the MDAQMD recommends that its regional and local air quality thresholds be employed by lead agencies.

#### **Regional Thresholds**

MDAQMD regional thresholds for regulated air pollutant emissions are summarized at Table 4.3-3. The *MDAQMD CEQA And Federal Conformity Guidelines* (MDAQMD) August 2016 (MDAQMD Guidelines) indicate that any project in the MDAB with daily regional emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

**Table 4.3-3  
Maximum Daily Emissions Regional Thresholds**

Pollutant	Daily Threshold
CO	548 lbs./day
NO <sub>x</sub>	137 lbs./day
VOC	137 lbs./day
SO <sub>x</sub>	137 lbs./day
PM <sub>10</sub>	82 lbs./day
PM <sub>2.5</sub>	65 lbs./day

**Source:** Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.

### **Carbon Monoxide Concentrations (CO “hot spots”) Thresholds**

CO “hot spots” are areas of carbon monoxide concentrations exceeding national or state air quality standards. CO hotspots typically occur because of excessive vehicular idling, often associated with traffic backups at underperforming intersections or congested roadway links. A project’s localized CO emissions impacts would be significant if the emissions exceed the following California standards for localized CO concentrations:

- 1-hour CO standard of 20.0 parts per million (ppm);
- 8-hour CO standard of 9.0 ppm.

## **4.3.6 POTENTIAL IMPACTS AND MITIGATION MEASURES**

### **4.3.6.1 Introduction**

The following discussions focus on areas where it has been determined that the Project may result in potentially significant air quality impacts. With the exception of the potential for the Project to “[c]reate objectionable odors affecting a substantial number of people,” all air quality topical issues listed at *CEQA Guidelines* Appendix G, Project air quality impacts are considered to be potentially significant. Potentially significant Project air quality impacts are discussed below.

#### 4.3.6.2 Impact Statements

Following is an analysis of potential air quality impacts that are expected to result from construction and operations the Project. For each topical discussion, potential impacts are evaluated under applicable criteria established above at Section 4.3.5, *Standards of Significance*.

**Potential Impact:** *Conflict with or obstruct implementation of the applicable air quality plan.*

**Impact Analysis:** The Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert established under the Western Mojave Desert Air Quality Management Plans (AQMPs) establish a comprehensive set of programs that will lead the MDAB into compliance with federal and state air quality standards. The control measures and related emission reduction estimates within the AQMPs are based on emissions projections derived from adopted land use plans, population estimates, and employment characteristics defined in consultation with local governments.

Conformance with the AQMPS is determined by demonstrating compliance with: 1) local land use plans and/or population projections, 2) all MDAQMD Rules and Regulations; and 3) demonstrating that the project under consideration would not increase the frequency or severity of a violation in the federal or state ambient air quality standards.

The City of Victorville General Plan Land Use designation of the Project site is "Commercial." The Commercial Land Use designation corresponds to a wide range of retail commercial, service commercial, and office commercial activities. The Project proposes land uses that are consistent with development anticipated under the site's existing General Plan Commercial land use designation. The Project would therefore conform to the governing local Land Use Plan.

The Project would also be required to comply with all applicable MDAQMD Rules and Regulations, including, but not limited to Rules 401, 402, 403, and 461. The Project would therefore conform to AQMP Rules and Regulations consistency criteria.

The region encompassing the Project site is currently nonattainment for PM<sub>10</sub>/PM<sub>2.5</sub> (particulate matter) and ozone. NO<sub>x</sub> is a PM<sub>10</sub>/PM<sub>2.5</sub> and ozone precursor. The MDAQMD Attainment Plans, in part, present goals and strategies to control and reduce NO<sub>x</sub> emissions in the Basin. As discussed in this Section, Project operational-source NO<sub>x</sub> emissions would exceed applicable MDAQMD NO<sub>x</sub> emissions regional thresholds and would be a significant and unavoidable Project air quality impact. Project operational-source NO<sub>x</sub> emissions exceedances would contribute to existing nonattainment particulate matter and ozone conditions affecting the region, and could increase the frequency or severity of violations of the federal or state ambient air quality standards for PM<sub>10</sub>/PM<sub>2.5</sub> and ozone. Project operational-source NO<sub>x</sub> emissions exceedances would also potentially delay or otherwise obstruct particulate matter and ozone attainment strategies and goals of the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert. This is a potentially significant impact.

**Level of Significance:** Potentially Significant.

**Mitigation Measures:** No feasible mitigation. The predominance (more than 99 percent by weight) of Project operational-source NO<sub>x</sub> emissions would be generated by vehicles accessing the Project site. Neither the Project Applicant nor the Lead Agency have regulatory authority to control vehicular-source NO<sub>x</sub> emissions, and no feasible mitigation measures exist that would otherwise reduce Project operational-source NO<sub>x</sub> emissions to levels that are less-than-significant. Project operational-source NO<sub>x</sub> emissions exceedances and related impacts concerning consistency with the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert are therefore considered significant and unavoidable.

**Level of Significance After Mitigation:** *Significant and Unavoidable.*

**Potential Impact:** *Violate any air quality standard or contribute substantially to an existing or projected air quality violation.*

**Impact Analysis:** The latest California Air Pollution Control Officers Association (CAPCOA)-approved version of the California Emissions Estimator Model (CalEEMod, v2016.3.2) was used to estimate Project-related air pollutant emissions levels. Project emissions levels were then compared to applicable MDAQMD thresholds to determine if air quality standards would be violated; or if Project emissions would contribute substantially to existing or projected air quality violations. Unless otherwise noted, CalEEMod default values and assumptions were applied throughout.

## **Regional Impacts**

### **Construction-Source Air Pollutant Emissions**

Typical Project construction activities (listed below) would generate emissions of CO, VOC, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

- Site Preparation;
- Grading;
- Building Construction;
- Paving;
- Architectural Coating; and
- Materials Deliveries and Construction Workers Commuting.

Modeled construction-source emissions levels reflect peak levels of construction activity and equipment use. Estimated maximum daily Project construction-source emissions are summarized at Table 4.3-4. Construction-source air pollutant emissions impacts resulting from implementation of any off-site utility and infrastructure improvements would not exceed maximum emissions impacts identified for other Project construction activities.

**Table 4.3-4  
Construction-Source Emissions Summary  
Maximum Daily (lbs./day)**

Year	Pollutants					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Maximum Daily Emissions	24.20	70.09	36.57	0.11	20.61	12.17
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	No	No	No	No	No	No

*Source: Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.*

As presented at Table 4.3-4, maximum daily Project construction-source air pollutant emissions would not exceed any applicable MDAQMD regional threshold. Project construction-source air quality impacts would therefore be less-than-significant.

**Level of Significance:** Less-Than-Significant.

### **Operational-Source Air Pollutant Emissions**

Project operations would result in emissions of VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational emissions would be generated by various area sources, building/facility energy consumption, and mobile sources (traffic). Each of these operational emissions sources are described below, and the estimated emissions from each source are summarized subsequently. Unless otherwise noted, CalEEMod default parameters were employed throughout.

#### ***Area-Source Emissions***

##### *Architectural Coatings*

Project buildings and improvements would require periodic maintenance. Maintenance activities would generate air pollution emissions due to the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings.

### *Consumer Products*

Various “consumer products” would be consumed over the life of the Project. Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants.

### *Landscape Maintenance Equipment*

Landscaping within the Project site would require ongoing maintenance. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers.

### *Energy-Source Emissions*

Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. The Project uses would consume electricity and natural gas. Because electrical generating facilities serving the Project are either sited outside the Basin or are offset through pollution credits (REgional CLean Air Incentives Market, RECLAIM<sup>3</sup>), criteria pollutant emissions from offsite generation of electricity are excluded from the evaluation criteria pollutant emissions impacts presented here. Emissions impacts resulting from Project consumption of natural gas are however considered.

### *Mobile-Source Emissions*

Project traffic (mobile sources) would generate criteria pollutant emissions. These emissions would constitute the predominance (more than 98 percent by weight) of all Project operational-source air pollutant emissions.

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<sup>3</sup> See also: <http://www.aqmd.gov/home/programs/business/about-reclaim>.

## Operational-Source Emissions Summary

Maximum daily Project operational-source air pollutant emissions are summarized at Table 4.3-5. Applicable MDAQMD regional significance thresholds are also identified.

**Table 4.3-5  
Operational-Source Emissions Summary  
Maximum Daily Winter/Summer Scenario (lbs./day)**

Summer Scenario	Pollutants					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	2.79	5.70E-04	0.06	0.00	2.20E-04	2.20E-04
Energy Source	0.12	1.05	0.88	6.31E-03	0.08	0.08
Mobile	27.49	146.09	187.10	0.56	31.60	8.81
<b>Total Maximum Daily Emissions</b>	<b>30.40</b>	<b>147.14</b>	<b>188.04</b>	<b>0.56</b>	<b>31.68</b>	<b>8.89</b>
MDAQMD Regional Threshold	137	137	548	137	82	65
<b>Threshold Exceeded?</b>	No	<b>YES</b>	No	No	No	No
Winter Scenario	Pollutants					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	2.79	5.70E-04	0.06	0.00	2.20E-04	2.20E-04
Energy Source	0.12	1.05	0.88	6.31E-03	0.08	0.08
Mobile	23.54	143.85	180.49	0.51	31.62	8.83
<b>Total Maximum Daily Emissions</b>	<b>26.45</b>	<b>144.90</b>	<b>181.43</b>	<b>0.51</b>	<b>31.70</b>	<b>8.90</b>
MDAQMD Regional Threshold	137	137	548	137	82	65
<b>Threshold Exceeded?</b>	No	<b>YES</b>	No	No	No	No

Source: Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.

**Level of Significance:** Potentially Significant. As indicated at Table 4.3-5, unmitigated Project operational-source NO<sub>x</sub> emissions would exceed the applicable MDAQMD regional threshold. This is a potentially significant impact.

**Mitigation Measures:** No feasible mitigation. NO<sub>x</sub> emissions are byproducts of fuel combustion, and the primary source of these emissions from the Project are tail pipe emissions generated by vehicles accessing the Project site. Neither the Project Applicant nor Lead Agency have any regulatory control over these vehicular-source emissions. Rather, vehicular-source NO<sub>x</sub> emissions are regulated by CARB and the US EPA (United

States Environmental Protection Agency). CARB and US EPA regulatory actions have effectively reduced NO<sub>x</sub> emissions from vehicle sources over the past years. Further reductions in these and other vehicular-source emissions are anticipated as clean vehicle and fuel technologies improve. No feasible mitigation measures exist that would reduce Project operational-source NO emissions to levels that are less-than-significant.<sup>4</sup> Project operational-source NO<sub>x</sub> emissions exceedances of applicable MDAQMD regional thresholds are therefore considered significant and unavoidable.

**Level of Significance After Mitigation: *Significant and Unavoidable.***

**Regional Air Quality Impact Summary**

As substantiated in the preceding discussions, Project construction-source emissions would not exceed applicable MDAQMD regional thresholds. Project construction-source emissions air quality impacts would therefore be less-than-significant. Project operational-source NO<sub>x</sub> emissions would exceed applicable MDAQMD regional thresholds. There is no feasible mitigation that would reduce Project operational-source NO<sub>x</sub> emissions to levels that would be less-than-significant. Project operational-source NO<sub>x</sub> exceedances would therefore be a significant and unavoidable Project air quality impact.

**Potential Impact:** *Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors.*

**Impact Analysis:** The Project area is designated as a nonattainment area for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. Pertinent to these nonattainment conditions, the Project-specific evaluation of emissions presented previously demonstrates that the Project's construction-source emissions would not exceed MDAQMD thresholds. Project construction-source

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<sup>4</sup> Further NO<sub>x</sub> emissions reductions could potentially result from availability and use of alternative transportation modes (bicycling, buses). Consistent with conservative methodologies employed in this EIR, no modal-split trip reductions have been assumed. Related reductions in vehicular-source emissions have not been assumed.

emissions would therefore not contribute to a cumulatively considerable net increase in ozone, PM<sub>10</sub>, PM<sub>2.5</sub>, or their precursors (VOC and NO<sub>x</sub>).

However, Project operational-source NO<sub>x</sub> emissions would exceed applicable MDAQMD thresholds. NO<sub>x</sub> is an ozone and PM<sub>10</sub>/PM<sub>2.5</sub> precursor.

The fact that the Project generates long-term emissions of NO<sub>x</sub> exceeding applicable MDAQMD thresholds indicates that the Project impact is significant on an individual basis. Per MDAQMD criteria, significant impacts at the Project level are cumulatively considerable. Project operational-source NO<sub>x</sub> emissions exceedances would therefore contribute to cumulatively significant ozone and PM<sub>10</sub>/PM<sub>2.5</sub> air quality impacts within the affected nonattainment areas. On this basis, Project operational-source emissions of NO<sub>x</sub> in exceedance of applicable MDAQMD regional thresholds would result in a cumulatively considerable net increase in criteria pollutants within a nonattainment area. This is a potentially significant cumulative air quality impact.

**Level of Significance:** Potentially Significant.

**Mitigation Measures:** No feasible mitigation. See previous discussion regarding infeasibility of reducing Project operational-source NO<sub>x</sub> emissions.

**Level of Significance After Mitigation:** *Significant and Unavoidable.*

**Potential Impact:** *Expose sensitive receptors to substantial pollutant concentrations.*

Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors. Project attributes/operations that could result in substantial pollutant concentrations affecting sensitive receptors include: Vehicular-source CO emissions that could result in adverse localized CO emissions concentrations (CO “hot spots”); and potential impacts to sensitive receptors resulting from the Project gas station operations.

## CO “Hot Spot” Analysis

### Background

To establish baseline CO concentrations within the Southern California region, a CO hot spot analysis was conducted in 2003 for four busy intersections in Los Angeles during the peak morning and afternoon traffic periods (2003 Hot Spot Analysis). Table 4.3-6 presents the results of the 2003 Hot Spot Analysis. As indicated, the 2003 Hot Spot Analysis did not predict any violation of CO standards.

**Table 4.3-6**  
**2003 Los Angeles Study-Hot Spot Analysis Results**

Intersection Location	Carbon Monoxide Concentrations (parts /million, ppm)				
	Morning 1-Hour	Afternoon 1-Hour	CA 1-Hour Std.	8-Hour	CA 8-Hour Std.
Wilshire-Veteran	4.6	3.5	20	3.7	9.0
Sunset-Highland	4.0	4.5		3.5	
La Cienega-Century	3.7	3.1		5.2	
Long Beach-Imperial	3.0	3.1		8.4*	

**Source:** *Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.*

**Notes:** \* Of this total, only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm reflect ambient CO concentrations. Per the 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations affecting the region were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and traffic congestion.

The busiest intersection evaluated within the 2003 Hot Spot Analysis was Wilshire Boulevard and Veteran Avenue. Reported AM/PM traffic volumes at this intersection were 8,062 vehicles per hour and 7,719 vehicles per hour, respectively (see Table 4.3-7). Even at these traffic volumes, exceedance of CO concentration standards and CO hot spots would not result (see previous Table 4.3-6). In comparison, the greatest Project peak hour traffic volumes (see Table 4.3-8) would not approach the greatest volumes experienced in the 2003 Hot Spot Analysis.

**Table 4.3-7**  
**2003 Los Angeles Study Hot Spot Analysis-Peak Hour Traffic Volumes**

Intersection Location	Peak Hour Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire-Veteran	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset-Highland	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega-Century	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach-Imperial	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

**Source:** Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.

**Notes:** vph-vehicles per hour.

**Table 4.3-8**  
**Project Peak Hour Traffic Volumes**

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
US-395/SR-18	962/990	1,101/1,317	911/851	737/970	3,711/4,128
US-395/Bear Valley Rd.	675/960	983/836	462/698	258/442	2,378/2,936
El Evado Rd./SR-18	460/737	418/551	1,154/991	619/1,243	2,651/3,522
Amargosa Rd./SR-18	508/538	408/656	1,133/1,143	768/1,433	2,817/3,770

**Source:** Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.

**Notes:** vph-vehicles per hour.

The Project considered here would not produce the volume of traffic required to generate a CO hot spot in the context of the 2003 Hot Spot Analysis.<sup>5</sup> Therefore, CO hot spots are not considered to be an environmental concern for the Project. On this basis, the potential for the Project traffic to generate CO hot spots and thereby expose sensitive receptors to substantial pollutant concentrations is considered less-than-significant.

<sup>5</sup> Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. As indicated at Table 4.3-8, Project traffic volumes would not approach the BAAQMD CO hot spot significance criteria.

### **Gas Station Operations**

Per the MDAQMD Guidelines, the following project types, if located within a specified distance to an existing or planned sensitive receptor land use, must be evaluated to determine exposure of substantial pollutant concentrations at sensitive receptors:

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

[MDAQMD Guidelines, p. 8]

The Project does not propose uses that would be subject to analysis per the above MDAQMD parameters. As such, there is no requirement to evaluate the potential for the Project to expose sensitive receptors to substantial pollutant concentrations. However, for disclosure purposes, the Project AQIA and this EIR nonetheless evaluate potential health risk impacts at sensitive receptors that could result from the Project's proposed gas station use. The nearest sensitive receptor that could be affected by the Project gas station operations is located approximately 1,157 feet to the southwest – well beyond the 300 foot analysis parameter for evaluation of gasoline dispensing facility impacts at sensitive receptors established by the MDAQMD.

The Project gasoline service operations may generate toxic air contaminants (TACs) (e.g., benzene, hexane, MTBE, toluene, xylene) that have the potential to contribute to health risks in the Project vicinity. The MDAQMD currently does not have an established procedure for determining screening-level health risk estimates for gasoline dispensing operations. MDAQMD relies on the SCAQMD Health Risk Assessment (HRA) methodology (SCAQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 & 212*). Per the SCAQMD HRA methodology, a potentially significant impact would occur if a project would increase the cancer-risk at affected receptors by 10 persons per million population (10 per million).

At the nearest residential receptor, the maximum cancer risk attributable to the Project gasoline dispensing operations would be 0.27 in one million. The maximum cancer-risk to workers would be 0.02 in one million.<sup>6</sup> In both instances, potential cancer risks attributable to the Project gasoline station operations would be well below the SCAQMD threshold of 10 in one million, and would therefore be less-than-significant. Risks at school receptors, the nearest of which is located more than one-mile from the Project site, would be non-detectable. The SCAQMD HRA protocol does not allow for definitive calculation of non-cancer risks from retail fuel dispensing operations. Given the nominal cancer-risk exposure noted above, little or no incremental non-cancer risks would be anticipated from the Project retail fuel dispensing operations.

The Project does not otherwise propose or require uses or activities that would result in or create substantial pollutant concentrations. On this basis, the potential for the Project gas station operations to generate substantial TACs, and thereby expose sensitive receptors to substantial pollutant concentrations is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

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<sup>6</sup> Project AQIA, p. 31.

## **4.4 GLOBAL CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS**

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## 4.4 GLOBAL CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

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### *Abstract*

*This Section addresses potential global climate change (GCC) and greenhouse gas (GHG) emissions impacts that may result from the Project. More specifically, the analysis evaluates the potential for the Project to cause or result in the following impacts:*

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

*Based on the analysis presented within Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019 (Project GHG Analysis), and summarized herein, all Project-related GHG impacts are considered less-than-significant.*

### 4.4.1 INTRODUCTION

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. GCC is currently one of the most controversial environmental issues in the United States, and much debate exists within the scientific community about whether or not GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred in the past over the course of thousands or millions of years. These historical changes to the earth's climate have occurred naturally without human influence, as in the case of an ice age. However, many scientists believe that the climate shift taking place since the industrial revolution (1900) is occurring at a quicker rate and magnitude than

in the past. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

An individual development proposal, such as the Project considered herein, cannot generate enough greenhouse gas emissions to effect a discernible change in the global climate. However, the Project may contribute to GCC through its increment of greenhouse gases (GHG) in combination with the cumulative increase in GHG from all other sources, which when taken together constitute potential influences on GCC. This Section summarizes the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to GCC. Detailed analysis of the Project's potential GHG/GCC impacts is presented in *Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville* (Urban Crossroads, Inc.) March 13, 2019 (Project GHG Analysis, GHGA); EIR Appendix D.

## **4.4.2 BACKGROUND**

### **4.4.2.1 Global Climate Change**

Global climate change refers to alteration of average meteorological conditions with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO<sub>2</sub> (Carbon Dioxide), N<sub>2</sub>O (Nitrous Oxide), CH<sub>4</sub> (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the atmosphere, but prevent heat from escaping, thus warming the atmosphere.

#### 4.4.2.2 Greenhouse Gases

Greenhouse gases (GHGs) are gases that trap heat in the atmosphere. GHGs are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the average temperature would be approximately 61° Fahrenheit (F) cooler than it is currently. The accumulation of these gases in the atmosphere is considered to be the cause for the observed increase in the Earth's temperature.

GHGs have varying global warming potential (GWP) values; GWP values represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is used as the reference gas for GWP, and thus has a GWP of 1. GWP and atmospheric lifetimes of typical GHGs are summarized at Table 4.4-1.

**Table 4.4-1  
GHG Global Warming Potentials and Atmospheric Lifetimes**

GHG	Atmospheric Lifetime (years)	Intergovernmental Panel on Climate Change (IPCC) GWP Values for 100-year time horizon		
		IPCC 2nd Assessment Report (SAR)	IPCC 4th Assessment Report (AR4)	IPCC 5th Assessment Report (AR4)
Carbon Dioxide	50 – 200	1	1	1
Methane	12 +/- 3	21	25	28
Nitrous Oxide	114	310	298	265
HFC-23	270	11,700	14,800	12,400
HFC-134a	14	1,300	1,430	1,300
HFC-152a	1.4	140	124	138
Sulfur Hexafluoride (SF6)	3,200	23,900	22,800	23,500

**Source:** Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report global warming potential (GWP) values – <https://ww2.arb.ca.gov/resources/documents/ipcc-100-year-gwp-values>.

The following discussions summarize and describe commonly occurring GHGs, their sources, and general characteristics.

### **Water Vapor**

Water vapor (H<sub>2</sub>O) is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change.

As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to ‘hold’ more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a “positive feedback loop.” The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. For example, increased atmospheric water vapor translates to increased cloud cover and increased reflection of incoming solar radiation (thus diminishing potential radiant heating of the Earth’s surface).

The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.

## **Carbon Dioxide**

Carbon dioxide (CO<sub>2</sub>) is an odorless and colorless GHG. Carbon dioxide is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO<sub>2</sub> concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.

## **Methane**

Methane (CH<sub>4</sub>) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.

Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

## **Nitrous Oxide**

Nitrous oxide (N<sub>2</sub>O), also known as laughing gas, is a colorless GHG. Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage).

Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant (i.e., in whipped cream bottles). It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction.

## **Chlorofluorocarbons**

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C<sub>2</sub>H<sub>6</sub>) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface).

CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

## **Hydrofluorocarbons**

Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Among the constituents classified as GHGs, they are one of three groups with the highest GWP. The HFCs with the greatest measured atmospheric abundances are (in order), HFC-23 ( $\text{CHF}_3$ ), HFC-134a ( $\text{CF}_3\text{CH}_2\text{F}$ ), and HFC-152a ( $\text{CH}_3\text{CHF}_2$ ). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt.

## **Perfluorocarbons**

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above Earth's surface, are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane ( $\text{CF}_4$ ) and hexafluoroethane ( $\text{C}_2\text{F}_6$ ). The U.S. EPA estimates that concentrations of  $\text{CF}_4$  in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

## **Sulfur Hexafluoride**

Sulfur hexafluoride ( $\text{SF}_6$ ) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (22,800). The U.S. EPA indicates that concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

### 4.4.2.3 Existing Conditions - Greenhouse Gases Emissions Inventories

#### Global

Worldwide anthropogenic GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). This GHG emission data for Annex I nations is available through 2016. Global GHG emissions are summarized at Table 4.4-2, and are representative of currently available inventory data.

**Table 4.4-2**  
**Global GHG Emissions by Major GHG Source Countries**

Source Countries	GHG Emissions (Gg CO <sub>2</sub> e)
China	11,895,765
United States	6,511,302
European Union (28-member countries)	4,291,252
India	2,643,817
Russian Federation	2,100,850
Japan	1,304,568
<b>Total</b>	<b>28,747,554</b>

*Source: Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019.*

*Note: Gg = Gigagrams; 1 Gigagram = 1,000 Metric Tons*

#### United States

As identified at Table 4.4-2, the United States, as a single country, was the number two producer of GHG emissions in 2016. The primary GHG emitted by human activities in the United States was carbon dioxide (CO<sub>2</sub>), representing approximately 81.6 percent of total GHG emissions. Carbon dioxide from fossil fuel combustion is the largest source of GHG emissions in the United States.

#### State of California

The California Air Resources Board reports GHG inventories for the State of California. Based upon the 2018 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2016 greenhouse gas emissions inventory, California emitted 429.4 Million

Metric Tons Carbon Dioxide Equivalent (MMTCO<sub>2e</sub>), including emissions resulting from imported electrical power in 2015.

### **City of Victorville**

The City of Victorville is home to one of 14 cement facilities in California and the Southern California Logistics Airport. Both the cement facility and the airport are reflected in the City's GHG emissions inventories. Cement manufacturing is a highly GHG intense industrial process, and emissions related to cement manufacturing activities make up the majority of the City's GHG emissions profile. However, these emissions are not considered in the City's GHG emissions reduction target since the City has no control over plant operations, which are regulated by both the state and local air districts.

### **Project Site**

The Project site is undeveloped and is not a source of GHG emissions.

#### **4.4.2.4 Effects of Climate Change in California**

### **Public Health**

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35 percent under the lower warming range to 75 to 85 percent under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios Report indicates that large wildfires could become more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase

projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

### **Water Resources**

A network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there may be years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

## **Agriculture**

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25 percent of the water supply they need. Although higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate O<sub>3</sub> pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

## **Forests and Landscapes**

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since

wildfire risk is determined by a combination of factors, including: precipitation, winds, temperature, terrain, and vegetation, future risks would likely not be uniform throughout the state. For example, wildfires in northern California could increase by up to 90 percent due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

### **Rising Sea Levels**

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Increased sea level elevations of this magnitude would inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches.

#### **4.4.2.5 Health Effects of Greenhouse Gases**

##### **Water Vapor**

There are no known direct health effects related to water vapor at this time. However, water vapor can be a transport mechanism for other pollutants to enter the human body.

##### **Carbon Dioxide**

According to the National Institute for Occupational Safety and Health (NIOSH), high concentrations of carbon dioxide can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted

that current concentrations of carbon dioxide in the earth's atmosphere are estimated to be approximately 370 ppm, while the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period (NIOSH 2005).

### **Methane**

Methane is extremely reactive with oxidizers, halogens, and other halogen-containing compounds, may displace oxygen in an enclosed space and act as an asphyxiant.

### **Nitrous Oxide**

Nitrous Oxide is often referred to as laughing gas; it is a colorless GHG. The health effects associated with exposure to elevated concentrations of nitrous oxide include dizziness, euphoria, slight hallucinations, and in extreme cases of elevated concentrations nitrous oxide can also cause brain damage.

### **Fluorinated Gases (HFCs, PFCs, SF<sub>6</sub>)**

High concentrations of fluorinated gases can also result in adverse health effects such as asphyxiation, dizziness, headache, cardiovascular disease, cardiac disorders, and in extreme cases, increased mortality.

### **Aerosols**

Health effects of aerosols are similar to those of other fine particulate matter. More specifically, aerosols can cause elevated respiratory and cardiovascular diseases and increased mortality.

#### **4.4.2.6 GCC Regulatory Setting**

The current GHG regulatory setting is extensive and constantly evolving. The GHG regulatory setting is discussed in detail within the Project GHG Analysis (see: GHG Analysis, Section 2.7 *Regulatory Setting*). Current aspects of the GHG regulatory setting of relevance to the Project are summarized below.

## STATE OF CALIFORNIA

### Overview

The State of California legislature has enacted a series of bills and associated actions, described below, that collectively act to reduce GHG emissions. Certain state legislation such as Assembly Bill (AB 32) *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other state legislation, such as Title 24 and Title 20 energy standards, originally adopted for other purposes (energy and water conservation), also facilitate GHG emissions reductions. Additionally, California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, Executive Orders set the tone for the state and guide the actions of state agencies.

**AB 32.** The California State Legislature enacted AB 32, which requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. GHGs, as defined under AB 32, include carbon dioxide, methane, N<sub>2</sub>O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The California Air Resources Board (CARB, ARB) is the state agency charged with monitoring and regulating sources of GHGs.

The ARB approved the 1990 GHG emissions level of 427 MMTCO<sub>2</sub>e on December 6, 2007 (ARB 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMTCO<sub>2</sub>e. Emissions in 2020 in a "business as usual" (BAU) scenario were estimated to be 596 MMTCO<sub>2</sub>e, which do not account for reductions from AB 32 regulations (ARB 2008). At that level, a 28.4 percent reduction was required to achieve the 427 million MTCO<sub>2</sub>e 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. The forecasted inventory without the benefits of adopted regulation is now estimated at 545 million MTCO<sub>2</sub>e. Therefore, under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels (ARB 2010).

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress is shown in updated emission inventories prepared by ARB for 2000 through 2012 (ARB 2014a). The State has achieved the Executive Order S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target.

- 1990: 427 million MTCO<sub>2</sub>e (AB 32 2020 target)
- 2000: 463 million MTCO<sub>2</sub>e (an average 8 percent reduction needed to achieve 1990 base)
- 2010: 450 million MTCO<sub>2</sub>e (an average 5 percent reduction needed to achieve 1990 base)

ARB has also made substantial progress in achieving its goal of achieving 1990 emissions levels by 2020. As described earlier in this section, ARB revised the 2020 BAU inventory forecast to account for new lower growth projections, which resulted in a new lower reduction from BAU to achieve the 1990 base. The previous reduction from 2020 BAU needed to achieve 1990 levels was 28.4 percent and the latest reduction from 2020 BAU is 21.7 percent.

- 2020: 545 million MTCO<sub>2</sub>e BAU (an average 21.7 percent reduction from BAU needed to achieve 1990 base).

The ARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and strategies. The Update does not set new targets for the State, but rather describes a path that would achieve the state's 2050 goal to achieve GHG emissions levels that are 80 percent below 1990 baseline levels.

Forecasting the amount of emissions that would occur in 2020 if no actions are taken was necessary to assess the amount of reductions California must achieve to return to the 1990 emissions level by 2020 as required by AB 32. The no-action scenario is known as

“business-as-usual” or BAU. The ARB originally defined the BAU scenario as emissions in the absence of any GHG emission reduction measures discussed in the Scoping Plan.

As part of CEQA compliance for the Scoping Plan, ARB prepared a Supplemental Functional Equivalent Document (FED) in 2011. The FED included an updated 2020 BAU emissions inventory projection based on current economic forecasts (i.e., as influenced by the economic downturn) and emission reduction measures already in place, replacing its prior 2020 BAU emissions inventory. ARB staff derived the updated emissions estimates by projecting emissions growth, by sector, from the State’s average emissions from 2006–2008. The new BAU estimate includes emission reductions for the million-solar-roofs program, the AB 1493 (Pavley I) motor vehicle GHG emission standards, and the Low Carbon Fuels Standard. In addition, ARB factored into the 2020 BAU inventory emissions reductions associated with 33 percent Renewable Energy Portfolio Standard (RPS) for electricity generation. The updated BAU estimate of 507 MMTCO<sub>2</sub>e by 2020 requires a reduction of 80 MMTCO<sub>2</sub>e, or a 16 percent reduction below the estimated BAU levels to return to 1990 levels (i.e., 427 MMTCO<sub>2</sub>e) by 2020.

To establish a BAU reduction scenario that is consistent with the original definition in the Scoping Plan and with threshold definitions used in thresholds adopted by lead agencies for CEQA purposes and many climate action plans, the updated inventory without regulations was also included in the Supplemental FED. The ARB 2020 BAU projection for GHG emissions in California was originally estimated to be 596 MMTCO<sub>2</sub>e. The updated ARB 2020 BAU projection in the Supplemental FED is 545 MMTCO<sub>2</sub>e. Considering the updated BAU estimate of 545 MMTCO<sub>2</sub>e by 2020, ARB estimates a 21.7 percent reduction below the estimated statewide BAU levels is necessary to return to 1990 emission levels (i.e., 427 MMTCO<sub>2</sub>e) by 2020, instead of the approximate 28.4 percent BAU reduction previously reported under the original Climate Change Scoping Plan (2008).

**2017 Climate Change Scoping Plan Update.** In November 2017, ARB released the final 2017 Scoping Plan Update, which identifies the State’s post-2020 reduction strategy. The 2017 Scoping Plan Update reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by Senate Bill 32 (SB 32). Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce methane emissions from agricultural and other wastes.

The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO<sub>2</sub>e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

California’s climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California’s local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).

- Implementing SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Scoping Plan also recognizes local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB advocates local government attainment of a community-wide goal of 6 MTCO<sub>2</sub>e or less per capita by 2030, and 2 MTCO<sub>2</sub>e or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the extent feasible. Alternatively, a lead agency may employ performance-based metric using a climate action plan or other plan to reduce GHG emissions.

Research conducted by the Lawrence Berkeley National Laboratory and supported by ARB indicates that under existing and proposed GHG reduction policies, California is on track to meet the 2020 reduction targets established under AB 32 and could achieve the 2030 goals promulgated under SB 32.

**Senate Bill 32.** On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the State to reduce statewide greenhouse gas emissions to 40 percent below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15.

**Cap-and-Trade Program.** The Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to ARB, a cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020 and ultimately achieving an 80 percent reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

ARB adopted a California Cap-and-Trade Program consistent with authority established under AB 32. See 17 California Code of Regulations (CCR) §§ 95800 to 96023. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32’s emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program’s duration.

Covered entities that emit more than 25,000 MTCO<sub>2e</sub> per year must comply with the Cap-and-Trade Program. Triggering of the 25,000 MTCO<sub>2e</sub> per year “inclusion threshold” is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or “MRR”).

Under the Cap-and-Trade Program, ARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender “compliance instruments” for each MTCO<sub>2e</sub> of GHG they emit. There also are requirements to surrender compliance instruments covering 30 percent of the prior year’s compliance obligation by November of each year. For example, in November 2014, a covered entity was required to submit compliance instruments to cover 30 percent of its 2013 GHG emissions.

The Cap-and-Trade Program establishes a definitive cap, ensuring that the 2020 statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions at any discrete location or from any particular source. Rather, GHG emissions reductions are only guaranteed on an aggregate basis. As summarized by ARB in the 2014 First Update to the Climate Change Scoping Plan (ARB First Update):

The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative (ARB First Update, p. 86).

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In this manner, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate:

The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the “capped sectors.” Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by ARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures (ARB First Update, p. 88).

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or

imported. Accordingly, GHG emissions associated with a CEQA projects' electricity usage are covered by the Cap-and-Trade Program.

The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation (i.e., they were not fully regulated) until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all, if not all, of GHG emissions from CEQA projects associated with vehicle-miles traveled (VMT) are covered by the Cap-and-Trade Program.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the Program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve sufficient GHG emissions reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.

**SB 375 - the Sustainable Communities and Climate Protection Act of 2008.** Passing the Senate on August 30, 2008, Senate Bill (SB) 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able

to achieve the goals of AB 32.” SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, as codified at Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the ARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

**AB 1493 Pavley Regulations and Fuel Efficiency Standards.** California AB 1493, enacted on July 22, 2002, required ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA’s denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards phased in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22 percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve

actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Cars program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

**SB 350 - Clean Energy and Pollution Reduction Act of 2015.** In October 2015, the legislature approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.

- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly-owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

**Executive Order S-3-05.** Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

**Executive Order S-01-07 – Low Carbon Fuel Standard.** The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the “life-cycle carbon intensity” of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was

submitted to ARB for consideration as an “early action” item under AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009.

The Low Carbon Fuel Standard was challenged in the U.S. District Court in Fresno in 2011. The court’s ruling issued on December 29, 2011, included a preliminary injunction against ARB’s implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012, pending final ruling on appeal, allowing ARB to continue to implement and enforce the regulation. The Ninth Circuit Court’s decision, filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that Low Carbon Fuel Standards adopted by ARB were not in conflict with federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled ARB failed to comply with CEQA and the Administrative Procedure Act (APA) when adopting regulations for Low Carbon Fuel Standards. In a partially published opinion, the Court of Appeal reversed the trial court’s judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of ARB approving Low Carbon Fuel Standards (LCFS) regulations promulgated to reduce GHG emissions. The court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, ARB was required to bring a new LCFS regulation to its Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity (low-CI) fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing was held on September 24 and September 25, 2015, where the LCFS Regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with Office of Administrative Law (OAL) on October 2, 2015. OAL had until November 16, 2015 to make a determination.

**Executive Order S-13-08.** Executive Order S-13-08 states that “climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California’s economy, to the health and welfare of its population and to its natural resources.” As provided for under the Order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted. The Strategy is “. . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States.” Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

**Executive Order B-30-15.** On April 29, 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor’s executive order aligns California’s GHG reduction targets with those of leading international governments. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO<sub>2</sub> equivalent (MMCO<sub>2e</sub>). The Order also requires the state’s climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable for local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

**Title 20 Appliance Efficiency Standards.** California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these

regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

**Title 24 Energy Efficiency Standards and California Green Building Standards.**

California Code of Regulations Title 24 Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. For nonresidential buildings, the 2016 Title 24 standards reduce energy consumption by 5 percent when compared to the 2013 Title 24 standards.

**California Code of Regulations, Title 24, Part 11: California Green Building Standards**

**Code (CALGreen).** CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011. CALGreen is updated on a regular basis, with the most recent update consisting of the 2016 California Green Building Code Standards that became effective January 1, 2017. Under state law, local jurisdictions are permitted to adopt more stringent requirements. Specific CALGreen requirements include, but are not limited to, those listed below. CALGreen Section citations are presented parenthetically.

- Short-term bicycle parking. If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (5.106.4.1.1).

- Long-term bicycle parking. For new buildings with 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (5.106.4.1.2).
- Designated parking. Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in [CALGreen] Table 5.106.5.2 (5.106.5.2).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (5.410.1).
- Construction waste. A minimum 65 percent diversion of construction and demolition waste from landfills, increasing voluntarily to 80 percent for new homes and commercial projects (CALGreen Sections 5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled (5.408.3).
- Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods:
  - The installation of water-conserving fixtures (5.303.3) or
  - Using nonpotable water systems (5.303.4).
- Water use savings. 20 percent mandatory reduction of indoor water use with voluntary goal standards for 30, 35 and 40 percent reductions (5.303.2, A5303.2.3 [nonresidential]).
- Water meters. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day (5.303.1).
- Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas (5.304.3).
- Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard (5.404).
- Building commissioning. Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over

10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

**Model Water Efficient Landscape Ordinance.** The Model Water Efficient Landscape Ordinance (Model Ordinance) established under the Water Conservation Act, requires local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance. New development projects that include landscape areas of 500 square feet or more are subject to the Model Ordinance.

Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected upon compliance with the ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015 to be effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance requirements, including:

- More efficient irrigation systems;
- Incentives for graywater usage;
- Improvements in on-site stormwater capture;
- Limiting the portion of landscapes that can be planted with high water use plants;  
and
- Reporting requirements for local agencies.

**ARB Refrigerant Management Program.** ARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth at sections 95380 to 95398 of Title 17, California Code of Regulations.

The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

**Tractor-Trailer GHG Regulation.** Tractors and trailers subject to this regulation must either use US EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

**Phase I and 2 Heavy-Duty Vehicle GHG Standards.** ARB has adopted a new regulation for GHG emissions from heavy-duty trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the U.S. EPA rule for new trucks and engines nationally. Existing heavy-duty vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation.

ARB staff has worked jointly with the U.S. Environmental Protection Agency (U.S. EPA) and the National Highway Traffic Safety Administration (NHTSA) on the next phase of federal greenhouse gas (GHG) emission standards for medium- and heavy-duty vehicles,

called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty vehicles, including trailers.

**SB 97 and the CEQA Guidelines Update.** Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states “(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a).” Section 21097 was also added to the Public Resources Code. It provided CEQA protection until January 1, 2010 for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA.

On April 13, 2009, the Office of Planning and Research submitted to the Secretary for Natural Resources its recommended amendments to the *CEQA Guidelines* addressing GHG emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code section 21083.05. Following a 55-day public comment period and two public hearings, the Natural Resources Agency proposed revisions to the text of the proposed amendments. The Natural Resources Agency transmitted the adopted amendments and the entire rulemaking file to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

A new section, *CEQA Guidelines* Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. However, little guidance is offered on the crucial next step in this assessment process—how to determine whether the project’s estimated GHG emissions are significant or cumulatively considerable.

Also amended were Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts, respectively. GHG mitigation measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze GHG emissions in an EIR when a project’s incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic GHG analysis and later project-specific tiering, as well as the preparation of GHG Reduction Plans. Compliance with such plans can support a determination that a project’s cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

In addition, the amendments revised Appendix F of the *CEQA Guidelines*, which focuses on Energy Conservation. The sample environmental checklist in Appendix G was amended to include GHG questions.

## **CITY OF VICTORVILLE**

The City of Victorville Climate Action Plan (CAP) provides a framework for reducing GHG emissions and managing resources to best prepare for a changing climate. To determine consistency with the CAP, the City of Victorville provided Screening Tables to facilitate measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. The CAP contains a menu of measures potentially applicable to discretionary development that include energy conservation, water use reduction, increased residential density or mixed uses, transportation management and solid waste recycling. Individual sub-measures are assigned a point value within the overall Screening Table of GHG implementation measures. The point values are adjusted according to the intensity of action items with modest adoption/installation (those that reduce GHG emissions by modest amounts) worth the least number of points and greatly enhanced adoption/installation worth the most. Projects that yield at least 45 points are determined to be consistent with the CAP. Such projects are considered to have a less than significant individual and cumulative impact on GHG emissions. Projects that are consistent with adopted CAPs are also considered to support and would not conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

### **4.4.3 SOURCES OF PROJECT GHG EMISSIONS**

#### **4.4.3.1 Construction-Source GHG Emissions**

Project construction activities would generate emissions of CO<sub>2</sub> and CH<sub>4</sub>. Project construction-source emissions are quantified and amortized over the life of the Project. To amortize construction-source emissions over the life of the Project, total construction-source greenhouse gas emissions were calculated, and then divided by an assumed 30-year Project life. Amortized Project construction-source GHG emissions are then added to annual operational-source GHG emissions, yielding total estimated annual Project GHG emissions.

#### **4.4.3.2 Operational-Source GHG Emissions**

Project operations would result in emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from the following primary sources:

- Building Energy Use (combustion emissions associated with natural gas and electricity);
- Water Supply, Treatment, and Distribution;
- Solid Waste; and
- Mobile Source Emissions.

#### **Area Source Emissions**

Landscape and site maintenance equipment employed over the life of the Project would generate GHG emissions from fuel combustion and evaporation of unburned fuel. Typical equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers.

#### **Energy Source Emissions**

Project building operations would consume electricity and natural gas. Combustion of any type of fuel emits CO<sub>2</sub> and other GHGs.

#### **Mobile Source Emissions**

GHG emissions would be generated by mobile sources (vehicular traffic) accessing the Project.

#### **Solid Waste Management Emissions**

The Project land uses would generate solid waste. Project-source solid waste would be diverted and recycled consistent with requirements of AB 39. Waste not diverted or recycled would be disposed of at a landfill. Anaerobic breakdown of material at landfills generate GHG emissions.

## **Water Supply, Treatment and Distribution Emissions**

The Project would consume water and would generate wastewater. Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water, and to convey and treat wastewater.

### **4.4.4 PROJECT GHG EMISSIONS IMPACTS**

#### **4.4.4.1 California Emissions Estimator Model™ Employed to Estimate GHG Emissions**

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod™ has been used for this Project to determine construction and operational emissions of the Project.

#### **4.4.4.2 Impact Statements**

**Potential Impact:** *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.*

**Impact Analysis:** An individual project cannot generate enough GHG emissions to influence global climate change. A project participates in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs, which when taken together may have a significant impact on global climate change.

The City's CAP provides a framework for reducing GHG emissions and managing resources to best prepare for a changing climate. The CAP includes Screening Tables to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures. The CAP contains a menu of measures encompassing energy conservation, water use reduction, increased residential density or mixed uses, transportation management and solid waste recycling. Individual sub-measures are assigned a point value. Projects that yield at least 45 points are determined to be consistent with the CAP. Further, "projects that garner a total of 45 points or greater would not require quantification of project specific GHG emissions" (City of Victorville Screening Tables, p. 6). The Project GHGA at Appendix 3.2, *Screening Tables*, substantiates that the Project would yield 53 points. The Project would therefore be consistent with the CAP and quantification of Project GHG emissions is not required. Project GHG emissions have nonetheless been quantified here for informational and disclosure purposes. Project GHG emissions are summarized at Table 4.4-3.

**Table 4.4-3**  
**Annual Project GHG Emissions**

Emission Source	Emissions (metric tons per year)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Annual construction-related emissions amortized over 30 years	14.24	0.00	0.00	14.31
Area Sources	0.01	3.00E-05	0.00	0.01
Energy Use	764.47	0.03	8.57E-03	767.70
Solid Waste Management	49.76	2.94	0.00	123.28
Water Use	59.70	0.34	8.47E-03	98.02
<b>Subtotal</b>	888.18	3.31	<.02	1,003.32
Mobile Sources	7,444.92	0.64	0.00	7,460.97
<b>TOTAL CO<sub>2</sub>E (All Sources)</b>	<b>8,464.29</b>			

**Source:** *Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville (Urban Crossroads, Inc.)* March 13, 2019.

**Note:** CalEEMod totals may not total 100% due to rounding.

As shown at Table 4.4-3, the Project has the potential to generate a total of approximately 8,464.29 MTCO<sub>2</sub>e per year. Annual GHG emissions from Project construction sources, area sources, energy use, solid waste management, and water use would total approximately 1,003.32 MTCO<sub>2</sub>e. Project mobile sources would generate an additional 7,460.97 MTCO<sub>2</sub>e per year. The latter assumes that all of the vehicle trips to and from the Project are “new” trips resulting from the development of the Project.

Projects that are consistent with an adopted CAP may be found to cause a less than significant impact under CEQA (*CEQA Guidelines* § 15064(h)(3)). Projects that are consistent with adopted CAPs are also considered to support and would not conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. The Project is substantiated herein to be consistent with the CAP. Project GHG emissions impacts on the environment are therefore considered less-than-significant. Additionally, because the Project is substantiated to be consistent with the CAP, the Project would not conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

**Impact Analysis:** As discussed above, the Project is consistent with the City of Victorville’s adopted CAP since it will achieve the required minimum 45 points per the City’s Screening Tables. Consequently, the Project is determined to be consistent with the California Air Resources Board (AB 32) Scoping Plan GHG emissions reduction targets for Year 2020 and 2030. The Project would not otherwise interfere with any future City-mandated, state-mandated, or federally-mandated retrofit obligations enacted or promulgated to legally require development City-wide, state-wide, or nation-wide to assist in meeting state-adopted greenhouse gas emissions reduction targets. Such

measures include those established under Executive Order S-3-05, Executive Order B-30-15, and SB 32. On this basis, the potential for the Project to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

## **4.5 NOISE**

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## 4.5 NOISE

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### ***Abstract***

*This Section assesses whether the Project would substantially increase ambient noise levels, or expose land uses to noise, groundborne noise, or groundborne vibration levels exceeding established standards. In this regard, potential impacts considered within this Section include:*

- 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;*
- Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels;*
- A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project;*
- A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project;*
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the Project area to excessive noise levels; or*
- For a project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels.*

*As substantiated in the following analyses, all Project-related noise impacts are considered less-than-significant.*

#### **4.5.1 INTRODUCTION**

This Section presents the noise setting, methodology, standards of significance, and potential noise impacts associated with the Project. Where impacts are determined to be potentially significant, mitigation measures are proposed to avoid or reduce the severity of impacts. The information presented in this section has been summarized from *Desert Grove Retail Project, Noise Impact Analysis, City of Victorville* (Urban Crossroads, Inc.) March 21, 2019 (Project Noise Study). The Project Noise Study in its entirety is included in Appendix E to this EIR.

#### **4.5.2 SETTING**

The following are discussions of noise fundamentals applicable to the Project, together with assessments of existing ambient noise levels and noise sources in the Project vicinity.

##### **4.5.2.1 Fundamentals of Noise**

Simply put, “noise” is unwanted sound. For the purposes of this analysis, “noise” is considered to consist generally of sounds created by the operation of commercial and industrial uses, by cars and trucks, by airplanes, and by other non-residential uses.

Noise levels are measured on a logarithmic scale in decibels. To provide an average measure of noise as it is perceived by the average person, these measurements are weighted and added over a 24-hour period to reflect not only the magnitude of the sound, but also its duration, frequency, and time of occurrence. There are various ways of calculating these daily averages, including: equivalent sound levels (Leq), day-night average sound levels (Ldn) and community noise equivalent levels (CNEL). The following analysis uses Leq to evaluate potential construction and operational noise impacts, and CNEL to evaluate off-site traffic noise impacts.

“A-weighted” decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against the very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. The decibel scale has a value of 0.0 dBA at the threshold of hearing and 140 dBA at the threshold of pain. Each interval of 10 decibels

indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. A 1.0 decibel increase is barely audible, whereas a 10-decibel increase is perceived as being twice as loud as before. Representative decibel levels of various noise sources are presented in Figure 4.5-1.

### **Noise Rating Schemes**

Equivalent sound levels are not measured directly but, rather, are calculated from sound pressure levels typically measured in dBA. The equivalent sound level (Leq) is the constant level that, over a given period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the Ldn and CNEL scales.

Day-night average sound levels (Ldn) are a measure of the cumulative noise exposure of the community. The Ldn value results from a summation of hourly Leq over a 24-hour period with an increased weighting factor applied to the night period between 10:00 p.m. and 7:00 a.m. This noise rating scheme accounts for subjectively more annoying noise events which occur during normal sleep hours.

Community noise equivalent levels (CNEL) also carry a weighting penalty for noise that occurs during the nighttime hours. In addition, CNEL levels include a penalty for noise events that occur during the evening hours between 10:00 p.m. and 7:00 a.m. Because of the weighting factors applied, CNEL values at a given location will always be larger than Ldn values, which in turn will exceed Leq values. However, CNEL values are typically within one decibel of the Ldn value.

## TYPICAL NOISE LEVELS AND THEIR SUBJECTIVE LOUDNESS AND EFFECTS

<b>COMMON OUTDOOR ACTIVITIES</b>	<b>COMMON INDOOR ACTIVITIES</b>	<b>A - WEIGHTED SOUND LEVEL dBA</b>	<b>SUBJECTIVE LOUDNESS</b>	<b>EFFECTS OF NOISE</b>
THRESHOLD OF PAIN		140	<b>INTOLERABLE OR DEAFENING</b>	<b>HEARING LOSS</b>
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	<b>VERY NOISY</b>	<b>SPEECH INTERFERENCE</b>
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80	<b>LOUD</b>	
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70		
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60	<b>MODERATE</b>	<b>SLEEP DISTURBANCE</b>
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50		
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	<b>FAINT</b>	<b>NO EFFECT</b>
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	<b>VERY FAINT</b>	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

SOURCE: NOISE TECHNICAL SUPPLEMENT BY CALTRANS

Source: Urban Crossroads, Inc.

## **Sound Propagation**

For a “line source” of noise such as a heavily traveled roadway, the noise level drops off by a nominal value of 3.0 decibels for each doubling of distance between the noise source and the noise receptor. The nominal value of 3.0 dBA with doubling applies to sound propagation from a line source: (1) over the top of a barrier greater than three meters in height; or (2) where there is a clear unobstructed view of the highway, the ground is hard, no intervening structures exist and the line-of-sight between the noise source and receptor averages more than three meters above the ground.

Notwithstanding, environmental factors such as wind conditions, temperature gradients, characteristics of the ground (hard or soft) and the air (relative humidity), and the presence of vegetation combine to typically increase the attenuation achieved outside laboratory conditions to approximately 4.5 decibels per doubling of distance. The increase in noise attenuation in exterior environments is particularly true: (1) for freeways with an elevated or depressed profile or exhibiting expanses of intervening buildings or topography; (2) where the view of a roadway is interrupted by isolated buildings, clumps of bushes, scattered trees; (3) when the intervening ground is soft or covered with vegetation; or (4) where the source or receptor is located more than three meters above the ground.

In an area which is relatively flat and free of barriers, the sound level resulting from a single “point source” of noise drops by six decibels for each doubling of distance or 20 decibels for each factor of ten in distance. This applies to fixed noise sources and mobile noise sources which are temporarily stationary, such as an idling truck or other heavy-duty equipment operating within a confined area (such as industrial processes or construction).

## **Noise Barrier Attenuation**

Noise barriers along roadways can reduce noise effects of vehicular-source at adjacent land uses. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to be effective, it must be high enough and long enough to block the view of the noise source.

## **Vibration**

According to the Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment, vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, groundborne vibrations may be described by amplitude and frequency. Vibration is often described in units of velocity (inches per second) and discussed in decibel (dB) units to compress the range of numbers required to describe vibration. The vibration velocity level is denoted as VdB in this document. Vibration impacts are generally associated with activities such as train operations, construction and heavy truck movements.

The background vibration-velocity level in residential areas is generally 50 VdB. Groundborne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

### **4.5.2.2 Factors Affecting Motor Vehicle Noise**

According to the Highway Traffic Noise Analysis and Abatement Policy and Guidance, provided by the Federal Highway Administration (FHWA), the level of traffic noise depends on three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the vehicle mix within the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. A doubling of the traffic volume, assuming that the speed and vehicle mix do not change,

results in a noise level increase of 3 dBA. The vehicle mix on a given roadway may also affect community noise levels. As the number of medium and heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise level impacts will increase. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires on the roadway.

To account for the ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft site and hard site conditions. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. A drop-off rate of 4.5 dBA per doubling of distance is typically observed over soft ground with landscaping, as compared with a 3.0 dBA drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. The Project Noise Study indicates that, generally, soft site conditions better reflect the predicted noise levels. In addition, Caltrans' research has shown that the use of soft site conditions is more appropriate for the application of the FHWA traffic noise prediction model used in this analysis.

#### **4.5.2.3 Community Responses to Noise**

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. As a result, even in the quietest environment, some complaints will occur. By comparison, about one-fourth of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from various people exposed to the same noise environment.<sup>1</sup>

Despite this variability in behavior on an individual level, populations in general can be expected to exhibit the following responses to changes in noise levels:

- An increase or decrease of 1.0 dBA cannot be perceived except in carefully controlled laboratory experiments.

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<sup>1</sup>U.S. Environmental Protection Agency Office of Noise Abatement and Control. *Noise Effects Handbook-A Desk Reference to Health and Welfare Effects of Noise*. October 1979 (revised July 1981).

- A 3.0 dBA increase may be perceptible outside of the laboratory.
- An increase of 5.0 dBA is often necessary before any noticeable change in community response (i.e., complaints) would be expected.

Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action. Several factors are related to the level of community annoyance including:

- Fear associated with noise-producing activities;
- Noise receptor's perception that they are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Receptor's belief that the noise source can be controlled.

Recent studies have shown that changes in long-term noise levels are noticeable and are responded to by people. For example, about ten percent of the people exposed to traffic noise of 60 Ldn will report being highly annoyed with the noise, and each increase of one Ldn is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 Ldn or aircraft noise exceeds 55 Ldn, people begin complaining. Group or legal actions to stop the noise should be expected to begin at traffic noise levels near 70 Ldn and aircraft noise levels near 65 Ldn.

#### **4.5.2.4 Land Use Compatibility With Noise**

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches and residences are more sensitive to noise intrusion than are commercial or industrial activities, as ambient noise levels affect the perceived amenity or liveability of a development or a community. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process.

#### 4.5.2.5 Current Noise Exposure

To characterize the existing noise level environment, six 24-hour noise level measurements were taken at receiver locations in the Project study area. Noise measurement locations are illustrated in Figure 4.5-2 and are representative of sites that may be affected by Project-generated noise. Descriptions of noise measurement locations and monitored noise levels are summarized in Table 4.5-1.

**Table 4.5-1  
Ambient Noise Levels (24-Hour)**

Location	Distance to Project Boundary	Description	Energy Average Hourly Noise Level (dBA Leq)		CNEL
			Daytime	Nighttime	
L1	475'	Located on Pearmain Street northwest of the Project site near an existing commercial area and vacant lot.	66.5	62.7	70.5
L2	95'	Located east of the Project site on US-395 south of an existing ARCO gas station in a vacant lot.	68.8	68.7	75.4
L3	2,355'	Located east of the Project site on Camino Alto Way near an existing single-family residential neighborhood.	54.2	51.2	58.6
L4	1,245'	Located south of the Project site on Fern Pine Road near an existing single-family residential neighborhood.	51.8	50.0	57.1
L5	975'	Located southwest of the Project site on Far Hills Lane near an existing single-family residential neighborhood.	52.8	51.1	58.3
L6	1,685'	Located west of the Project site on Mesa View Drive south of Palmdale Road.	67.2	64.3	71.7

**Source:** *Desert Grove Retail Project, Noise Impact Analysis, City of Victorville* (Urban Crossroads, Inc.) March 21, 2019.  
 "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.



**LEGEND:**  
 ▲ Noise Measurement Locations

Source: Urban Crossroads, Inc.

Figure 4.5-2  
 Noise Measurement Locations

### **4.5.3 REGULATORY SETTING**

Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. To limit population exposure to intrusive noise levels, the City of Victorville has established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas.

#### **4.5.3.1 State of California**

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards and provides guidance for local land use compatibility. State law requires each county and city to adopt a General Plan that includes a Noise Element. The purpose of the Noise Element is to “limit the exposure of the community to excessive noise levels.” In addition, CEQA requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

#### **California Building Code**

The 2016 State of California’s Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.507 on Environmental Comfort. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available, and the noise level exceeds 65 dBA Leq for any hour

of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

#### **4.5.3.2 City of Victorville Noise Standards**

##### **City of Victorville General Plan**

The City of Victorville General Plan Noise Element is intended to limit exposure of the community to excessive noise levels. The City of Victorville General Plan Noise Element land use compatibility standards specify the noise levels allowable for new developments impacted by transportation noise sources. The City's compatibility criteria, found in Table N-3 of the General Plan, identify the criteria for commercial land uses such as the Project. When the unmitigated exterior noise levels approach 65 dBA CNEL commercial land use is considered normally acceptable. With exterior noise levels ranging from 70 to 75 dBA CNEL, commercial land uses are considered conditionally acceptable. With exterior noise levels greater than 75 dBA CNEL, commercial land uses are considered normally unacceptable. Residential uses are considered normally acceptable with exterior noise levels below 60 dBA CNEL, and conditionally acceptable when exterior noise levels exceed 65 dBA CNEL.

##### **Victorville Construction Noise Standards**

Neither the City of Victorville General Plan or Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase.

To evaluate whether the Project will generate potentially significant construction noise levels at off-site sensitive receiver locations, a construction noise level threshold was adopted from the *Criteria for Recommended Standard: Occupational Noise Exposure* prepared by the National Institute for Occupational Safety and Health (NIOSH). A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction-related noise level threshold starts at 85 dBA for more than eight hours per day, and for every 3 dBA

increase, the exposure time is cut in half. This results in noise level thresholds of 88 dBA for more than four hours per day, 92 dBA for more than one hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative construction noise level threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at the nearby receiver locations. Since this construction noise level threshold represents the energy average of the noise source over a given time, they are expressed as Leq noise levels. Therefore, the noise level threshold of 85 dBA Leq over a period of eight hours or more is used to evaluate the potential Project construction noise impacts at nearby receiver locations.

### **Victorville Operational Noise Standards**

To analyze noise impacts originating from a designated fixed location or private property, stationary-source (operational) noise such as the expected roof-top air conditioning units, drive-through speakerphones, gas station activity, parking lot vehicle movements, car wash tunnel, entry, and vacuum activities, loading dock activity, shopping cart corrals, and temporary RV idling/parking activity are typically evaluated against standards established under a jurisdiction's Municipal Code.

Section 13.01.030 of the City of Victorville Municipal Code, establishes the noise level standards for stationary noise sources. Since the Project will potentially impact non-noise-sensitive commercial uses in addition to noise-sensitive uses in the Project study area, the noise analysis relies on the exterior noise level standards for all land uses identified by the City of Victorville Municipal Code. The operational noise level standards are shown at Table 4.5-2.

**Table 4.5-2  
City of Victorville Operational Noise Standards**

<b>Jurisdiction</b>	<b>Land Use</b>	<b>Time Period</b>	<b>Exterior Noise Level Standard (dBA L<sub>eq</sub>)</b>
City of Victorville	Residential	Daytime (7:00 a.m. - 10:00 p.m.)	65
		Nighttime (10:00 p.m. - 7:00 a.m.)	55
	Commercial	Anytime	70
	Industrial	Anytime	75

**Source:** *Desert Grove Retail Project, Noise Impact Analysis, City of Victorville* (Urban Crossroads, Inc.) March 21, 2019.

### **Victorville Vibration Level Standards**

The City of Victorville has not identified or adopted specific vibration level standards. However, the United States Department of Transportation Federal Transit Administration (FTA) provides guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines allow 80 VdB for residential uses and buildings where people normally sleep. Operational and construction activities can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. The FTA guidelines of 80 VdB for sensitive land uses provide a substantiated basis for determining the relative significance of potential vibration impacts due to on-site operational and construction activities.

#### **4.5.3.3 City of Adelanto Noise Standards**

The City of Adelanto jurisdictional boundaries are located north of the Project site on the north side of SR-18. Therefore, this section includes a review of applicable City of Adelanto noise standards as they relate to the analysis presented herein.

#### **City of Adelanto General Plan**

The City of Adelanto General Plan Noise Element identifies land use compatibility criteria at Table VIII-2. Table VIII-2 indicates residential uses require noise reduction analysis when exterior noise levels range from 65 to 70 dBA CNEL. Commercial uses are considered compatible with exterior noise levels approaching 70 dBA CNEL. These criteria are generally consistent with the City of Victorville's General Plan compatibility

criteria. As such, 65 dBA CNEL is considered the threshold of compatibility for residential uses, and 70 dBA CNEL for commercial uses.

### **Adelanto Operational Noise Standards**

The City of Adelanto Municipal Code, Section 17.90.020(b)(1) indicates that the General Plan Noise Element Table VIII-2, *Land Use Compatibility Guidelines Related to Noise Exposure*, shall apply to land uses City-wide and shall be used to define acceptable and unacceptable noise levels. The lowest exterior noise level criteria identified for the noise-sensitive residential use in the Project study area in Table VIII-2 of the General Plan Noise Element is 65 dBA Leq, with 70 dBA Leq identified for commercial uses. These standards are, therefore, consistent with standards identified in Section 13.01.030 of the City of Victorville Municipal Code. As such, the 65 dBA Leq and 70 dBA Leq exterior noise level limits are used to evaluate Project operational noise levels at noise-sensitive residential uses in the Project study area in both the City of Victorville and Adelanto jurisdictions. However, the City of Victorville specifies more restrictive nighttime exterior noise level limits for noise-sensitive uses of 55 dBA Leq, and as such, the analysis herein relies on the more restrictive City of Victorville standards for operational noise.

### **Adelanto Construction Noise Standards**

Similar to the City of Victorville, neither the City of Adelanto General Plan or Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase. Therefore, the previously-identified NIOSH 85 dBA Leq threshold is used in this analysis for all receiver locations.

### **Adelanto Vibration Level Standards**

The City of Adelanto Municipal Code, Section 17.90.030 *Vibration*, identifies a vibration level standard of 0.2 in/sec PPV. However, the previously-identified FTA 80 VdB standard represents a more conservative threshold for this analysis since it equates to approximately 0.01 in/sec PPV, and therefore, the FTA threshold is used in this analysis.

#### 4.5.4 STANDARDS OF SIGNIFICANCE

Based on the noise criteria presented above, and direction provided within the *CEQA Guidelines*, Project noise impacts would be considered potentially significant if the Project is determined to result in or cause the following conditions:

- 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;
- A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project;
- A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project;
- Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels;
- 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, expose people residing or working in the Project area to excessive noise levels; or
- For a project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels.

Impact significance criteria applicable to the Project are summarized within the following table.

**Table 4.5-3  
Summary of Significance Criteria**

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic Noise <sup>1</sup>	Noise-Sensitive	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
Operational Noise	Multiple	Exterior Noise Level Standards	See Table 4.5-2.	
	Noise-Sensitive <sup>1</sup>	if ambient is < 60 dBA Leq	≥ 5 dBA Leq Project increase	
		if ambient is 60 - 65 dBA Leq	≥ 3 dBA Leq Project increase	
		if ambient is > 65 dBA Leq	≥ 1.5 dBA Leq Project increase	
Construction Noise and Vibration	All	Noise Level Threshold <sup>2</sup>	85 dBA Leq	
	Noise-Sensitive	Noise Level Increase <sup>3</sup>	12 dBA Leq	
	All	Vibration Level Threshold <sup>4</sup>	80 VdB	

**Source:** *Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.)* March 21, 2019.

<sup>1</sup> FICON, 1992.

<sup>2</sup> NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure, June 1998.

<sup>3</sup> Caltrans Traffic Noise Analysis Protocol, May 2011.

<sup>4</sup> Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

"Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

#### 4.5.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

Following is an analysis of potential noise impacts that could occur because of the Project. Of the CEQA threshold considerations at presented Section 4.5.4, and as substantiated in the Initial Study, the Project's potential impacts under the following topics are determined to be less-than-significant, and are not further discussed in this Section:

- 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, expose people residing or working in the Project area to excessive noise levels.
- For a project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels.

Please refer also to Appendix A, *Initial Study and NOP Responses*; Initial Study Checklist Item XII., *Noise*.

Noise levels will change both on-site and off-site if the Project is approved and implemented. The discussion of potential noise/vibration impacts is organized under the following topical headings:

- Construction-Source Noise;
- Vehicular-Source Noise;
- Operational/Area-Source Noise; and
- Vibration.

For each topical discussion, potential impacts are evaluated under applicable criteria established above in Section 4.5.4, *Standards of Significance*.

#### RECEIVER LOCATIONS

To assess the potential for long-term operational noise and short-term construction noise and vibration impacts, eight receiver locations were identified as representative locations for focused analysis, as shown in Figure 4.5-3 and described below.

- R1: Location R1 represents the existing, non-noise-sensitive commercial use located approximately 125 feet north of the Project site on the north side of Palmdale Road.
- R2: Location R2 represents the existing, non-noise-sensitive commercial-designated vacant land located approximately 128 feet east of the Project site on the east side of US-395.
- R3: Location R3 represents the existing, non-noise-sensitive commercial use located approximately 34 feet south of the Project site on the west side of US-395.
- R4: Location R4 represents existing, noise-sensitive residential homes south of the Project site at roughly 1,269 feet on Fern Pine Road. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

- R5: Location R5 represents existing, noise-sensitive residential homes west of the Project site at roughly 727 feet on Brynwood Street. A 24-hour noise measurement was taken near this location, L5, to describe the existing ambient noise environment.
- R6: Location R6 represents the existing, non-noise-sensitive commercial-designated vacant land located approximately 90 feet south of the Project site.
- R7: Location R7 represents existing, noise-sensitive residential-designated vacant land west of the Project site at roughly 451 feet on the south side of Palmdale Road. A 24-hour noise measurement was taken near this location, L6, to describe the existing ambient noise environment.
- R8: Location R8 represents the existing, non-noise-sensitive commercial use located approximately 94 feet northeast of the Project site on the south side of Palmdale Road.

Other land uses in the Project study area that are located at greater distances than those identified in this analysis would experience lower noise levels than those identified here due to the additional attenuation from distance and the shielding of intervening structures.



Source: Urban Crossroads, Inc.

Figure 4.5-3  
Receiver Locations

## CONSTRUCTION-SOURCE NOISE

**Potential Impact:** *Project construction activities and associated noise would 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.*

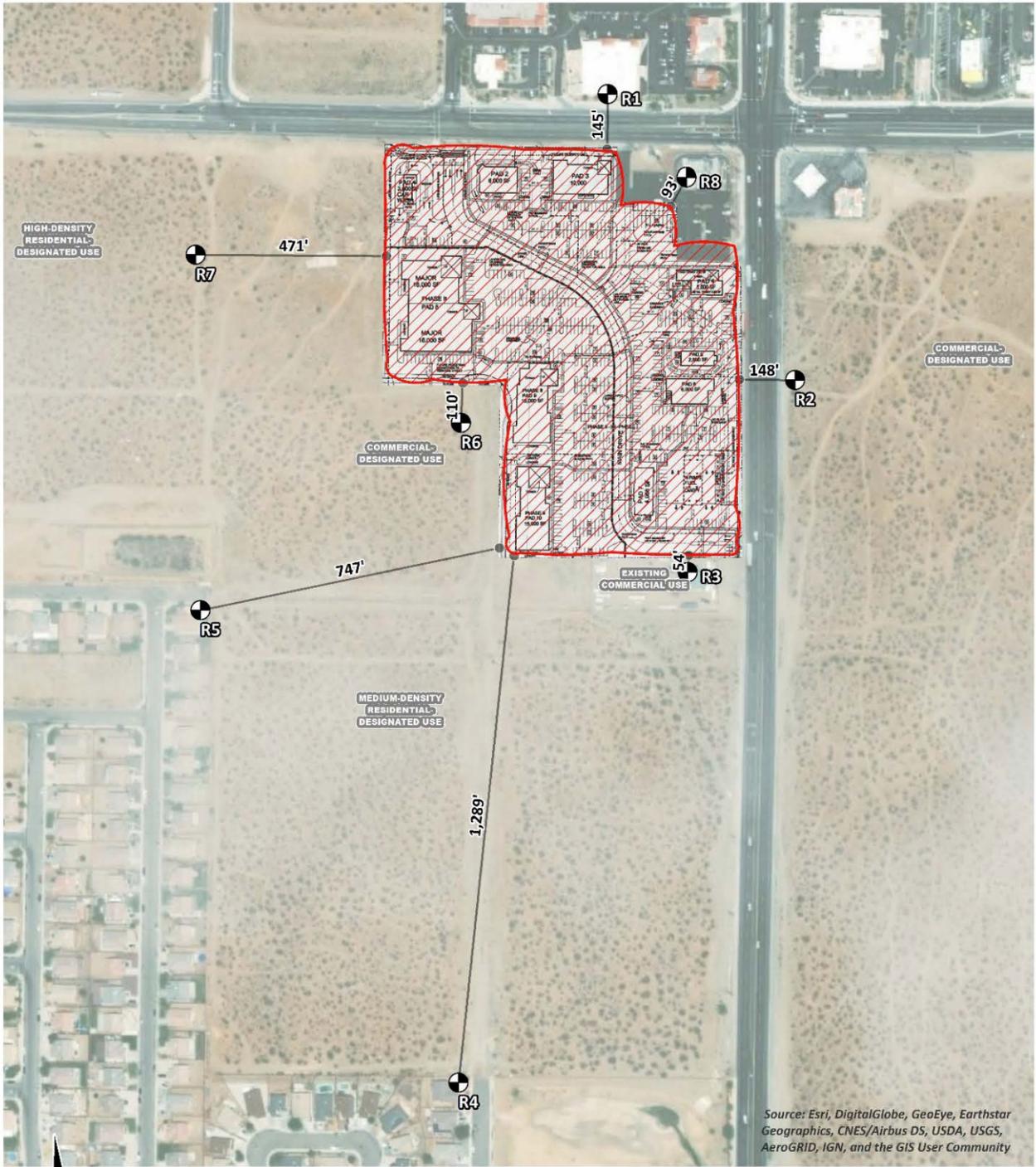
**Impact Analysis:** Construction noise represents a short-term impact on ambient noise levels. Noise generated by construction equipment, including trucks, power tools, concrete mixers, and portable generators can reach high levels. Project construction is expected to occur in the following stages:

- Site Preparation;
- Grading;
- Building Construction;
- Paving; and
- Architectural Coating.

The construction noise analysis was prepared using reference noise level measurements to describe the typical construction activity noise levels for each stage of Project construction.<sup>2</sup> The construction reference noise level measurements represent the noise generated by typical construction equipment and activities. Noise levels generated by heavy construction equipment can range from approximately 68 dBA to in excess of 80 dBA when measured at 50 feet. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet from the source to the receiver and would be further reduced to 68 dBA at 200 feet from the source to the receiver. Figure 4.5-4 illustrates the location of the construction activities assumed for the Project.

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<sup>2</sup> Please refer to Noise Impact Analysis (EIR Appendix E) Table 10-1 for a complete listing of reference noise levels used within the analysis.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- LEGEND:**
-  Construction Activity
  -  Distance from receiver to construction activity (in feet)

Source: Urban Crossroads, Inc.

Figure 4.5-4  
Construction Noise Source Locations

As shown in previous Table 4.5-3, construction noise impacts would be considered significant if any of the following occur as a direct result of the Project:

- If Project-related construction activities:
  - Generate noise levels which exceed the 85 dBA Leq acceptable noise level threshold at the nearby sensitive receiver locations (NIOSH, Criteria for Recommended Standard: Occupational Noise Exposure); or
  - Generate temporary Project construction-related noise level increases which exceed the 12 dBA Leq substantial noise level increase threshold at noise-sensitive receiver locations (Caltrans, Traffic Noise Analysis Protocol).

Using the reference noise levels, Table 4.5-4 presents the highest noise levels at the receiver locations identified in Figure 4.5-4.

**Table 4.5-4**  
**Project Construction Noise Level Summary**

Receiver Location	Construction Hourly Noise Level (dBA Leq)					Highest Construction Noise Levels
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	
R1	54.9	70.0	58.9	62.4	58.2	70.0
R2	54.7	69.8	58.7	62.2	58.0	69.8
R3	63.5	78.6	67.5	70.9	66.8	78.6
R4	35.9	51.0	39.9	43.4	39.2	51.0
R5	40.7	55.8	44.7	48.1	44.0	55.8
R6	57.3	72.4	61.3	64.8	60.6	72.4
R7	44.7	59.8	48.7	52.1	48.0	59.8
R8	58.8	73.9	62.8	66.2	62.1	73.9

**Source:** *Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.*

As shown above, the highest construction noise levels at the potentially impacted receiver locations are expected to approach 78.6 dBA Leq and, therefore, will satisfy the construction noise level threshold of 85 dBA Leq at all receiver locations. Based on the preceding analysis, Project construction activities and associated noise 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.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Project construction activities and associated noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.*

**Impact Analysis:** To describe the temporary Project construction noise level contributions to the existing ambient noise environment, the Project construction noise levels presented above were combined with the existing ambient noise levels measurements at the off-site receiver locations. The difference between the combined Project-construction and ambient noise levels are used to describe the construction noise level contributions. Temporary noise level increases that would be experienced at sensitive receiver locations when Project construction-source noise is added to the ambient daytime conditions are presented in Table 4.5-5.

**Table 4.5-5  
Construction Noise Level Increases**

Receiver Location	Highest Noise Level	Measurement Location	Ambient Noise Level	Combined Project and Ambient	Project Contribution	Threshold Exceeded?
R4	51.0	L4	51.8	54.4	2.6	No
R5	55.8	L5	52.8	57.5	4.7	No
R7	59.8	L6	67.2	67.9	0.7	No

*Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.*

As indicated in Table 4.5-5, the Project will contribute construction noise level increases approaching 4.7 dBA Leq at the closest sensitive receiver location, R5. As such, temporary noise level increases during Project construction are below the 12 dBA Leq significance threshold. Based on the preceding analysis, Project construction activities and associated noise would not result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

**Level of Significance:** Less-Than-Significant.

## TRAFFIC NOISE

**Potential Impact:** *Project-related off-site traffic noise would 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 other applicable standards of other agencies.*

**Impact Analysis:** To assess impacts resulting from off-site Project-related traffic noise on area roadways, the Project Noise Study developed noise contours for Study Area roadway segments based on average daily trip (ADT) estimates, Project trip generation, and trip distribution as presented in *SWC US-395/Palmdale Road (SR-18), Traffic Impact Analysis* (TJW Engineering, Inc.) March 13, 2019 (Traffic Impact Analysis).

The noise contours were used to assess the Project's incremental vehicular-source noise impacts at land uses adjacent to roadways conveying Project traffic. Potential off-site vehicular-source noise impacts were evaluated under the following scenarios:

- Existing Conditions Without / With Project: This scenario refers to the existing present-day noise conditions without and with the proposed Project.
- Opening Year 2019 Without / With the Project: This scenario refers to Opening Year noise conditions with ambient growth, without and with the proposed Project. This scenario includes all cumulative traffic volumes identified in the Traffic Impact Analysis.
- Interim Year Without / With the Project: This scenario refers to Interim Year noise conditions with ambient growth, without and with the proposed Project. This scenario includes all cumulative traffic volumes identified in the Traffic Impact Analysis.

- General Plan 2040 Without / With the Project: This scenario refers to Year 2040 noise conditions with ambient growth, without and with the proposed Project. This scenario includes all cumulative traffic volumes identified in the Traffic Impact Analysis.

As shown in previous Table 4.5-3, off-site traffic noise impacts would be considered significant if any of the following occur as a direct result of the Project:

- When the noise levels at existing and future noise-sensitive land uses (e.g., residential, etc.):
  - Are less than 60 dBA CNEL and the Project creates a readily perceptible 5 dBA CNEL or greater Project-related noise level increase; or
  - Range from 60 to 65 dBA CNEL and the Project creates a barely perceptible 3 dBA CNEL or greater Project-related noise level increase; or
  - Already exceed 65 dBA CNEL, and the Project creates a community noise level impact of greater than 1.5 dBA CNEL (FICON, 1992).

Tables 4.5-6 through 4.5-9 present the noise levels associated with the above scenarios.

**Table 4.5-6**  
**Existing Condition Off-site Traffic Noise Impacts**

	Road	Segment	CNEL at Receiving Land Use (dBA)			Noise-Sensitive Receiver Land Use?	Threshold Exceeded?
			No Project	With Project	Project Addition		
1	US-395	n/o SR-18	70.8	71.1	0.3	No	No
2	US-395	n/o Dos Palmas Rd.	71.3	71.6	0.3	No	No
3	US-395	n/o Luna Rd.	70.6	70.9	0.2	Yes	No
4	US-395	n/o La Mesa Rd.	74.5	74.8	0.3	Yes	No
5	US-395	n/o Bear Valley Rd.	74.1	74.3	0.3	Yes	No
6	SR-18	w/o US-395	70.6	70.9	0.3	Yes	No
7	Luna Rd.	e/o US-395	63.6	63.9	0.3	Yes	No
8	SR-18	e/o Cantina St.	70.1	70.4	0.3	Yes	No
9	SR-18	e/o Cobalt Rd.	70.3	70.6	0.3	Yes	No
10	SR-18	e/o Amethyst Rd.	70.3	70.5	0.2	Yes	No

Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.

**Table 4.5-7**  
**Opening Year Off-site Traffic Noise Impacts**

	Road	Segment	CNEL at Receiving Land Use (dBA)			Noise-Sensitive Receiver Land Use?	Threshold Exceeded?
			No Project	With Project	Project Addition		
1	US-395	n/o SR-18	71.1	71.2	0.1	No	No
2	US-395	n/o Dos Palmas Rd.	71.6	72.1	0.5	No	No
3	US-395	n/o Luna Rd.	70.9	71.4	0.5	Yes	No
4	US-395	n/o La Mesa Rd.	74.8	74.9	0.1	Yes	No
5	US-395	n/o Bear Valley Rd.	74.3	74.4	0.1	Yes	No
6	SR-18	w/o US-395	70.9	71.1	0.2	Yes	No
7	Luna Rd.	e/o US-395	63.9	65.6	1.7	Yes	No
8	SR-18	e/o Cantina St.	70.4	70.8	0.4	Yes	No
9	SR-18	e/o Cobalt Rd.	70.6	70.9	0.3	Yes	No
10	SR-18	e/o Amethyst Rd.	70.5	70.8	0.3	Yes	No

Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.

**Table 4.5-8**  
**Interim Year Off-site Traffic Noise Impacts**

	Road	Segment	CNEL at Receiving Land Use (dBA)			Noise-Sensitive Receiver Land Use?	Threshold Exceeded?
			No Project	With Project	Project Addition		
1	US-395	n/o SR-18	72.3	72.4	0.1	No	No
2	US-395	n/o Dos Palmas Rd.	72.6	73.0	0.4	No	No
3	US-395	n/o Luna Rd.	72.3	72.7	0.3	Yes	No
4	US-395	n/o La Mesa Rd.	76.4	76.5	0.1	Yes	No
5	US-395	n/o Bear Valley Rd.	76.0	76.0	0.1	Yes	No
6	SR-18	w/o US-395	70.8	71.0	0.2	Yes	No
7	Luna Rd.	e/o US-395	63.8	65.5	1.7	Yes	No
8	SR-18	e/o Cantina St.	70.8	71.1	0.3	Yes	No
9	SR-18	e/o Cobalt Rd.	71.0	71.3	0.3	Yes	No
10	SR-18	e/o Amethyst Rd.	70.9	71.1	0.2	Yes	No

Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.

**Table 4.5-9**  
**General Plan 2040 Off-site Traffic Noise Impacts**

	Road	Segment	CNEL at Receiving Land Use (dBA)			Noise-Sensitive Receiver Land Use?	Threshold Exceeded?
			No Project	With Project	Project Addition		
1	US-395	n/o SR-18	73.4	73.5	0.1	No	No
2	US-395	n/o Dos Palmas Rd.	73.5	73.9	0.3	No	No
3	US-395	n/o Luna Rd.	73.6	73.8	0.3	Yes	No
4	US-395	n/o La Mesa Rd.	77.7	77.8	0.1	Yes	No
5	US-395	n/o Bear Valley Rd.	77.3	77.3	0.1	Yes	No
6	SR-18	w/o US-395	71.0	71.3	0.2	Yes	No
7	Luna Rd.	e/o US-395	64.1	65.7	1.6	Yes	No
8	SR-18	e/o Cantina St.	71.4	71.7	0.3	Yes	No
9	SR-18	e/o Cobalt Rd.	71.6	71.8	0.2	Yes	No
10	SR-18	e/o Amethyst Rd.	71.4	71.6	0.2	Yes	No

Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.

## Summary

As shown above, Project contributions to off-site roadway noise levels would not result in noise levels exceeding City standards or that would significantly impact any existing or future sensitive noise receptors during any of the Study scenarios. On this basis, Project-related off-site traffic noise would not result in noise levels exceeding standards established in a general plan, noise ordinance, or other applicable standards of other agencies.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Project-related off-site traffic noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.*

**Impact Analysis:** Tables 4.5-6 through 4.5-9, presented previously, show the off-site roadway noise levels that can be expected under the following scenarios: Existing Conditions Without/With Project, Opening Year 2019 Without/With Project, Interim Year Without/With Project, and General Plan 2040 Without/With Project. As shown, off-site Project-related traffic noise would not exceed the applicable significance thresholds at any roadway segments within the Study Area. As such, Project-related traffic noise would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

**Level of Significance:** Less-Than-Significant.

## OPERATIONAL/AREA-SOURCE NOISE

**Potential Impact:** *Project operational/area-source noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance.*

**Impact Analysis:** To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of uses/activities to represent the noise levels that can be expected with the operation of the proposed Project. Project

operational/area noise sources are anticipated to include: roof-top air conditioning units, drive-through speakerphones, gas station activity, parking lot vehicle movements, car wash tunnel, entry, and vacuum activities, loading dock activity, shopping cart corrals, and temporary RV idling/parking activity. Reference noise levels for these noise sources employed in this analysis are presented at Noise Impact Analysis Table 9-1, *Reference Noise Level Measurements*.

As shown at previous Table 4.5-3, operational noise impacts would be considered significant if any of the following occur as a direct result of the Project:

- If Project-related operational (stationary-source) noise levels exceed the exterior daytime or nighttime noise level standards for sensitive residential land uses as outlined at Table 4.5-2; or
- If the existing ambient noise levels at the nearby noise-sensitive receivers near the Project site:
  - Are less than 60 dBA Leq and the Project creates a readily perceptible 5 dBA Leq or greater Project-related noise level increase; or
  - Range from 60 to 65 dBA Leq and the Project creates a barely perceptible 3 dBA Leq or greater Project-related noise level increase; or
  - Already exceed 65 dBA Leq, and the Project creates a community noise level impact of greater than 1.5 dBA Leq (FICON, 1992).

Locations of the operational-source noise generators proposed within the Project site are illustrated at Figure 4.5-5. Using the reference noise levels, operational noise levels as received at off-site sensitive receiver locations were estimated. Operational noise levels are presented at Table 4.5-10.

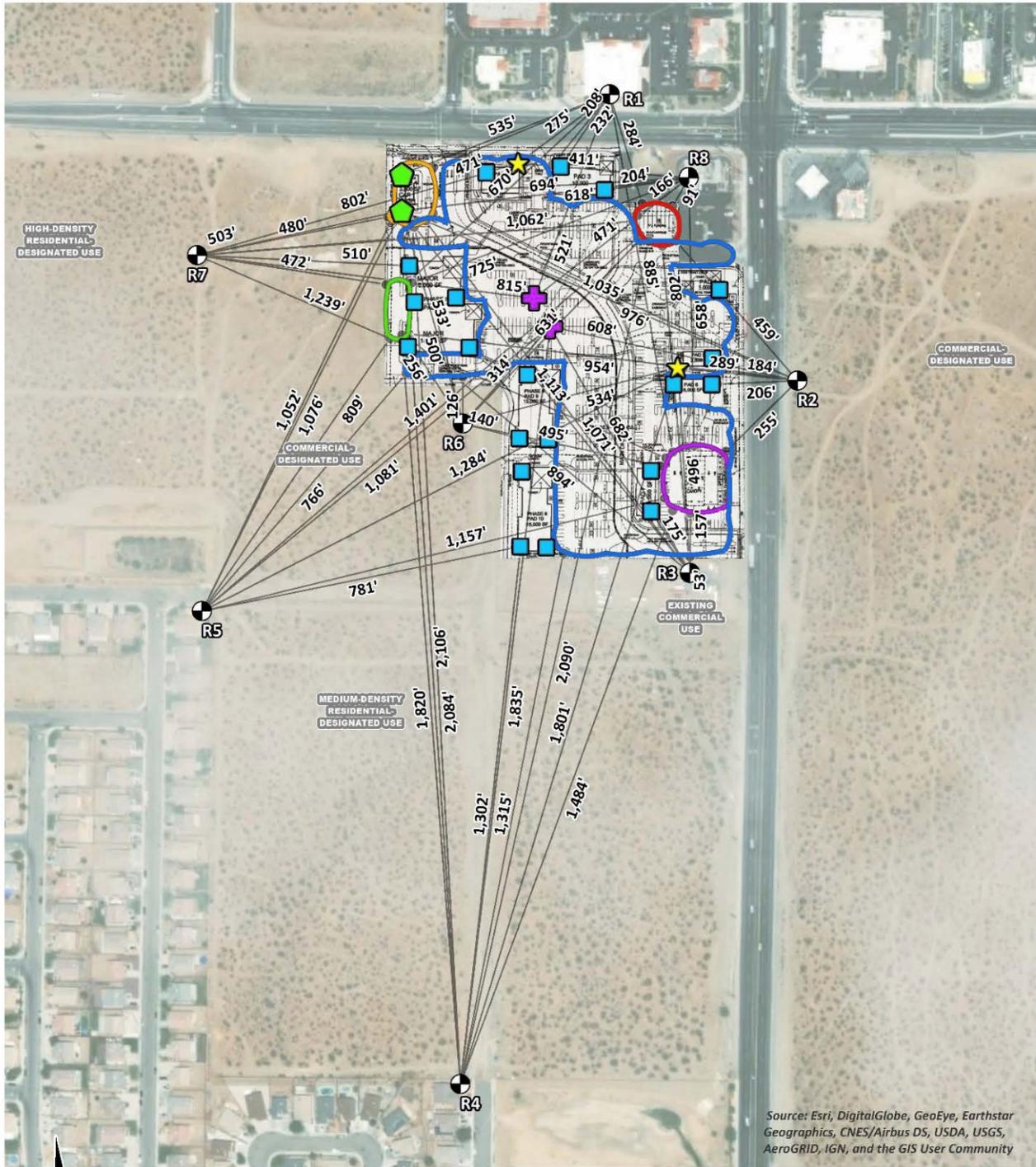
**Table 4.5-10  
Operational Noise Levels**

Receiver	Land Use	Total Project Operational Noise Levels (dBA Leq)	Threshold (dBA Leq)		Threshold Exceeded?	
			Daytime	Nighttime	Daytime	Nighttime
R1	Commercial	56.3	70	70	No	No
R2	Commercial	53.3	70	70	No	No
R3	Commercial	52.2	70	70	No	No
R4	Residential	44.6	65	55	No	No
R5	Residential	49.4	65	55	No	No
R6	Commercial	54.5	70	70	No	No
R7	Residential	54.1	65	55	No	No
R8	Commercial	62.2	70	70	No	No

*Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.*

As shown above, total Project operational noise levels are expected to range from 44.6 to 62.2 dBA Leq. To demonstrate compliance with local noise regulations, received Project operational-source noise levels were evaluated against City of Victorville and City of Adelanto exterior noise level standards. As demonstrated, the received operational-source noise levels associated with the Project would not exceed City of Victorville or City of Adelanto exterior noise level standards. Based on the preceding analysis, Project operational/area-source noise 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.

**Level of Significance:** Less-Than-Significant.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**LEGEND:**

- Roof-Top Air Conditioning Unit
- ★ Drive-Thru Speakerphone
- Loading Dock Activity
- + Shopping Cart Corral
- ▮ Car Wash Tunnel Entrance/Exit
- RV Idling/Parking Activity
- Parking Lot Vehicle Movements
- Distance from receiver to noise source (in feet)

Source: Urban Crossroads, Inc.

Figure 4.5-5  
Operational Noise Source Locations

**Potential Impact:** Project operational/area-source noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

**Impact Analysis:** To describe the Project operational noise level contributions, the Project operational noise levels were combined with the existing ambient noise levels measurements for the off-site receiver locations potentially impacted by Project operational noise sources. Tables 4.5-11 and 4.5-12 present the daytime and nighttime operational noise level increases associated with the Project.

**Table 4.5-11  
Daytime Operational Noise Level Contributions (dBA Leq)**

Receiver	Total Project Noise Level	Measurement Location	Ambient	Project Plus Ambient	Project Increase	Threshold	Threshold Exceeded?
R4	44.6	L4	51.8	52.6	0.8	5.0	No
R5	49.4	L5	52.8	54.4	1.6	5.0	No
R7	54.1	L6	67.2	67.4	0.2	1.5	No

Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.

**Table 4.5-12  
Nighttime Operational Noise Level Contributions (dBA Leq)**

Receiver	Total Project Noise Level	Measurement Location	Ambient	Project Plus Ambient	Project Increase	Threshold	Threshold Exceeded?
R4	44.6	L4	50.0	51.1	1.1	5.0	No
R5	49.4	L5	51.1	53.4	2.3	5.0	No
R7	54.1	L6	64.3	64.7	0.4	3.0	No

Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.

As indicated in Tables 4.5-11 and 4.5-12, the Project will contribute an operational noise level increase during the daytime hours of up to 1.6 dBA Leq and during the nighttime hours of up to 2.3 dBA Leq. Based on ambient noise levels (and the criteria presented previously in Tables 4.5-2 and 4.5-3), Project operational noise level increases would not exceed applicable thresholds.

Based on the preceding discussion, the potential for Project operational/area-source noise to result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Project would result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise.*

**Impact Analysis:** The following discussions address the Project's potential to generate groundborne vibration, also referred to as groundborne noise, resulting from Project construction and operations. The Project does not propose or require facilities or operations that would be substantive sources of vibration. Project construction activities may however result in potentially adverse vibration levels received at nearby properties.

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that groundborne vibration from Project construction activities would cause only intermittent, localized intrusion. Project construction activities most likely to cause vibration impacts are:

- **Heavy Construction Equipment:** Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage. It is not expected that heavy equipment such as large bulldozers would operate close enough to any residences to cause a vibration impact.
- **Trucks:** Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Groundborne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). Construction activities that would have the potential to generate low levels of groundborne vibration within the Project site include grading. Using the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. As shown in previous Table 4.5-3, vibration impacts would be considered significant if short-term Project generated construction vibration levels exceed the FTA acceptable vibration standard of 80 VdB at sensitive receiver locations.

Table 4.5-13 presents the unmitigated Project construction-related vibration levels at each of the receiver locations.

**Table 4.5-13  
Construction Vibration Levels**

Receiver Location	Distance to Construction Activity	Receiver PPV Levels (in/sec)					Threshold Exceeded?
		Small Bulldozer	Jack-Hammer	Loaded Trucks	Large Bulldozer	Highest Levels	
R1	145'	35.1	56.1	63.1	64.1	64.1	No
R2	148'	34.8	55.8	62.8	63.8	63.8	No
R3	54'	48.0	69.0	76.0	77.0	77.0	No
R4	1,289'	6.6	27.6	34.6	35.6	35.6	No
R5	747'	13.7	34.7	41.7	42.7	42.7	No
R6	110'	38.7	59.7	66.7	67.7	67.7	No
R7	471'	19.7	40.7	47.7	48.7	48.7	No
R8	93'	40.9	61.9	68.9	69.9	69.9	No

*Source: Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.*

As shown above, at distances ranging from 54 to 1,289 feet from the Project construction activities, construction vibration velocity levels are expected to range from 6.6 to 77.0 VdB. As such, Project construction vibration levels would not exceed the FTA threshold of 80 VdB for residential uses.

Further, vibration levels at the site of the closest receiver are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating simultaneously adjacent to the Project site perimeter.

Based on the preceding, the potential for the Project to result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise is less-than-significant.

**Level of Significance:** Less-Than-Significant.

## **4.6 GEOLOGY AND SOILS**

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## 4.6 GEOLOGY AND SOILS

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### *Abstract*

*This Section addresses the potential for the Project to result in substantial geotechnical hazards or soils-related impacts. More specifically, this analysis presented here focuses on whether the Project would result in, or be subjected to, any of the following:*

- Exposure of 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;*
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking;*
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction;*
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides;*
- Result in substantial soil erosion or the loss of topsoil;*
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;*

- *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or*
- *Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.*

*As summarized below, the subject site is suitable for development of the Project, provided that recommendations of the final Geotechnical Investigation(s) are implemented during Project design and construction. As supported by the analysis presented in this Section, potential geology and soils impacts of the Project are determined to be less-than-significant.*

#### **4.6.1 INTRODUCTION**

Information contained in this Section has been summarized or excerpted from: *Geotechnical Investigation, Proposed Victorville Retail Shopping Center, SWC Palmdale Road and Highway 395, Victorville, California* (Geocon West, Inc.), August 15, 2018 (Investigation), which is provided at EIR Appendix F.

This Section examines underlying soil conditions and geologic characteristics of the Project area, and evaluates related impacts potentially affecting design, construction, and operation of the Project. The subsequent discussions provide an assessment of potential seismologic hazards, notably faults and primary and secondary earthquake hazards which may affect the Project. Influences such as topography and soil types are also discussed as these factors substantively influence potential erosion and landslide hazard characteristics of the Project site.

#### **4.6.2 SETTING**

The Project site is relatively level with no pronounced highs or lows. Surface water drainage at the site appears to be by drainage channels running across the site. Vegetation on-site consists of native grasses and bushes scattered throughout the site. For a more detailed description of the on-site fauna, please refer to EIR Section 4.9, *Biological Resources*. Following are discussions of the Project area's geologic setting, prevalent site soils, geotechnical considerations, and seismic design considerations.

### ***Regional Geology***

The site is located within the central portion of the Mojave Desert. The Mojave Desert is bounded by the Owens Valley to the north, the Tehachapi Mountains and the San Gabriel mountains to the west, the Basin and Range Province to the east, and San Bernardino Mountains to the south. Regionally, the site is located within the Eastern California Shear Zone geomorphic province. This geomorphic province is characterized by northwest-trending physiographic and geologic features such as the Helendale fault located approximately 16 miles to the northeast.

### ***Local Geology***

Quaternary age alluvium was encountered during the field explorations to a maximum depth of 40.5 feet below existing ground surface. The alluvium generally consists of light yellowish brown to brown sand and silty sand with minor amounts of sandy silt. The alluvium is characterized dry to slightly moist and medium dense to very dense or firm to hard.

### ***Groundwater***

The site is located in the Upper Mojave River Valley groundwater basin. There are several active water wells proximal to the site. The closest of these is state well number 345075N1173990W001 located approximately 500 feet northeast of the site. The most recent measurement from this well was taken on March 24, 2006 with a depth to groundwater surface of 383 feet below the existing ground surface.

Groundwater was not encountered in field explorations drilled to a maximum depth of 40.5 feet below the existing ground surface. Considering the lack of groundwater in the study borings, the depth of the proposed construction, and the depth to groundwater in local wells it is not anticipated that groundwater will be encountered during construction. However, it is not uncommon for groundwater levels to vary seasonally or for groundwater seepage conditions to develop where none previously existed, especially in impermeable fine-grained soils which are heavily irrigated or after seasonal rainfall.

### *Faulting*

The numerous faults in Southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the California Geological Survey for the Alquist-Priolo Earthquake Fault Zone Program. By definition, an active fault is one that has had surface displacement within Holocene time (approximately the last 11,700 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years) but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive.

The site is not within a currently established state-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. No active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the site.

The closest active fault to the site is the Ord Mountains Fault located approximately 13.8 miles to the southeast. Other nearby active faults are the San Andreas Fault, the Helendale Fault, Llano Fault located approximately 15.6 miles southwest, 16 miles northeast, and 20.6 miles west of the site, respectively. Buried thrust faults, commonly referred to as blind thrusts, are not exposed at the ground surface and are typically identified at depths greater than 3.0 kilometers.

The October 1, 1987 5.9-magnitude Whittier Narrows earthquake and the January 17, 1994 6.7-magnitude Northridge earthquake were a result of movement on the Puente Hills Blind Thrust and the Northridge Thrust, respectively. These thrust faults are not exposed at the surface and do not present a potential surface fault rupture hazard at the site; however, these deep thrust faults are considered active features capable of generating future earthquakes that could result in moderate to significant ground shaking at the site. The site is not underlain by any known blind thrust faults.

### *Secondary Effects of Seismic Activity*

In general, secondary effects of seismic activity include surface fault rupture, soil liquefaction, seismic settlement, lateral spreading, subsidence, landslides, tsunamis, seiches, and earthquake-induced flooding. Site-specific potential for each of these seismic hazards is discussed in the following sections.

#### *Dynamic Settlement (Liquefaction and Dry Seismic Settlement)*

Liquefaction is defined as the phenomenon in which a soil mass within about the upper 50 feet of the ground surface suffers a substantial reduction in its shear strength, due to the development of excess pore pressures. During earthquakes, excess pore pressures in saturated soil deposits may develop as a result of induced cyclic shear stresses, resulting in liquefaction. Soil liquefaction occurs during or after strong ground shaking.

The current standard of practice, as outlined in the “Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction in California” and “Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California” requires liquefaction analysis to a depth of 50 feet below the lowest portion of the proposed structure.

Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

The Geologic Hazard Map for San Bernardino County indicates that the site is not located within an area designated as having a potential for liquefaction. The site is underlain by dense Quaternary age alluvial deposits that are not prone to liquefaction. Additionally, groundwater was not encountered during any encountered during field explorations. Based on these considerations, the potential for liquefaction and associated ground deformations beneath the site is very low.

### *Subsidence*

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. No large-scale extraction of groundwater, gas, oil, or geothermal energy is occurring or planned at the site or in the general site vicinity. Therefore, the potential for ground subsidence due to withdrawal of fluids or gases at the site is considered low.

### *Landslides*

The site is not located near a hillside and therefore landslides are not a design consideration. Slopes graded in accordance with the recommendations of the final Geotechnical Investigation(s) and current codes are anticipated to address any on-site issue/concerns.

### *Tsunamis*

Tsunamis are large waves generated in open bodies of water by fault displacement or major ground movement. The Project site is located approximately 80 miles from the nearest coastline; therefore, the negligible risk associated with tsunamis is not a design consideration.

### *Seiches*

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. The site is not located near or below reservoirs or other standing bodies of water; therefore, the potential for flooding due to seiches is considered low.

### *Earthquake-Induced Flooding*

Earthquake-induced flooding is inundation caused by failure of dams or other water-retaining structures due to earthquakes. The site is not located within a potential inundation area for any known earthquake-induced dam failure. Therefore, the probability of earthquake-induced flooding is considered very low. Additionally, the site is within an area of minimal flooding (Zone X) as defined by the Federal Emergency Management Agency.

### 4.6.3 CITY OF VICTORVILLE REGULATIONS

The City of Victorville, through its Development Department, implements General Plan Goals and Policies addressing geology, soils, and seismic conditions through established development permit review processes. These processes provide for the completion of development-specific geotechnical investigations where appropriate, and that requirements and recommendations of these investigations are incorporated in construction plans, are followed through during construction processes, and are functionally complete before buildings are occupied and/or infrastructure systems or other improvements are accepted. To the satisfaction of the City, recommendations and requirements of the final Geotechnical Investigation(s) would be incorporated in the final Project design and construction. Applicable provisions of the California Building Code (CBC) are incorporated throughout development design and implementation.

### 4.6.4 STANDARDS OF SIGNIFICANCE

Appendix G of the *CEQA Guidelines* indicates a Project will have potentially significant geology and soils impacts if it would result in, or be subjected to:

- Exposure of 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;
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking;
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction;
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides;

- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

#### **4.6.5 POTENTIAL IMPACTS AND MITIGATION MEASURES**

Following is an analysis of potential geology and soils impacts that could occur because of the Project. Of the CEQA threshold considerations presented at Section 4.6.4, and as substantiated in the Initial Study, the Project's potential impacts under the following topics are determined to be less-than-significant, and are not further discussed in this Section:

- Exposure of 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;
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides;
- Result in substantial soil erosion or the loss of topsoil; and

- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

Please refer also to Appendix A, *Initial Study and NOP Responses*; Initial Study Checklist Item VI., *Geology and Soils*.

#### 4.6.5.1 Impact Statements

**Potential Impact:** *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.*

**Impact Analysis:** As presented previously, the Project site is not adversely affected by known earthquake faults or other seismic hazards. Further, appropriate measures which reduce the effects of seismic events and potentially adverse geology and soils conditions at the Project site are broadly identified in the CBC as implemented by the City of Victorville.

The Geotechnical Investigation earthwork and design/construction recommendations address topics such as:

- General Considerations (Investigation, p. 9);
- Soil and Excavation Characteristics (Investigation, p. 11);
- Minimum Resistivity, pH and Water-Soluble Sulfate (Investigation, p. 11);
- Grading (Investigation, p. 12);
- Shrinkage (Investigation, p. 14);
- Foundation Design (Investigation, p. 14);
- Miscellaneous Foundations (Investigation, p. 16);
- Foundation Settlement (Investigation, p. 16);
- Lateral Design (Investigation, p. 17);
- Concrete Slabs-On-Grade (Investigation, p. 18);
- Pavement Design (Investigation, p. 19);

- Retaining Wall Design (Investigation, p. 21);
- Retaining Wall Drainage (Investigation, p. 23);
- Temporary Excavations (Investigation, p. 23);
- Stormwater Infiltration (Investigation, p. 24);
- Surface Drainage (Investigation, p. 26);
- Plan Review (Investigation, p. 26);

Through established Site Plan, Building Permit, and Certificate of Occupancy requirements, the City will verify that required design and construction measures are incorporated throughout Project development and are functionally implemented in the completed structures and facilities. It is anticipated that any site-specific geologic constraints which may be encountered during Project implementation will be addressed by compliance with the recommendations of the final Geotechnical Investigation(s), and existing City/CBC seismic design regulations, standards, and policies.

Short of a catastrophic event, design of structures in accordance with the final Geotechnical Investigation(s), the CBC, and current seismic engineering practices is sufficient to reduce potential effects of ground shaking at the Project site below the level of significance.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.*

**Impact Analysis:** Liquefaction and seismically-induced settlement or ground failure are generally associated with strong seismic shaking in areas where ground water tables are at relatively shallow depths (within 50 feet of the ground surface) and/or when the area is underlain by loose, cohesionless deposits. During a strong groundshaking event, saturated, cohesionless soils may acquire a degree of mobility to the extent that the overlying ground surface distorts. In extreme cases, saturated soils become suspended in groundwater and become fluid-like.

As previously discussed, the Geologic Hazard Map for San Bernardino County indicates that the site is not located within an area designated as having a potential for liquefaction. The site is underlain by dense Quaternary age alluvial deposits that are not prone to liquefaction. Additionally, groundwater was not encountered during field explorations at the site.

Based on these considerations, the potential for liquefaction and associated ground deformations beneath the site is very low. Additionally, any site-specific geologic constraints which may be encountered during Project implementation will be addressed by compliance with the recommendations of the final Geotechnical Investigation(s), and existing City/CBC seismic design regulations, standards, and policies.

As supported by the preceding discussions, the potential for the Project to result in exposure of people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.*

**Impact Analysis:** The Project site and surrounding properties do not exhibit substantial gradient or elevation differences, or other factors that may cause unstable soils, landslides, or collapse. As previously discussed, the potential for liquefaction or ground subsidence at the site is low. Further, the Geotechnical Investigation includes earthwork and design/construction recommendations to preclude impacts in this regard. The potential for the Project to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.*

**Impact Analysis:** Unmitigated effects of expansive or otherwise unstable soils may adversely affect roadway subgrades, concrete slabs-on-grade, and building foundations. In the event of a severe earthquake in the vicinity, structural foundations and floors may be damaged if constructed in, or over, expansive or unstable soils.

The CBC establishes methodologies and guidelines for identification of expansive soils and establishes responsive design standards which act to avoid potentially adverse effects of expansive soils on facilities. Section 1802.3 of the 2013 CBC directs expansive soil tendency be graded by its Expansion Index. A soil's Expansion Index is defined by its potential to swell when wet or saturated.

Based on material classifications and laboratory testing, the near surface site soils are generally expected to possess a "low" expansion potential (EI of 21 to 50). Additionally, any site-specific geologic constraints which may be encountered during Project implementation will be addressed by compliance with the recommendations of the final Geotechnical Investigation(s), and existing City/CBC seismic design regulations, standards, and policies.

**Level of Significance:** Less-Than-Significant.

## **4.7 HAZARDS/HAZARDOUS MATERIALS**

## 4.7 HAZARDS/HAZARDOUS MATERIALS

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### *Abstract*

*This Section identifies and addresses potential hazards and hazardous materials impacts that may result from the implementation and operation of the Desert Grove Retail Project (Project). More specifically, the hazards and hazardous materials analysis presented here examines whether the Project would:*

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;*
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;*
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;*
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 and, as a result, create a significant hazard to the public or the environment;*
- Result in a safety hazard for people residing or working in the project area due to airport/airstrip operations;*

- *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or*
- *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.*

*As supported by the analysis presented in this Section, with the Project's mandated compliance with existing statutes and regulations, potential hazards and hazardous materials impacts of the Project would be less-than-significant.*

#### **4.7.1 INTRODUCTION**

The analysis presented in this Section addresses the potential impacts of hazards and/or hazardous materials associated with the construction and operation of the Project. The analysis considers potential hazards/hazardous conditions affecting the Project site; and also considers potential hazards resulting from the Project, including potential effects at off-site land uses.

Information presented in this Section is summarized from: *Phase I Environmental Site Assessment, Proposed Walgreen Store Location, SWC of US Highway 395 and Palmdale Road, Victorville, California* (Clayton Group Services, Inc.) July 21, 2006 (Phase I ESA, EIR Appendix G).

#### **4.7.2 EXISTING LAND USES**

The Project site is currently vacant. An existing fast-food restaurant is located at the southwesterly corner of US-395/Palmdale Road (SR-18) and abuts the Project site to the northwest. A commercial trailer polishing use with frontage on US-395 is located southerly adjacent to the Project site. Southerly of this trailer polishing use are vacant properties.

- Northerly of the Project site, across SR-18 at the northwest corner of the US-395/SR-18 intersection, is a commercial/retail shopping center. Northeasterly of the Project site, across the US-395/SR-18 intersection, are additional commercial/retail uses.
- Easterly of the Project site, across US-395 is a gas station, located at the southeasterly corner of the US-395/SR-18 intersection. Southerly of this gas station and easterly of the Project site, across US-395, are vacant properties.
- Properties to the west of the Project site are vacant.
- Properties located southwesterly of the Project site are developed with single-family residential uses.

### **4.7.3 HAZARDS/HAZARDOUS MATERIALS POLICIES AND REGULATIONS**

#### **4.7.3.1 Overview**

As summarized below, the City of Victorville has developed and adopted General Plan Goals and Policies addressing hazards and hazardous materials. Applicable federal, state, and local regulations which act to reduce potential creation of, or exposure to, hazards and hazardous materials are also presented.

#### **4.7.3.2 City of Victorville General Plan**

The City of Victorville General Plan Safety Element establishes Goals and Policies addressing community health and safety, including potential hazards and hazardous materials concerns. Goals and Policies implemented by the City through its General Plan support prevention measures acting to minimize the occurrence and effects of hazards, emergencies and disasters; and include measures to allow the City to respond appropriately under hazardous, emergency, or disaster conditions.

In addition to General Plan Goals and Policies, Chapter 6.49 of the Victorville Municipal Code establishes a hazardous materials release response and inventory program, in compliance with Chapter 6.95 of the California Health and Safety Code. Additionally, the

City of Victorville Fire Department maintains a Hazardous Materials Incident Emergency Response Plan, to protect people, property, and the environment in case of emergency.

#### **4.7.3.3 Regulatory Context**

In addition to the above-referenced General Plan Goals and Policies, a number of federal, state, and local laws have been enacted to regulate and manage hazardous materials. Implementation of these laws and the associated management of hazardous materials are regulated independently of the CEQA process, through programs administered by various agencies at the federal, state, and local levels. An overview of regulatory agencies and certain key hazardous materials laws and regulations applicable to the Project, and to which the Project must conform, is provided below.

### **Federal**

#### **Overview**

Several federal agencies regulate hazardous materials. These include the U.S. EPA, the United States Occupational Safety and Health Administration (USOSHA), and the United States Department of Transportation (USDOT). Applicable Federal Regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). Some of the major federal laws and issue areas include the following statutes and implementing regulations:

- Resources Conservation and Recovery Act (RCRA) - hazardous waste management;
- Hazardous and Solid Waste Amendments Act (HSWA) - hazardous waste management;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - cleanup of contamination;
- Superfund Amendments and Reauthorization Act (SARA) - cleanup of contamination; and
- Emergency Planning and Community Right-to-Know (SARA Title III) - business inventories and emergency response planning.

The U.S. EPA is the primary federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the federal level is delegated to state and local environmental regulatory agencies.

In addition, with respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management at the federal, state, and local levels. This includes the development of a national capability to mitigate against, prepare for, respond to, and recover from a full range of emergencies.

### **Hazardous Waste Handling**

The U.S. EPA has authorized the California Department of Toxic Substance Control (DTSC) to enforce hazardous waste laws and regulations in California. Requirements place “cradle-to-grave” responsibility for hazardous waste disposal on the shoulders of hazardous waste generators. Waste generators must ensure that their wastes are disposed of properly, and legal requirements dictate the disposal requirements for many waste streams (e.g., a ban on the disposal of many types of hazardous wastes in landfills).

## **State**

### **Overview**

The primary state agencies with jurisdiction over hazardous chemical materials management are the DTSC and the State Water Quality Control Board (SWQCB). Other state agencies involved in hazardous materials management and oversight are the Department of Industrial Relations, California OSHA (Cal OSHA) implementation, Office of Emergency Services (OES - California Accidental Release Prevention Implementation), Air Resources Board (ARB), California Department of Transportation (Caltrans), State Office of Environmental Health Hazard Assessment (OEHHA - Proposition 65 implementation) and CalRecycle (formerly the California Integrated Waste Management Board, CIWMB). The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol (CHP) and Caltrans. Hazardous materials

and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Relevant hazardous materials management laws in California include, but are not limited to, the following statutes and implementation regulations:

- Hazardous Materials Management Act - business plan reporting;
- Hazardous Waste Control Act - hazardous waste management;
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) - release of and exposure to carcinogenic chemicals;
- Hazardous Substance Act - cleanup of contamination; and
- Hazardous Materials Storage and Emergency Response.

### **California Environmental Protection Agency**

The California Environmental Protection Agency (CalEPA) has broad jurisdiction over hazardous materials management in the state. Within CalEPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law.

Along with the DTSC, the SWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. SWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

### **Department of Toxic Substances Control**

The Resource Conservation and Recovery Act (RCRA) of 1976 is the principal federal law that regulates the generation, management, and transportation of hazardous materials and other wastes. The DTSC regulates hazardous waste in California primarily under the

authority of the federal RCRA, and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. In addition, DTSC reviews and monitors legislation to ensure that the position reflects the DTSC's goals. From these laws, DTSC's major program areas develop regulations and consistent program policies and procedures. The regulations determine what those who handle hazardous waste must do to comply with the laws.

California law provides the general framework for regulation of hazardous wastes by the Hazardous Waste Control Law (HWCL) passed in 1972. DTSC is the State's lead agency in implementing the HWCL. The HWCL provides for state regulation of existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous wastes," and requires permits for, and inspections of, facilities involved in generation and/or treatment, storage and disposal of hazardous wastes.

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and SWQCB are the two primary state agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to federal and state laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. The DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determine if a release of hazardous wastes/substances exists at a site and delineate the general extent of contamination; estimate the potential threat to public health and/or the environment from the release and provide an indicator of relative risk; determine if an expedited response action is required to reduce an existing or potential threat; and complete

preliminary project scoping activities to determine data gaps and identify possible remedial action strategies to form the basis for development of a site strategy.

### **California Accidental Release Prevention Program (CalARP)**

The CalARP program (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP program regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of an RMP is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day-care facilities, and must also consider external events such as seismic activity.

## **Regional**

### **South Coast Air Quality Management District (SCAQMD)**

The SCAQMD establishes Rules that regulate or control various air pollutant emissions and emissions sources, including hazardous emissions sources, within the South Coast Air Basin (Basin). The SCAQMD coordinates its actions with local, state, and federal government agencies, the business community, and private citizens to achieve and maintain healthy air quality.

## Local

### **Hazardous Materials Division of the San Bernardino County Fire Department**

Under the California Unified Hazardous Waste and Hazardous Material Management Regulatory Program, (Chapter 6.11, Division 20, Section 25404 of the Health and Safety Code), hazards/hazardous materials management is addressed locally through the Certified Unified Program Agency (CUPA). The Hazardous Materials Division of the San Bernardino County Fire Department is designated by the State Secretary for Environmental Protection as the CUPA for the County of San Bernardino in order to focus the management of specific environmental programs at the local government level. The CUPA is charged with the responsibility of conducting compliance inspections for over 7000 regulated facilities in San Bernardino County.

As a CUPA, San Bernardino County Fire Department manages six hazardous material and hazardous waste programs. The CUPA program is designed to consolidate, coordinate, and uniformly and consistently administer permits, inspection activities, and enforcement activities throughout San Bernardino County.

#### **4.7.3.4 Waste Handling Procedures**

As presented above, the identification, characterization, handling, transportation and disposal of wastes are primarily regulated under 40 CFR, part 261.24 (Federal) and Title 22 of the California Code of Regulations (State) and other applicable DOT, CA DTSC, and OSHA laws and regulations. The following discussions detail how these regulations are applied to the most common hazardous materials encountered as part of demolition and site preparation.

### **Manifesting and Transportation**

Waste must be hauled under proper shipping manifests as follows:

- a) Non-hazardous: A uniform non-hazardous manifest.

- b) Cal-haz/Non-RCRA (State system): A uniform hazardous manifest, identifying the waste as non-RCRA, using an appropriate EPA number.
- c) RCRA-hazardous (Federal system): A uniform hazardous manifest, identifying the waste as RCRA, using an appropriate EPA number.

The transporter must have the required and appropriate hauling permits and licenses in order to be able to haul the waste.

### **Disposal**

Landfills are classified based on the type of waste accepted; hazardous waste must be disposed of at a Class I landfill, “designated waste”<sup>1</sup> at a Class II, non-hazardous solid waste at a Class III, and inert waste is disposed of at an unclassified disposal site. All designated landfills must have the proper local, State and Federal operating permits. Waste, as classified, is disposed as follows:

- a) Non-hazardous: At a non-hazardous Class III landfill or at a Treatment and Recycling facility.
- b) Cal-haz/Non-RCRA: At a hazardous Class I landfill or at an out of State non-hazardous landfill.
- c) RCRA-hazardous: At a hazardous Class I landfill.

While non-hazardous waste from the Project site could be transported to a number of Class III landfills, any hazardous waste that may be encountered as part of site preparation activities would be disposed of at a Class I landfill. There are currently three (3) Class I landfills located in California. These sites are located in Imperial, Kings, and

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<sup>1</sup> “Designated waste” is defined as hazardous waste that has been granted a variance from hazardous waste management requirements; or non-hazardous waste that could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of waters of the State.

Kern Counties. The precise disposal location would be determined by the contractor in charge of demolition and site preparation.

## **Contaminated Soils**

### **Fuel and Oil**

Fuel and/or oil contaminated soils can be generated by activities such as fuel stations, storage facilities, spills, etc. The associated contamination is typically petroleum-based and may include a range of hydrocarbon chains such as gasoline, diesel, oil, kerosene, etc. Petroleum-contaminated soils are not typically considered as hazardous by the Federal or State policies but the waste is considered regulated requiring proper characterization, handling and disposal. As such, petroleum-contaminated solid wastes are routinely disposed of at a non-hazardous Class III landfill. Alternatively, there are also various treatment and recycling facilities that accept contaminated soils and neutralize the contamination to a level that would be accepted at any landfill. The final determination of the precise disposal procedure would be determined by the contractor at the time the material is removed.

### **Pesticides**

There are State and Federal thresholds dictating the characterization of pesticide-contaminated soils. As a result, based on testing results, impacted soils may be characterized and disposed of as follows:

- a) Non-hazardous: The soil must pass the State and Federal regulatory thresholds. In that case, the soil may be disposed of as non-hazardous at a Class III landfill or, as discussed above, a treatment or recycling facility.
- b) Cal-haz/Non-RCRA: In this case, the soil fails the State regulatory thresholds but passes the Federal requirements. Therefore, the soil may be disposed of as non-RCRA at a Class I hazardous landfill or at an out of State non-hazardous landfill.

- c) RCRA-hazardous: In this case, the soil fails both the State and Federal regulatory thresholds. Therefore, the soil will have to be disposed of as Federal, RCRA-hazardous at a Class I landfill.

### **Water Wells**

Because of the potential risk to public health via improperly abandoned water wells, the State of California and the County of San Bernardino require that all water wells either be maintained in a useable state or be properly destroyed. As stated under California Water Code Sections 13700 to 13806, the California Department of Water Resources is responsible for developing well standards to protect groundwater quality. *California Well Standards, Bulletin 74-90* (California Department of Water Resources) June 1991 presents minimum standards for well construction, alteration, and destruction to protect groundwater.

#### **4.7.4 STANDARDS OF SIGNIFICANCE**

Consistent with the *CEQA Guidelines* as adopted and implemented by the City of Victorville, and for purposes of this EIR, implementation of the Project may result in or cause potentially significant hazards/hazardous materials impacts if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

- Result in a safety hazard for people residing or working in the project area due to airport/airstrip operations;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- 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.

The following discussions focus on those areas where it has been determined that the Project may result in potentially significant impacts. As supported by analysis in the Initial Study, the Project's potential to: create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; result in a safety hazard for people residing or working in the project area due to airport/airstrip operations; impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or expose people or structures to a significant risk of loss, injury or death involving wildland fires, are determined to be less-than-significant. Please refer also to EIR Appendix A, Initial Study Checklist Item VIII., *Hazards and Hazardous Materials*.

#### 4.7.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

##### 4.7.5.1 Impact Statements

**Potential Impact:** *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.*

## Impact Analysis:

### Existing Hazards

To assess existing hazards, the following tasks were undertaken as part of the Phase I:

- A field inspection of the site was conducted to identify any visual evidence of potential environmental concerns, including potential soil or groundwater contamination; indications of waste dumping; containers of hazardous substances or petroleum products; electrical or hydraulic equipment that may contain polychlorinated biphenyls (PCBs); or underground and aboveground storage tanks.
- Site history was researched through a review of land deeds, fire insurance maps, City directories, aerial photographs, and interviews.
- A review of the general geology and topography of the site, local groundwater conditions, sources of water, power, and sewer, and proximity to ecologically sensitive receptors was conducted.
- A review of environmental records was conducted for evidence of environmental concerns.
- A property line reconnaissance of adjacent properties was conducted.
- A review of a commercial database of ASTM Standard federal and state regulatory agency records for the site and nearby offsite facilities was conducted.
- Interviews with key site personnel regarding current and previous uses of the site were conducted.
- Local and state regulatory agency case files for the site were reviewed, and interviews with appropriate local agency officials were conducted.

The Phase I ESA found no evidence of recognized environmental conditions (RECs), affecting the Project site.

Notable findings of the Phase I ESA include:

- **Nearby former filling station/LUST Incident to Northeast (14111 US Highway 395).** A release of gasoline was discovered at this former gas station site in 1988. The release reportedly affected soil only, and a remediation plan was developed in 1991. No additional information was available. Regardless, the Phase I ESA concluded that this site does not pose a concern to the Project site; it is located downgradient from the site. All USTs have reportedly been removed.
- **Northeast adjacent filling station (12117 Palmdale Road).** A gas station exists northeasterly of the site, across Highway 395. This site does not pose a concern to the Project site; it is located downgradient from the site and has no reported violations.
- **On-site well.** A water well was identified in the northeasterly portion of the site, which is reportedly used by the adjacent fast-food restaurant, that is “not a part” of this development proposal. Access to the well for “maintenance and incidental purposes” is provided via an easement agreement between the two adjacent property owners. The developer will provide the fast food restaurant with the opportunity to “tie” into the proposed domestic water system. If they elect to use the new domestic water system, the well will be abandoned as part of the site preparation processes. Well abandonment procedures would be consistent with State, County, and City requirements. Abandonment of the well would be subject to review and approval by the City as part of the City’s plan check (grading plan) review process.

Based on the results of the investigation, the Phase I ESA concluded that no further action was necessary.

### **Project Construction and Operation**

During the normal course of construction activities, there would be limited transport and use of potentially hazardous materials (e.g., gasoline, diesel fuel, paints, solvents,

fertilizer, etc.) to and from the Project site. The Project would be required to comply with all applicable regulations addressing the transport, use, storage and disposal of these materials.

Operation of the Project could involve the temporary storage and handling of potentially hazardous materials such as detergents, pesticides, fertilizers, or paint products that are pre-packaged for distribution and use. These materials are typical of those used in commercial occupancies and would be employed for routine cleaning, maintenance, and landscaping activities. This type of storage, transfer, use and disposal of potentially hazardous materials is extensively regulated at the local, State and federal levels.

Additionally, the Project would utilize underground storage tanks (USTs) to store gas and diesel fuel on the Project site associated with the proposed gas station. The USTs would consist of double-walled, fiberglass fuel storage tanks with leak detection sensors. All Project USTs would be designed, installed, inspected, maintained, and monitored consistent with federal, State, and local regulatory requirements.

Additionally, gasoline fueling stations are required by the SCAQMD Rule 461, *Gasoline Storage and Dispensing*, to include an enhanced vapor recovery and diagnostic system. The purpose of this system is to collect and store gasoline vapors during both bulk deliveries and vehicle operations. Fuel dispensing systems are required to include dripless nozzles that seal to the vehicle during filling. A vacuum system forces the vapors created by the vehicle filling back to the UST. The storage tank is vented by a mechanical filtration system that scrubs and neutralizes the vapors before their release. Similarly, during bulk delivery operations, the delivery truck's filling tubes are sealed to the storage tank and all vapors are returned to the UST. This process stems the release of vapors. The vapors created by the filling operation are then subject to mechanical scrubbing and neutralization prior to release. The final component of the vapor recovery process is the diagnostic system. This electronic system provides 24-hour monitoring of the vapor recovery system, including collection of vapors during fueling operations and assurances that vapors in the UST are not leaking. The system identifies failures automatically, notifies the station operator, and reduces emissions by early detection and prompt repair.

The Project would be required to comply with the provisions established by Section 2540.7, *Gasoline Dispensing and Service Stations*, of the California Safety and Health (Cal/OSHA) Regulations; Chapter 38, *Liquefied Petroleum Gases*, of the California Fire Code; Resource Conservation and Recovery Act requirements; and the Fire Department requirements. Collectively, the routine inspection of the gas station, the USTs, and all associated fuel delivery infrastructure, along with the continued mandated compliance with all federal, State, and local regulations, provides the framework that would avoid potentially significant hazards/hazardous materials impacts and/or reduce these impacts to levels that would be less-than-significant.

### **Summary**

No existing hazards have been identified on the Project site. Additionally, no significant short-term construction or long-term operational impacts associated with handling, storing, and dispensing of hazardous materials are anticipated. Based on the preceding, the potential for the Project to create or result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

**Potential Impact:** *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Section 65962.5 and, as a result, create a significant hazard to the public or the environment.*

**Impact Analysis:** As part of the Phase I ESA, federal state, and local databases were consulted. The Project site does not appear on any hazardous material site list compiled under Government Code Section 65962.5. Further, the Phase I ESA found no evidence or indication of recognized environmental concerns on the site. As such, the Project's potential to create a hazard to the public or the environment based on existing conditions is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

## **4.8 HYDROLOGY/WATER QUALITY**

## 4.8 HYDROLOGY/WATER QUALITY

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### *Abstract*

*This Section of the EIR addresses potential impacts of the Project related to hydrology and water quality. The analysis presented herein focuses on the potential for the Project to:*

- Violate any water quality standards or waste discharge requirements;*
- 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 which would not support existing land uses or planned uses for which permits have been granted);*
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site;*
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of 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;*
- Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;*
- Otherwise substantially degrade water quality;*
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;*

- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows;*
- *Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; and*
- *Inundation by seiche, tsunami, or mudflow.*

*As supported by the analysis presented in this Section, the above-noted potential hydrology/water quality impacts are determined to be less-than-significant.*

#### **4.8.1 INTRODUCTION**

Information contained in this Section has been summarized or excerpted from: *Preliminary Drainage Study, Victorville Retail Project, SWC US 395 & SR-18, Victorville, CA* (Blue Peak Engineering, Inc.) March 1, 2019 (Drainage Study); and *Preliminary Mojave River Watershed Water Quality Management Plan for Victorville Retail Project* (Blue Peak Engineering, Inc.) March 1, 2019 (Preliminary WQMP). The Drainage Study and Preliminary WQMP are presented at EIR Appendix H. Additional source and background information was obtained from the City of Victorville (City) General Plan (General Plan), the Lahontan Regional Water Quality Control Board (LRWQCB), and the California State Water Resources Control Board (SWRCB).

#### **4.8.2 EXISTING DRAINAGE CONDITIONS**

##### **4.8.2.1 Overview**

Under existing conditions, stormwaters sheet flow across the Project site from southwest to northeast. Stormwaters drain toward an existing drainage structure located at the northeast corner of the Project site. For the purposes of analysis, the Drainage Study apportions the Project site into two drainage Sub-Areas, “AA3.1” and “AA3.2.” Drainage characteristics of these Sub-Areas and existing drainage improvements are summarized below. Sub-Areas and various drainage improvements described in the following discussions are graphically presented at Figure 4.8-1, *Existing Drainage Conditions*.

**Sub-Area AA3.1**

Sub-Area AA3.1 comprises 13.79 acres comprising the majority of the Project site. Stormwater runoff from Sub-Area AA3.1 sheet flows from southwest to northeast toward the noted existing drainage structure located at the northeast corner of the Project site. There are two natural drainage flowlines conveying the majority of these stormwaters. Stormwaters collected at the referenced drainage structure are then conveyed northerly under SR-18 via an existing double 7' x 3' reinforced concrete box (RCB) culvert. This double 7' x 3' RCB culvert then connects to an existing 8' x 7' RCB storm drain located northerly of SR-18.

**Sub-Area AA3.2**

Sub-Area AA3.2 comprises 1.01 acres located at the northwest corner of the Project site. Stormwater runoff from Sub-Area AA3.2 sheet flows northeasterly and discharges as surface runoff to SR-18. Stormwater runoff is then directed by existing SR-18 curb and gutter improvements to the grated inlet located at the existing "Burger King" driveway onto SR-18. The grated inlet discharges to an existing 18-inch storm drain underlying SR-18. This 18-inch storm drain discharges to an existing drainage structure located on the north side of SR-18.

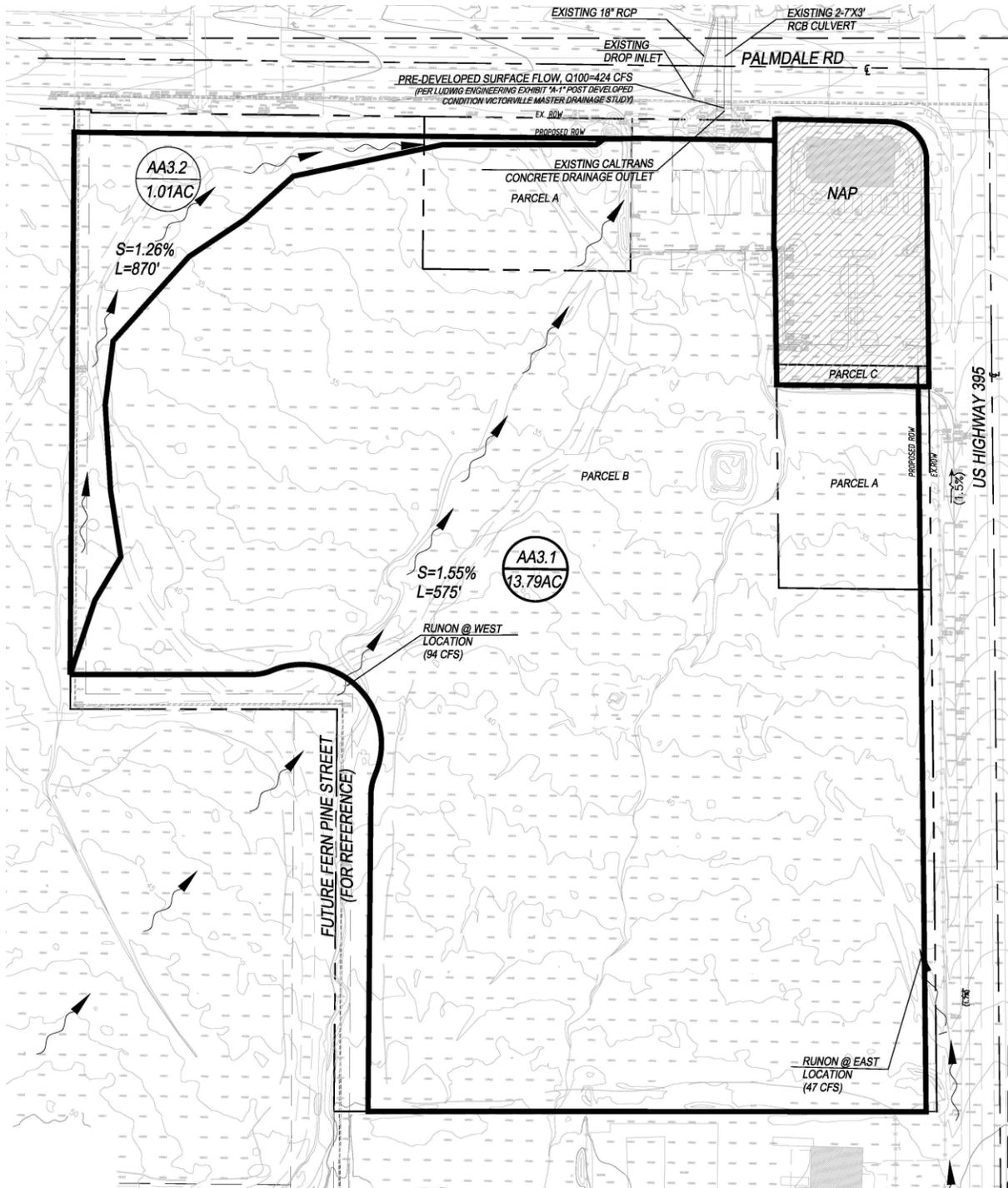
**4.8.2.2 Existing Conditions Stormwater Discharge Volumes and Peak Flow Rates**

Design 100-year storm and 10-year storm stormwater discharge volumes and peak flow rates under existing conditions are summarized at Table 4.8-1.

**Table 4.8-1  
Existing Conditions Stormwater Discharge**

100-Year Storm		10-Year Storm	
Runoff Volume (cubic feet, cf)	Peak Flow Rate (cubic feet/second, cfs)	Runoff Volume (cf)	Peak Flow Rate (cfs)
181,340	49.27	86,162	23.17

**Source:** Preliminary Drainage Study, Victorville Retail Project, SWC US 395 & SR-18, Victorville, CA (Blue Peak Engineering, Inc.) March 1, 2019.



PRE-DEVELOPMENT HYDROLOGY ANALYSIS (ONSITE ONLY)					
AREA	ACRES	TC	Q100	Q10	Q2
AREA AA3.1	13.79 AC.	24	45.84 CFS	20.63CFS	7.63CFS
AREA AA3.2	1.01 AC.	18.5	3.88 CFS	1.75CFS	0.66CFS
<b>TOTAL</b>	<b>14.80 AC.</b>		<b>49.41CFS</b>	<b>22.38CFS</b>	<b>8.29CFS</b>



NOT TO SCALE  
Source: Blue Peak Engineering, Inc.

Figure 4.8-1  
Existing Drainage Conditions

### **4.8.3 DEVELOPED DRAINAGE CONDITIONS**

Under developed conditions, drainage patterns would generally conform to existing conditions. That is, Project site stormwater runoff would flow generally from southwest to northeast – and would be directed ultimately to the existing drainage structure located at the northeast corner of the Project site.

The Project stormwater management system includes various surface curbs/gutters, curb inlets, and grated surface inlets that would collect and direct stormwater runoff to a system of underground retention basins. Stormwater flows in excess of the retention basins' capacities would be directed to Regional Storm Drain Line E-01 to be constructed as part of the Project (see below). Limited portions of the Project site would be designed to allow stormwater runoff to sheet flow to existing and proposed adjacent roadways, and would be collected and directed by curb/gutter improvements within those roadways.

#### **4.8.3.1 Region-Serving Storm Drain Improvements Constructed by the Project**

As part of the Project and per Victorville Master Plan Drainage Study, a region-serving storm drain (Regional Storm Drain Line E-01) would be constructed along the Project site easterly boundary, adjacent to US-395. This storm drain would comprise an 84-inch reinforced concrete pipe (RCP) at the southeasterly corner of the Project and would extend northerly, transitioning to a double 7' x 3' reinforced concrete box (RCB) culvert before connecting to the existing double 7' x 3' RCB culvert located at the northeasterly corner of the Project site. The Project would also construct a 48-inch RCP traversing the Project site along a generally southwest-to-northeast alignment. This storm drain (referred to herein as "Line E-01.A") would convey stormwaters discharged from properties located southwest of the Project site and would connect to Regional Storm Drain Line E-01 within the Project site. Regional Storm Drain Line E-01 and Line E-01.A would be constructed within dedicated drainage easements. No surface structures would be permitted within these easements.

#### **4.8.3.2 Stormwater Management System Concept**

For the purposes of analysis, the Drainage Study apportions the developed Project site into 9 Drainage Areas, each divided into Sub-Areas. Characteristics of these Drainage Areas, Sub-Areas, and existing and proposed stormwater management system improvements are summarized below. Drainage Areas and Sub-Areas and stormwater improvements described in the following discussions are presented at Figure 4.8-2, *Project Stormwater Management System Concept*.

##### **Drainage Area 1**

Stormwater runoff from Drainage Area 1 would be directed to the Project underground retention system. Drainage Area 1 Sub-Area characteristics and drainage improvements are summarized below.

##### **Sub-Area P**

Sub-Area P comprises 0.36 acres in the southeast portion of the Project site. Sheet flows within this Sub-Area would be collected by curb and gutter improvements, tributary to a curb inlet basin that connects directly to the underground retention system (DT-1) located in Sub-Area M.

##### **Sub-Area M**

Sub-Area M comprises 1.42 acres in the southeast portion of the Project site. Sheet flows within this Sub-Area would be collected by curb and gutter improvements, tributary to a curb inlet basin that connects directly to the underground retention system (DT-1) located in Sub-Area M.

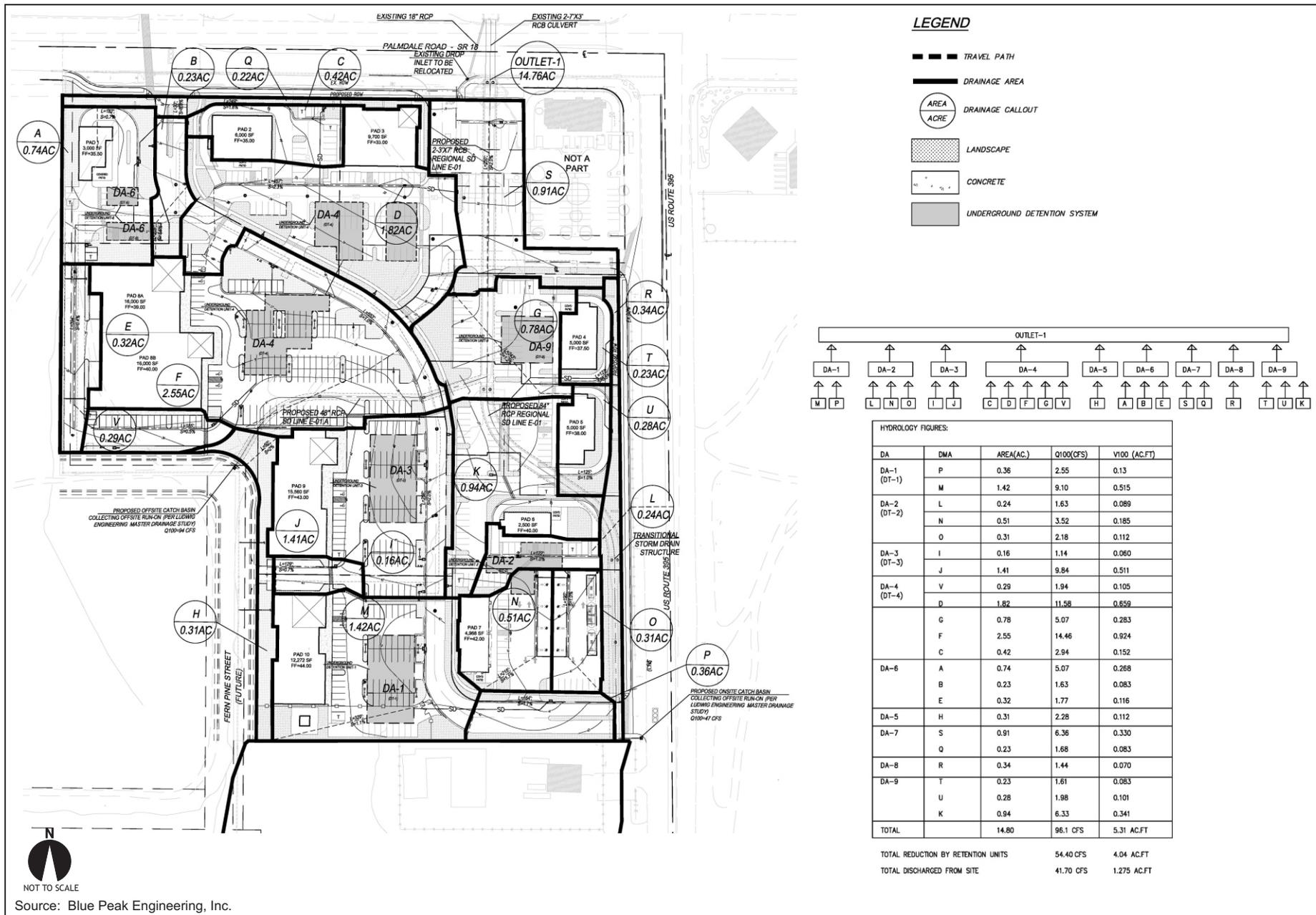


Figure 4.8-2 Stormwater Management System Concept

## **Drainage Area 2**

Stormwater runoff from Drainage Area 2 would be directed to the Project underground retention system. Drainage Area 2 Sub-Area characteristics and drainage improvements are summarized below.

### **Sub-Area L**

Sub-Area L comprises 0.24 acres in the southeasterly portion of the Project site. Sheet flows within this Sub-Area would be collected by curb and gutter improvements, tributary to a curb inlet that connects directly to the underground retention system (DT-2) located in Sub-Area L.

### **Sub-Area N**

Sub-Area N comprises 0.51 acres in the southeasterly portion of the Project site. Sheet flows within this Sub-Area would be collected at a grated catch basin inlet that connects directly to the underground retention system (DT-2) located in Sub-Area L.

### **Sub-Area O**

Sub-Area O comprises 0.31 acres in the southeasterly portion of the Project site. Sheet flows within this Sub-Area would be collected at a grated catch basin inlet that connects directly to the underground retention system (DT-2) located in Sub-Area L.

## **Drainage Area 3**

Stormwater runoff Drainage Area 3 would be directed to the Project underground retention system. Drainage Area 3 Sub-Area characteristics and drainage improvements are summarized below.

### **Sub-Area I**

Sub-Area I comprises 0.16 acres in the westerly portion of the Project site. Sheet flows within this Sub-Area would be collected to a curb inlet that connects directly to the underground retention system (DT-3) located in Sub-Area J.

### Sub-Area J

Sub-Area J comprises 1.41 acres in the westerly portion of the Project site. Sheet flows within this Sub-Area would be collected to a curb inlet that connects directly to the underground retention system (DT-3) located in Sub-Area J.

### Drainage Area 4

Stormwater runoff from Drainage Area 4 would be directed to the Project underground retention system. Drainage Area 4 Sub-Area characteristics and drainage improvements are summarized below.

### Sub-Area C

Sub-Area C comprises 0.42 acres in the northerly portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-4) located within Sub-Areas D and F. Peak 100-year storm flows not accepted at the curb inlet would be diverted and piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

### Sub-Area D

Sub-Area D comprises 1.87 acres in the northerly portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-4) located within Sub-Areas D and F. Peak 100-year storm flows not accepted at the curb inlet would be piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

### Sub-Area F

Sub-Area F comprises 2.55 acres located in the central portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-4) located within Sub-Areas D and F. Peak 100-year storm flows not accepted at the curb inlet would be piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

### Sub-Area G

Sub-Area G comprises 0.78 acres located in the central portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-4) located within Sub-Areas D and F. Peak 100-year storm flows not accepted at the curb inlet would be piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

### Sub-Area V

Sub-Area V comprises 0.29 acres located in the westerly portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-4) located within Sub-Areas D and F.

### Drainage Area 5

Stormwater runoff from Drainage Area 5 would sheet flow to future adjacent Fern Pine Street. Drainage Area 5 Sub-Area characteristics and drainage improvements are summarized below.

### Sub-Area H

Sub-Area H comprises 0.31 acres in the westerly portion of the Project site, adjacent to future Fern Pine Street. This Sub-Area would sheet flow offsite onto future Fern Pine Street and would be collected/directed by curb/gutter improvements within the Fern Pine Street right-of-way. Runoff from this Sub-Area is reflected in the overall site discharge calculations.

### Drainage Area 6

Stormwater runoff from Drainage Area 6 would be directed to the Project underground retention system. Drainage Area 6 Sub-Area characteristics and drainage improvements are summarized below.

### Sub-Area A

Sub-Area A comprises 0.74 acres in the northwesterly portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-6) located within Sub-Area A. Peak 100-year storm

flows not accepted at the curb inlet would be piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

#### Sub-Area B

Sub-Area B comprises 0.23 acres in the northerly portion of the Project site, adjacent to the main drive entrance onto SR-18. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-6) located within Sub-Area A. Peak 100-year storm flows not accepted at the curb inlet would be piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

#### Sub-Area E

Sub-Area B comprises 0.32 acres in the westerly portion of the Project site. Sheet flows within this Sub-Area would be collected at a grated inlet that connects directly to the underground retention system (DT-6) located within Sub-Area A. Peak 100-year storm flows not accepted at the curb inlet would be piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

#### **Drainage Area 7**

Stormwater runoff from Drainage Area 7 would sheet flow northerly toward SR-18. Drainage Area 7 Sub-Area characteristics and drainage improvements are summarized below.

#### Sub-Area S

Sub-Area S comprises 0.91 acres in the northerly portion of the Project site, adjacent to the existing Burger King. Sheet flows within this Sub-Area would be collected at a grated inlet adjacent to the existing SR-18 Caltrans Drainage Structure and discharged directly to the proposed Regional Storm Drain Line E-01. Runoff from this Sub-Area is reflected in the overall site discharge calculations.

#### Sub-Area Q

Sub-Area Q comprises 0.23 acres in the northerly portion of the Project site, adjacent to SR-18. Runoff from this Sub-Area would sheet flow offsite to SR-18, and would be

collected/directed by curb/gutter improvements within the SR-18 right-of-way. Runoff from this Sub-Area is reflected in the overall site discharge calculations.

### **Drainage Area 8**

Stormwater runoff from Drainage Area 8 would sheet flow easterly toward US-395. Drainage Area 8 Sub-Area characteristics and drainage improvements are summarized below.

### **Sub-Area R**

Sub-Area R comprises 0.34 acres in the easterly portion of the Project site, adjacent to US-395. Runoff from this Sub-Area would sheet flow offsite onto US-395 and would be collected/directed by curb/gutter improvements within the US-395 right-of-way. Runoff from this Sub-Area is reflected in the overall site discharge calculations.

### **Drainage Area 9**

Stormwater runoff from Drainage Area 9 would be directed to the Project underground retention system. Drainage Area 9 Sub-Area characteristics and drainage improvements are summarized below.

### **Sub-Area K**

Sub-Area K comprises 0.94 acres in the central portion of the Project site. Sheet flows within this Sub-Area would be collected at a grated inlet that connects to the underground retention system. Peak 100-year storm flows not accepted at the curb inlet would be piped via a storm drain directly into the proposed Regional Storm Drain Line E-01.

### **Sub-Area U**

Sub-Area U comprises 0.28 acres located in the easterly portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-8) located within Sub-Areas G.

### Sub-Area T

Sub-Area T comprises 0.23 acres located in the easterly portion of the Project site. Sheet flows within this Sub-Area would be collected at a curb inlet that connects directly to the underground retention system (DT-8) located within Sub-Areas G.

#### 4.8.3.3 Developed Conditions Stormwater Discharge Volumes and Peak Flow Rates

Design 100-year storm and 10-year storm stormwater discharge volumes and peak flow rates under developed conditions are summarized at Table 4.8-2.

**Table 4.8-2**  
**Developed Conditions Stormwater Discharge**

100-Year Storm		10-Year Storm	
Runoff Volume (cubic feet, cf)	Peak Flow Rate (cubic feet/second, cfs)	Runoff Volume (cf)	Peak Flow Rate (cfs)
55,539	41.70	24,437	19.52

**Source:** Preliminary Drainage Study, Victorville Retail Project, SWC US 395 & SR-18, Victorville, CA (Blue Peak Engineering, Inc.) March 1, 2019.

#### 4.8.3.4 Water Quality Management Plan Required

Pursuant to City Municipal Code Section 10.30.220 - *Post-construction requirements for specified projects; WQMP*, the Applicant would be required to develop, submit to the City for approval, and implement a water quality management plan (WQMP) (Municipal Code Section 10.30.220 [a]). Submittal of the WQMP would be required prior to issuance of, or as a condition of, a subdivision map, site plan, grading or building permit, development or improvement plan or other similar City-issued permit (Municipal Code Section 10.30.220 [b]). The Preliminary WQMP is presented at EIR Appendix H.

Basic requirements and content of the Project Final WQMP would include, but not be limited to:

- All proposed measures for site design, source control, runoff reduction, stormwater treatment, baseline hydromodification management and LID techniques as specified in the municipal NPDES Permit.

- Implementation of structural BMPs. Project structural BMPs designed so that the structural BMPs comply with the volume or flow design criteria specified in the municipal NPDES Permit.
- Maintenance schedules for post-construction structural and treatment control BMPs, and for any required hydromodification and LID features and a plan addressing the continued maintenance and operation responsibilities for such stormwater management facilities.
- Measures and plans and binding agreements that would ensure continued proper operation and maintenance of the stormwater management facilities.

The WQMP must demonstrate to the City's satisfaction that proposed BMPs and LID features, numeric design criteria, or design elements meet the requirements of the municipal NPDES permit and the City Municipal Code. Demonstrated compliance with the City-approved WQMP would be a condition of any required planning approval. Prior to issuance of Certificate of Occupancy (CO), the City would require the following:

- The Applicant, facility operators and/or owners, as appropriate, shall construct all stormwater pollution control BMPs, structural or treatment control BMPs, and LID features shown on the approved Project plans;
- The Applicant, facility operators and/or owners shall submit, for review and approval, a BMP and LID maintenance schedule and inspection plan;
- The Applicant shall file a signed statement that the Project site and all structural or treatment control BMPs and LID features shall be maintained in compliance with the City-approved WQMP.

#### **4.8.4 REGULATORY SETTING**

Applicable federal, state, and local policies and regulations, which act to reduce potential hydrologic impacts and/or act to protect and preserve water quality, are summarized below.

##### **4.8.4.1 Federal Water Pollution Control Act, Federal Clean Water Act (CWA)**

The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act, or Clean Water Act (CWA), which was substantially revised by amendments in 1972 that created the bulk of the current statutory scheme. The CWA requires states to adopt water quality standards. To achieve its objectives, the CWA is based on the concept that all discharges into the nation's waters are unlawful, unless specifically authorized by a permit. Moreover, the CWA states that discharge of pollutants into waters of the United States from any point source is unlawful unless the discharge complies with applicable provisions of the National Pollution Discharge Elimination System (NPDES) program.

The NPDES program is established under Section 402 of the CWA. The CWA provides the framework for regulating municipal and industrial (point sources) stormwater discharges under the NPDES program. In California, the NPDES program is administered through the nine Regional Water Quality Control Boards, including the LRWQCB.

Non-point pollution sources are also regulated by the statewide Construction General Permit. Construction activities that are subject to the General Permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation that result in soil disturbances. Storm Water Pollution Prevention Plans (SWPPPs) are developed and implemented for compliance with the construction NPDES permit and typically include both structural and non-structural Best Management Practices (BMPs) to reduce water quality impacts.

#### **4.8.4.2 State of California**

At the federal level, the CWA allows the Environmental Protection Agency (EPA) to delegate its NPDES system permitting authority to states with an approved regulatory program. The CWA authorizes discharge of pollutants into waters of the State by issuance of NPDES Permits.

Regulated entities under an NPDES Permit (Permit) are required to implement construction SWPPPs, and operational Water Quality Management Plans (WQMPs), both employing BMPs that effectively reduce or prevent the discharge of pollutants to receiving waters. The Permit imposes various requirements of the discharger. In general, provided the discharger complies with such requirements, the discharger is deemed to be in compliance with the CWA and the Permit. Most of the requirements imposed by the Permit consist of BMPs, which are construction and operational discharge control practices and mechanisms acting to achieve compliance with the CWA requirements. Additional details regarding the SWPPP and WQMP required of the Project are provided below.

#### **Storm Water Pollution Prevention Plan (SWPPP)**

In December 1999, the State Water Resources Control Board (SWRCB) issued an NPDES General Permit for the discharge of stormwater associated with construction activities. Federal regulations promulgated by USEPA (40 CFR Parts, 9, 122, 123, and 124) expanded the NPDES stormwater program to include stormwater discharges from MS4s and construction sites that were smaller than those previously included in the program. Accordingly, LWRCB issued a NPDES General Permit for the discharge of stormwater associated with construction activities. The Permit is applicable to all of California, which is inclusive of the City and the Project area.

Requirements of this Permit include a mandate that all dischargers shall develop and implement an SWPPP in accordance with Section A of the NPDES General Permit. As provided for under NPDES General Permit Section A, SWPPP requirements: all pollutant sources shall be identified; BMPs shall be implemented in order to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction; and a maintenance schedule for BMPs installed

during construction shall be implemented. BMPs shall be described for control of discharges from waste handling and disposal areas and methods of on-site storage and disposal of construction materials and construction waste.

An effective combination of erosion and sediment control on all disturbed areas during the rainy season must be implemented. The SWPPP shall include a description of the erosion control practices. The SWPPP shall include descriptions of the BMPs to reduce pollutants in stormwater discharges subsequent to Project construction. The beneficial uses of the receiving waters are protected through implementation of these BMPs.

BMP stormwater pollutant source controls are articulated in the NPDES Permit, and include such measures as first flush diversion, detention/retention basins, infiltration trenches/basins, porous pavement, oil/grease separators, grass swales, education programs, and maintenance practices. The NPDES permitting program also includes measures to reduce the release of pollutants such as sediment, construction materials, or accidental spillage of polluting materials during construction. Consistent with provisions of the NPDES Permit, the City requires implementation of development-specific SWPPPs and incorporation of BMPs that reduce, to the extent practicable, stormwater and urban runoff pollutant discharges to receiving waters.

### **Water Quality Management Plan (WQMP)**

The Project is also required to develop and implement a WQMP addressing potential operational stormwater pollutant discharges over the life of the Project. As with the Project SWPPP, the Project's mandated WQMP will act to control potential discharge of pollutants, prevent sewage spills, and avoid discharge of sediments into streets, stormwater channels, or waterways. Typical SWPPP and WQMP elements include:

- Introduction and Purpose;
- Compliance Requirements and Certifications;
- Facility Information/Pollution Prevention Team Members;
- Site Map;
- List of Significant Materials;
- Potential Storm Water Pollutants and Sources;

- Best Management Practices;
- Summary of Pollutants, Sources, and BMPs;
- Annual Comprehensive Site Evaluation;
- Definitions; and
- State Notice of Intent Form and Instructions.

### **Porter-Cologne Water Quality Act**

Section 303 of the federal CWA and the State's Porter-Cologne Water Quality Act establish applicable water quality objectives for ground and surface waters in the State. In general, protection and maintenance of surface water quality is the combined responsibility of the applicable Regional Water Quality Control Board (RWQCB), water supply and wastewater management agencies, and City and County governments.

The RWQCB has purview over point and non-point sources of pollution. Point source water pollutants consist of controlled wastewater releases that are commonly generated by activities that use water to collect pollutants and transport them from the processing facility. When such wastewater discharges are proposed, the Applicant must obtain a set of Waste Discharge Requirements from the RWQCB which serve to control water pollution to a non-significant level from such point sources.

Non-point sources of water pollution consist of surface runoff from a site or area during or following a storm where the source of pollution cannot be traced to a specific location. Typical non-point water pollution sources consist of agricultural fields with sediment and fertilizers, construction sites with sediment and debris, and roads with oil, tire particles, and debris common to roads. The Project will implement and comply with applicable Porter-Cologne water quality protection policies and mandates.

#### **4.8.4.3 City of Victorville Municipal Code**

All Project storm management systems and facilities would be designed, implemented, and maintained consistent with requirements presented in City Municipal Code Chapter 10.30 - *Storm Water and Urban Runoff Management and Discharge Control*. Compliance with Municipal Code Chapter 10.30 requirements would control the volume and rate of Project stormwater discharges, and would minimize pollutant discharges. Additionally,

the Applicant would be required to pay storm drainage fees pursuant to City Municipal Code Chapter 6.30 - *Storm Drainage Fees*. Payment of required storm drain fees finances implementation, operation and maintenance of areawide storm drainage facilities, acting to minimize potential stormwater discharge impacts. Please refer also to the City of Victorville Municipal Code available at: [https://library.municode.com/ca/victorville/codes/code\\_of\\_ordinances](https://library.municode.com/ca/victorville/codes/code_of_ordinances).

#### 4.8.5 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines*, hydrology/water quality impacts would be considered potentially significant if the Project would:

- Violate any water quality standards or waste discharge requirements;
- 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 which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of 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;

- Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; and
- Inundation by seiche, tsunami, or mudflow.

#### **4.8.6 POTENTIAL IMPACTS AND MITIGATION MEASURES**

Following is an analysis of potential hydrology and water quality impacts that could occur because of the Project. The analysis presented here substantiates that the Project would not result in any potentially significant hydrology and water quality impacts. No mitigation is required.

Additionally, of the CEQA threshold considerations presented above at Section 4.8.5, and as substantiated in the Initial Study, the Project's potential impacts under the following topics have been previously determined to be less-than-significant, and are not further discussed in this Section:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge;

- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding;
- Result in inundation by seiche, tsunami, or mudflow.

Please refer also to Appendix A, *Initial Study and NOP Responses*; Initial Study Checklist Item IX. *Hydrology and Water Quality*.

#### 4.8.6.1 Impact Statements

**Potential Impact:** *Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.*

**Impact Analysis:** As previously described at Section 4.8.3, the Project incorporates necessary drainage and stormwater management systems, and would comply with stormwater system design, construction, and operational requirements mandated under the City Municipal Code, and with regulations established by other agencies, including the LRWQCB and California Department of Water Resources.

The Project would implement an underground storm drain system that will collect storm and retain stormwater water runoff via strategically dispersed systems and retention

basins. The retention basins have been designed to mitigate the impacts of additional runoff that would be generated by the Project. Specifically, as required by the City, 100-year storm event discharge volumes and discharge rates from the Project site under developed conditions would not exceed 90 percent of existing conditions. Please refer to Table 4.8-3.

**Table 4.8-3**  
**Comparison of Existing and Developed Conditions**  
**Stormwater Discharge**

	100-Year Storm		10-Year Storm	
	Runoff Volume (cubic feet, cf)	Peak Flow Rate (cubic feet/second, cfs)	Runoff Volume (cf)	Peak Flow Rate (cfs)
Existing Conditions	181,340	49.27	86,162	23.17
Developed Conditions	55,539	41.70	24,437	19.52

**Source:** Preliminary Drainage Study, Victorville Retail Project, SWC US 395 & SR-18, Victorville, CA (Blue Peak Engineering, Inc.) March 1, 2019.

Final design, configuration, and locations of proposed drainage system improvements will be reviewed and approved by the City and SBCFCD, prior to, or concurrent with, application for grading permits.

In combination, the Project's stormwater management system components, and compliance with regulatory requirements act to preclude potentially adverse drainage and stormwater runoff impacts.

### **Project SWPPP and Compliance with Regulatory Requirements Address Construction-Source Water Quality Impacts**

During site preparation activities, any existing groundcover would be removed from the site, exposing the Project area to increased wind and water erosion potentials. Further, construction site runoff may carry increased loads of sediment, heavy metals and petroleum hydrocarbons (from machinery) which could degrade water quality. In accordance with NPDES requirements, the Project Applicant would be required to prepare and implement a construction activities erosion control plan to alleviate potential sedimentation and stormwater discharge contamination impacts of the Project.

The Applicant would also be responsible for compliance with the General Construction Permit by filing a Notice of Intent to Commence Construction Activities. Under the General Construction Permit, discharge of materials other than stormwater is prohibited. The General Construction Permit stipulates further that the Applicant shall prepare, retain at the construction site, and implement a SWPPP which identifies the sources of sediments and other pollutants that affect the quality of stormwater discharge, and implement practices to reduce sediment and other pollutants to stormwater discharge. SWPPP requirements include identification of construction and post-construction BMPs that would act to reduce sediments and other pollutants.

Implementation of the Project SWPPP and compliance with applicable NPDES, SBCFCD, and LRWQCB requirements would ensure that potential construction-source water quality impacts of the Project are reduced to levels that would be less-than-significant.

### **Project WQMP and Compliance with Regulatory Requirements Address Operational-Source Water Quality Impacts**

Over the life of the Project, contaminants such as oil, fuel and grease that are spilled or left behind by vehicular traffic, collect and concentrate on paved surfaces. During storm events, these contaminants are washed into the storm drain system and may potentially degrade receiving water quality. Stormwater runoff from paved surfaces within the developed Project area could carry a variety of urban wastes, including greases and oils and small amounts of metals which are common by-products of vehicular travel. In addition, storm runoff will likely contain residual amounts of fertilizers and plant additives washed off from landscaped areas.

Recognizing the potential hazards of such urban runoff, the EPA has issued regulations which require municipalities to participate in the NPDES program. The SBCFCD, San Bernardino County, and the 16 incorporated cities in the Santa Ana River watershed (including the City) are co-permittees under an NPDES stormwater discharge permit, issued by the State of California through the Santa Ana Regional Water Quality Control Board. Project compliance with applicable NPDES requirements and performance standards would be achieved through implementation of a Project-specific WQMP. The

Preliminary Project WQMP is presented at EIR Appendix H. As discussed herein, the Applicant would be required to develop and implement a Project-specific WQMP pursuant to City Municipal Code Section 10.30.220 - *Post-construction requirements for specified projects; WQMP*.

To ensure adequate and appropriate treatment of stormwater discharges, the Project stormwater management concept and associated Water Quality Management Plan (WQMP) would implement water quality BMPs that would treat stormwaters on-site prior to release to the regional stormwater system or infiltration to groundwater.

In combination, implementation of the Project SWPPP, on-site stormwater management system and associated WQMP, and compliance with NPDES Permit requirements, act to protect local and regional water quality by preventing or minimizing potential stormwater pollutant discharges to the watershed. On this basis, the potential for the Project to: substantially alter the existing drainage pattern of area in a manner which would result in substantial erosion or siltation on- or off-site; or that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or that would create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less-than-significant.

**Level of Significance:** Less-Than-Significant.

## **4.9 BIOLOGICAL RESOURCES**

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## 4.9 BIOLOGICAL RESOURCES

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### *Abstract*

*This Section identifies and addresses potential impacts to biological resources resulting from the Project. More specifically, the analysis presented here examines whether the Project would:*

- Substantially and adversely affect, either directly or through habitat modifications, any candidate for listing, any listed threatened or endangered species of plant or animal, or the habitat of the species;*
- Substantially affect any riparian habitat or other sensitive natural community identified in local or regional plan, policies, regulations, or by the CDFW or USFWS;*
- Substantially and adversely affect federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruptions or other means;*
- 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 wildlife nursery sites; or*
- Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.*

*As supported by the analysis presented in this Section, with application of proposed mitigation measures, the Project's potential impacts to biological resources are determined to be less-than-significant.*

#### **4.9.1 INTRODUCTION**

Following are discussions of existing wildlife and plant communities characteristic of the Project area, with focused consideration on species of special interest known to occur, or that could potentially occur on the Project site. Potential impacts to biological resources are identified, and mitigation of potentially significant impacts is proposed.

Information presented in this Section is summarized and excerpted from *Biological Report for the Desert Grove Project Site* (Harmsworth Associates) November 2018, which is included at EIR Appendix I.

#### **4.9.2 SETTING**

##### **4.9.2.1 Overview**

The Project site has been significantly impacted due to years of disturbance, trash, off-road trails, and footpaths. The site is flat with little topographical variation. Site topography varies from an elevation of approximately 3,139 feet above mean sea level (msl) along the northeastern boundary to approximately 3,153 along the southwestern boundary of the site.

The site is located within the western Mojave Desert, which has hot dry summers, mild winters, high winds and sparse winter rains. Annual precipitation for the region averages 5.6 inches, and average annual temperature ranges from 47° to 76° F. Rainfall during the 2017/2018 season was below normal throughout southern California.

##### **4.9.2.2 Biologic Setting**

Available literature and resource databases were reviewed as a means of preliminarily evaluating the potential occurrence of sensitive plant and animal species within the Project site and vicinity. Please refer to Biological Report Section 2.1, *Biological Resources Information Sources*, for a complete listing of all resources consulted. Subsequent to literature/database reviews, field surveys were conducted.

## **Vegetation Communities**

Although the Project site has been significantly impacted due to years of disturbance, the study area contains two vegetation communities; *Larrea tridentata* Shrubland Alliance and *Ericameria nauseosa* Shrubland Alliance. The following paragraphs describe these communities.

### ***Larrea tridentata* Shrubland Alliance (Creosote bush scrub)**

*Larrea tridentata* Shrubland Alliance (Creosote bush scrub) is an open shrubby community dominated by creosote bush (*Larrea tridentata*), with a variety of other shrubs sometimes present. Joshua tree (*Yucca brevifolia*) may be present in small quantities. Numerous ephemeral herbs occur after spring rains. This alliance occurs throughout the California Mojave Desert on well-drained soils on alluvial fans, bajadas, upland slopes, and intermittent washes.

At the Project site, *Larrea tridentata* Shrubland Alliance occupied the entire site, except for smaller portions along the northern and western boundary. Both of these areas were likely occupied by *Larrea tridentata* Shrubland Alliance in the past, prior to disturbance. Throughout this alliance, creosote bush was the sole dominant. Other shrubs present included rubber rabbitbrush (*Ericameria nauseosa*), silver cholla (*Cylindropuntia echinocarpa*) and two Joshua trees. Weedy non-native species such as Russian thistle (*Salsola tragus*), summer mustard (*Hirshfield incana*) and brome grasses (*Bromus* spp.) were present. Species diversity was low.

### ***Ericameria nauseosa* Shrubland Alliance (Rubber Rabbitbrush Scrub)**

*Ericameria nauseosa* Shrubland Alliance (Rubber Rabbitbrush Scrub) occurs in a variety of settings throughout arid parts of California. Rubber rabbitbrush (*Ericameria nauseosa*) is dominant or co-dominant with big sagebrush (*Artemisa tridentata*), green rabbitbrush (*Chrysothamnus viscidiflorus*), *Ephedra* spp., flat-top buckwheat (*Eriogonum fasciculatum*), California juniper (*Juniperus californica*), or antelope bush (*Purshia tridentata*). *Ericameria nauseosa* Shrubland Alliance is a fast-growing pioneer of disturbed sites. Sites may have been disturbed due to repeated flooding, overgrazing, or mechanical disturbance. In

parts of the Mojave Desert, stands occupy fallow agricultural fields and areas with old mine tailings.

At the Project site, *Ericameria nauseosa* Shrubland Alliance occupied the western boundary of the site. Throughout this alliance, rubber rabbitbrush was the sole dominant. A few creosote bushes and weedy non-native species, such as summer mustard and brome grasses, were present but otherwise this area was sparsely vegetated.

### **Disturbed**

A recently disturbed area occurred along the northern boundary of the site, adjacent to Palmdale Road. This area was devoid of vegetation due to disturbance (likely disking) except for a few sparse non-native weeds.

### **Wildlife**

Wildlife at the site consisted mostly of common species associated with open, disturbed desert habitats. The most abundant species detected during the site visit were side blotched lizard (*Uta stansburiana*), common raven (*Corvus corax*), and desert cottontail (*Sylvilagus audubonii*).

### **Special-Status Species**

#### **Plant Species**

No special-status plants were observed within the Project site during the field surveys, and there are no historic site records for any special-status plant species on-site. Based on a review of California Natural Diversity Database (CNDDDB), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California, and field surveys, a number of special-status species could occur on-site. Please refer to Table 3 of the Biological Study for a complete listing of all plants having potential to occur on-site. Potential impacts in this regard are discussed at Section 4.9.5, *Potential Impacts and Mitigation Measures*, presented subsequently.

### **Wildlife Species**

One special status wildlife species was detected during the current surveys, the loggerhead shrike (*Lanius ludovicianus*). Additional special-status species which typically occur in native desert habitats could occur on-site. Please refer to Table 4 of the Biological Study for a complete listing of all wildlife having potential to occur on-site. Potential impacts in this regard are discussed at Section 4.9.5, *Potential Impacts and Mitigation Measures*, presented subsequently.

### **Jurisdictional Waters/Wetlands**

Currently, several ephemeral drainages cross the site in a south to north direction. Prior to development in the area, there were no drainages on-site; however, local development has changed land contours and additional water has been added for irrigation.

The water source for all on-site drainages is a culvert at Far Hills Lane, a detention basin at the corner of Highway 395 and Dos Palmas Road, and run-off from Highway 395. All drainages eventually make their way north and into the culvert under Palmdale Road (except one, which dissipates into the ground).

All drainages are typical desert washes, only conveying water during and immediately following large storm events. Water only stays in the system for short periods after large storm events and does not occur at all in smaller storms. The rest of the time these drainages are completely dry.

The substrate was sandy or gravelly and was dry at the time of the site survey. In general, the channels were devoid of vegetation and any vegetation that was present consisted of upland shrubs or herbs. No wetlands or riparian habitat has been identified within or proximate to the Project site.

In some cases, the drainages exhibited a clear bed and bank and definable ordinary high water mark (OHWM). In others, there was no clear bed and bank and often just surface flows. There is no clear connectivity with downstream navigable waters.

### **4.9.3 EXISTING POLICIES AND REGULATIONS**

#### **4.9.3.1 Federal Endangered Species Act/California Endangered Species Act**

The United States Congress passed the federal Endangered Species Act (ESA) in 1973 to protect those species that are endangered or threatened with extinction. The State of California enacted a similar law, the California Endangered Species Act (CESA) in 1984. The state and federal Endangered Species Acts are intended to operate in conjunction with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The United States Fish and Wildlife Service (USFWS) is responsible for implementation of ESA, while the CDFW implements CESA. During Project review, each agency is given the opportunity to comment on the potential of the Project to affect listed plants and animals.

#### **4.9.3.2 State of California, Fish and Game Code Section 1600 *et seq.***

The California Department of Fish and Wildlife (CDFW) has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code over fish and wildlife resources of the State. Under Section 1602, a private party must notify the CDFW if a project will “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, except when the department has been notified pursuant to Section 1601.” If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the initiating party, they may enter into an agreement with the CDFW identifying the approved activities and associated mitigation measures.

#### **4.9.3.3 City of Victorville**

The City has recognized the importance of its biological resources, specifically including the plants and wildlife of the City within the Resource Element of the Victorville General Plan. The following policy, excerpted from the General Plan Resource Element, is

applicable to the Project. Following the excerpted policy (presented in italics), Project consistency is summarized.

*Policy 4.1.1: Encourage development [to avoid] natural habitat that supports rare, threatened or endangered plants and wildlife (i.e., “sensitive” species), or require restoration of the same type of impacted habitat within an existing, planned or potential conservation area. As discussed subsequently, sensitive plant and wildlife species have the potential to occur within the Project site. Through the mitigation presented within this Section, which require additional surveys and agency coordination, the Project is determined to be consistent with, and supportive of, this Policy.*

#### **Joshua Tree Protection, City Ordinance 1224**

City of Victorville Municipal Code Section 13.33 *Preservation and Removal of Joshua Trees*, prohibits damage to, and harvest of, any Joshua tree without the prior written consent of the City. To this end, the City has initiated an inspection and application process that governs the relocation of Joshua trees. Completion of the inspection and application process through the Parks Division of the City’s Community Services Department is required prior to the issuance of grading permits. Trees may be relocated on-site, relocated to another property with a letter of authorization from that property owner, or placed for public “adoption.” Trees larger than eight feet in height or six inches in diameter require relocation by a professional tree mover.

#### **4.9.3.4 Other Statutes, Codes, and Policies**

In addition to formal listing under ESA and CESA, plant and wildlife species receive additional consideration during the CEQA process as discussed below.

#### **Species of Special Concern**

Species that may be considered for focused review are included on CDFW’s list of “Species of Special Concern.” Species of Special Concern are generally defined as those California species whose numbers, reproductive success, or habitat may be threatened.

### **CNPS-Listed Plants**

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

### **Raptors and Migratory Birds**

Raptors (birds of prey), migratory birds, and other avian species are protected by state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

### **Native Desert Trees and Shrubs**

The California Desert Native Plants Act (Section 80001, *et seq.*, of the California Department of Food and Agriculture Code), regulates the removal of many native desert tree and shrub species.

#### **4.9.3.5 Jurisdictional Waters/Wetlands**

As discussed below, the U.S. Army Corps of Engineers (Corps), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) each have a specific regulatory role in the protection and preservation of jurisdictional Waters of the United States, wetlands, streambeds, and riparian habitat.

#### **U.S. Army Corps of Engineers - Waters of the United States/Wetlands**

The Corps regulates the discharge of dredged or fill material into “waters of the United States” pursuant to Section 404 of the federal Clean Water Act. These waters include wetland and non-wetland bodies of water that meet certain criteria. The Code of Federal

Regulations, Section 328.3, provides a definition of “waters of the United States.” To summarize, waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. In practice, the Corps typically regulates as waters of the United States any body of water displaying an ordinary high water mark (OHWM). The OHWM is defined as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.”

Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. '328.3(b)]. In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

### **CDFW Streambeds and Riparian Habitat**

The CDFW, through provisions of the California Fish and Game Code Sections 1600 through 1616, is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water. CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake, as defined by CDFW.

### **Regional Water Quality Control Board**

For purposes of water quality certification pursuant to Section 401 of the Federal Clean Water Act, the RWQCB regulates all activities that are regulated by the Corps. The RWQCB also regulates “Waters of the State” pursuant to California’s Porter-Cologne

Water Quality Control Act. “Waters of the State” are defined by the Porter-Cologne Act as any surface or subsurface water or groundwater, including saline waters, within the boundaries of the State.

The RWQCB, under authority granted by the Porter-Cologne Water Quality Control Act, may choose to regulate discharges of dredge or fill materials by issuing or waiving (with or without conditions) Waste Discharge Requirements (WDRs), a type of state discharge permit, instead of taking a water quality certification action. Processing a WDR is similar to that of a Section 401 certification; however, the RWQCB has slightly more discretion to add conditions to a project under the state’s Porter-Cologne Act than under the Federal Clean Water Act. Recently the RWQCBs have used the WDR process to regulate discharge of dredge or fill to isolated waters that are not subject to Corps jurisdiction.

#### **4.9.4 STANDARDS OF SIGNIFICANCE**

CEQA has identified the following significance thresholds relative to biological resources. If the Project would result in any one of the following, its impacts to biological resources would be considered significant.

- Substantially and adversely affect, either directly or through habitat modifications, any candidate for listing, any listed threatened or endangered species of plant or animal, or the habitat of the species;
- Substantially affect any riparian habitat or other sensitive natural community identified in local or regional plan, policies, regulations, or by the CDFG or USFWS;
- Substantially and adversely affect federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruptions or other means;

- Interfere substantially with the movement of any 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;
- Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### 4.9.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

##### 4.9.5.1 Introduction

The following discussions focus on those areas where it has been determined that the Project may result in potentially significant biological resources impacts, based on the analysis presented within this Section and included within the EIR Initial Study (EIR Appendix A), and responses received pursuant to the EIR Notice of Preparation.

As discussed in the Initial Study, the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, this impact is not further discussed here. All other CEQA topics concerning the Project's potential impacts to biological resources are discussed below. Please refer to also Initial Study Checklist Item IV., *Biological Resources*.

##### 4.9.5.2 Impact Statements

**Potential Impact:** *Substantially affect, either directly or through habitat modifications, 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 (CDFW) or United States Fish and Wildlife Service (USFWS).*

## **Impact Analysis:**

### **Special-Status Plant Species**

The protected California desert native plant, the Joshua tree (*Yucca brevifolia*), was identified on-site as part of the field survey. Two Joshua trees were documented in good condition. The trees were under 20 feet in height, and supported just a few branches. A few dead and decaying trees were also present on-site. Pursuant to City of Victorville Municipal Code Chapter 13.33, prior written consent from the Director of Parks and Recreation is required prior to Joshua tree removal/relocation.

No special-status plants were observed on the Project site during the field surveys, and there are no historic site records for any special-status plant species on-site. Due to the disturbed nature of the site, the absence of any current or historic site records, the Biological Report determined that special-status plant species have a low potential to occur on-site. Regardless, based on a review of CNDDDB, the CNPS Inventory of Rare and Endangered Vascular Plants of California, and field surveys, a number of special-status species were identified as having potential to occur on-site. Project development or Project activities that would adversely affect these species would be considered potentially significant impacts.

### **Special-Status Wildlife Species**

Based on a review of CNDDDB, published literature and field surveys and assessments, a number of special-status wildlife species were identified as potentially occurring on-site. These are species which typically occur in native desert habitats that historically occurred in the Project vicinity. Species observed on-site, or with the potential to occur on-site, are discussed below.

- One special status wildlife species, the loggerhead shrike (*Lanius ludovicianus*), was observed foraging on-site during the field survey. Loggerhead shrikes like dense brush, including shrubs and trees, for nesting. On-site habitat provides limited suitable nesting habitat, consequently only foraging birds are likely to occur on-site.

- The desert tortoise (*Gopherus agassizii*) primarily occurs within Joshua tree woodland, creosote bush scrub, and saltbush scrub habitats. No desert tortoises or their sign (burrows, scat, shell fragments, tracks) were located on-site during the surveys and there are no past site records for this species. Desert tortoise is unlikely to occur on-site due to the site disturbance and because the site is generally surrounded by development. The Project site is outside the critical habitat for the desert tortoise. Nonetheless, the Project site contains generally suitable habitat for desert tortoise.
- Burrowing owls (*Athene cunicularia*) occur in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a yearlong resident. They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a critical habitat feature, they require the use of rodent or other burrows for roosting and nesting cover. They can also use pipes, culverts, and nest boxes.

No burrowing owls or their sign (suitable burrows, pellets, scat, feathers etc.) were detected during the surveys and there was no evidence that any burrowing owls occur on-site. However, there is a potential that owls could reside on-site.

- Mojave ground squirrel (*Spermophilus mohavensis*) generally occurs on flat areas with sandy soils but also can occur in gravelly areas. They occur in Mojave Creosote Bush Scrub, Mojave Mixed Woody Scrub, and Desert Saltbush in the western Mojave Desert. The Project site is located at the southeastern edge of the species historic distribution, but is outside the BLM's Mojave ground squirrel conservation area. Although no Mojave ground squirrel or their sign were detected during the current or past surveys, the potential exists for the species to occur on-site.

Direct impacts would not be significant if species are found to be absent through completion of accepted protocol surveys; stated another way, direct impacts to species will not occur if the species are not located on the site. However, if these species were

found to be present, species-specific mitigation (e.g., relocation and/or avoidance, mitigation fees, on-site preservation or off-site habitat replacement) would be required. Until these species are determined absent from the site, the Project's potential impacts to the desert tortoise, burrowing owl, and the Mohave ground squirrel are considered potentially significant.

**Level of Significance Before Mitigation:** Potentially Significant.

**Mitigation Measures:**

4.9.1 *In Spring 2019, prior to any site disturbances, a qualified biologist shall conduct protocol surveys for the desert tortoise. If continued absence of this species is confirmed, no additional mitigation will be required. If however, desert tortoise is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Project Applicant shall consult with the wildlife agencies regarding the potential Project impacts to desert tortoise and the appropriate mitigation measures. Mitigation measures may include avoidance, in-lieu fees, or habitat preservation/restoration.*

*After consultation and agreement with the wildlife agencies, and prior to any site disturbances, the Project Applicant shall construct permanent desert tortoise exclusion fencing around the perimeter of the site using the USFWS's fence specifications to ensure that no desert tortoise moves onto the site. A qualified biologist will be present during the installation of the desert tortoise exclusion fence to ensure that the installation process does not result in take of the desert tortoise. The desert tortoise exclusion fence will be repaired immediately (within 48 hours) if it is not serving its intended purpose.*

*Immediately after the desert tortoise exclusion fence is constructed around the site, the qualified biologist will conduct a presence-absence survey using belt transects with a maximum width of 30 feet. If the site has vegetation or topography that obscures or reduces the biologist's ability to see a desert tortoise or desert tortoise sign, the width of the transect will be reduced, as appropriate. The qualified biologist will examine every location that the desert tortoise may use as shelter within the site; therefore, a special emphasis will be placed on examining the interior of all burrows that could be used by the desert tortoise as shelter*

*sites. Burrows would not be excavated to determine if desert tortoises are present. Results of fence construction monitoring and the presence-absence surveys will be reported to the USFWS and CDFW. Any tortoises found on-site shall be relocated to other locations as approved by the City, CDFW, and USFWS.*

*Prior to initiation of any construction-related activities (including equipment or vehicle staging), the limits of disturbance will be clearly marked with temporary construction fencing or lath with flagging tape, and the qualified biologist will survey the entire area within limits of disturbance in the morning prior to the initiation of any such activities. During construction, a biological monitor (may be different than the qualified biologist, as approved by the USFWS and CDFW) will survey ahead of all equipment to ensure that no desert tortoises are present in the anticipated path of the equipment. Results of the daily surveys and construction monitoring will be reported to the USFWS and CDFW following construction documenting compliance with these measures.*

- 4.9.2 *In Spring 2019, prior to any site disturbances, focused breeding season surveys for the burrowing owl shall be conducted. If absence of this species is confirmed, no additional mitigation will be required. If however, burrowing owl is located on site, the appropriate resource agencies (CDFW and USFWS) shall be contacted. The Project Applicant shall consult with the wildlife agencies regarding the most appropriate methods and timing for removal of owls.*

*As necessary, owls will be actively evicted following agency approved protocols (i.e., placing a one-way door at the burrow entrance to ensure that owls cannot access the burrow once they leave). Any such active eviction shall occur outside of the breeding/nesting season. That is, active eviction shall be accomplished between September 1 and February 15.*

*If more than 30 days has elapsed between owl eviction and completion of clearing and grubbing activities, a subsequent survey for the burrowing owl shall be conducted to ensure that owls have not re-populated the site. Any reoccupation by owls will require subsequent protocol active eviction.*

4.9.3 *In Spring 2019, prior to any site disturbances, a qualified biologist shall conduct pre-construction surveys for the Mohave ground squirrel (MGS) consistent with the January 1991 Guidelines, as modified in January 2003. Visual surveys to determine activity and habitat quality must be undertaken between March 16 and April 15, during daylight hours. If visual surveys do not reveal the presence of this species, trapping grids shall be established to trap for a minimum of five consecutive days, or until a MGS is captured, between March 21 and April 30. If no MGS is captured during the first five-day period, the grid will be sampled a second time, at least two weeks after the first period and between May 1 and May 31. If no MGS is captured during the second five-day period, the grid will be sampled a third time, at least two weeks after the end of the second period and between June 15 and July 15. If the continued absence of the MGS is confirmed, no further mitigation shall be required.*

*Alternatively, the Project Applicant shall pay \$1,000/acre to CDFW as security for the acquisition of suitable replacement habitat, plus \$250/acre to CDFW for any necessary enhancement of the property, plus \$1,300/acre to CDFW as an endowment to protect the property. Within 18 months of such payment, as extended at CDFW discretion, the Project Applicant shall purchase suitable replacement habitat and deed it to CDFW. At that time, CDFW shall return the \$1,000/acre acquisition fee, and any remainder of the \$250/acre enhancement fee not required for the replacement habitat.*

4.9.4 *In Spring 2019, prior to any site disturbances, focused protocol spring time surveys shall be conducted for special-status plant species. If special-status plant species are encountered on-site, mitigation shall be accomplished as specified in a formal agreement between CDFW, USFWS and the Project Applicant, to include marking plant locations with a pin flag in spring when plants are in bloom, then salvaging soil, seeds and roots in fall after plants have died back for the winter, followed by transplant to the closest adjacent suitable preserved habitat, as specified by CDFW/USFWS.*

4.9.5 *A biological monitor must be on-site during all ground disturbance activities, and will halt any such activities if, in his or her professional opinion, such activities will result in the take of a protected species.*

4.9.6 *Limits of the Project site shall be clearly marked by stakes or other means to ensure that off-site areas are not disturbed by Project construction activities.*

**Level of Significance After Mitigation:** Less-Than-Significant.

**Potential Impact:** *Substantially affect any riparian habitat or other sensitive natural community identified in local or regional plans, polices, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; or substantially and adversely affect federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruptions or other means.*

**Impact Analysis:** No wetlands or riparian habitat has been identified within or proximate to the Project site. The on-site plant communities are not considered sensitive natural communities, nor does the Project propose uses or activities that would potentially adversely affect any off-site sensitive natural communities.

Currently, several ephemeral drainages cross the site in a south to north direction. Prior to development in the area, there were no drainages on-site; however, local development has changed land contours, and additional water has been added for irrigation.

The water source for all on-site drainages is a culvert at Far Hills Lane, a detention basin at the corner of Highway 395 and Dos Palmas Road, and run-off from Highway 395. All drainages eventually make their way north and into the culvert under Palmdale Road (except one, which dissipates into the ground).

All drainages are typical desert washes, only conveying water during and immediately following large storm events. Water only stays in the system for short periods after large storm events and does not occur at all in smaller storms. The rest of the time these drainages are completely dry.

The substrate was sandy or gravelly and was dry at the time of the site survey. In general, the channels were devoid of vegetation and any vegetation that was present consisted of upland shrubs or herbs.

In some cases, the drainages exhibited a clear bed and bank and definable ordinary high water mark (OHWM). In others, there was no clear bed and bank and often just surface flows.

There is no clear connectivity with downstream navigable waters. Without hydrological connectivity with any downstream navigable waters, and since the drainages were artificially created in an upland they are likely not subject to the Corps 404 program and possibly not to the California Regional Water Quality Control Boards 401 program. However, the California Department of Fish and Wildlife does typically take jurisdiction over these types of drainages. Consultation with these agencies is required to preclude impacts in this regard.

**Level of Significance Before Mitigation:** Potentially Significant.

**Mitigation Measures:**

- 4.9.7 *Prior to any site disturbances or any earthmoving activities, the Project Applicant shall consult with the Corps to determine if a Corps 404 permit is required for the Project. If the Corps determine a 404 permit is required, then the Project Applicant shall obtain the 404 permit from the Corps prior to initiating any site disturbances or any earthmoving activities.*
- 4.9.8 *Prior to any site disturbances or any earthmoving activities, the Project Applicant shall consult with the California Regional Water Quality Control Board to determine if a Regional Board 401 certification is required for the Project. If the Regional Board determines that a 401 certification is required, then the Project Applicant shall obtain the 401 certification from the Regional Board prior to initiating any site disturbances or any earthmoving activities.*
- 4.9.9 *Prior to any site disturbances or any earthmoving activities, the Project Applicant shall complete and submit to CDFW a notification package pursuant to Fish and Game Code Section 1602, together with the requisite fee. Based on its review of the notification package, CDFG shall determine applicable provisions of a Project Lake or Streambed Alteration*

*Agreement (LSAA). The Applicant shall obtain the LSAA from CDFW prior to initiating any site disturbances or any earthmoving activities and will comply with all included LSAA measures to protect fish and wildlife resources.*

**Level of Significance After Mitigation:** Less-Than-Significant.

**Potential Impact:** *Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*

**Impact Analysis:** The Biological Report determined that, due to the surrounding roadways and development, it is unlikely the site is used as a wildlife corridor or for significant wildlife movement. However, raptors (birds of prey), migratory birds, and other avian species which may occur on-site are protected by the federal Migratory Bird Treaty Act (MBTA). Impacts in this regard are considered potentially significant.

**Level of Significance Before Mitigation:** Potentially Significant.

**Mitigation Measure:**

4.9.10 *In order to avoid impacts to nesting birds within the Project area, vegetation clearing and grading shall be conducted outside the nesting season. The nesting season generally occurs from February 15 through August 31, but can vary slightly from year to year. If clearing of the site will occur during the nesting season, no more than thirty (30) days prior to site clearing/grading, a breeding bird survey shall be conducted by a qualified biologist. This survey shall identify any potential nesting activities within the Project site. If an active nest is observed, a minimum 300-foot radius buffer area shall be established and clearly designated by flags or other suitable means around the occupied nests(s). Until any nestlings have fledged, periodic monitoring by a qualified biologist shall be conducted throughout construction activities to ensure that nesting birds are not disturbed. Such monitoring shall be conducted at least once per week.*

**Level of Significance After Mitigation:** Less-Than-Significant.

**Potential Impact:** *Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.*

**Impact Analysis:** As previously mentioned, two Joshua trees were documented in good condition on-site. A few dead and decaying trees were also present on-site. Under the requirements of the City's municipal code, written consent from the Director of Parks and Recreation will be required prior to the removal of the Joshua trees on-site. Any necessary permits pursuant to the Desert Native Plants Act will also be acquired. The Joshua trees will be removed/salvaged in consultation with the City and in compliance with City guidelines. As such, the Project's potential to conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance is considered less-than-significant.

**Level of Significance:** Less-Than-Significant.

## **4.10 CULTURAL RESOURCES/ TRIBAL CULTURAL RESOURCES**

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## 4.10 CULTURAL RESOURCES/ TRIBAL CULTURAL RESOURCES

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### *Abstract*

*This Section examines the potential of the Project to impact cultural and/or tribal resources in the Project area. Of primary concern are the protection of currently unknown (buried or undiscovered) paleontological or tribal resources that may be present on the site. Specifically, this analysis seeks to determine whether the Project would result in any of the following:*

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;*
- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;*
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;*
- Disturb any human remains, including those interred outside of dedicated cemeteries; or*
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*
  - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or*
  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c)*

*of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

*Based on the analysis contained within this section, with the implementation of mitigation, all impacts to cultural resources are considered less-than-significant.*

#### **4.10.1 INTRODUCTION**

Information contained within this section is based upon *Cultural Resources Assessment, Victorville Retail Project, City of Victorville, San Bernardino County, California* (BCR Consulting LLC) September 10, 2018 (Cultural Resources Assessment), which is included at Appendix J.

#### **4.10.2 SETTING**

##### **Prehistoric Context**

The prehistoric cultural setting of the Mojave Desert has been organized into many chronological frameworks, although there is no definitive sequence for the region. The difficulties in establishing cultural chronologies for the Mojave are a function of its enormous size and the small amount of archaeological excavations conducted there. Moreover, throughout prehistory many groups have occupied the Mojave and their territories often overlap spatially and chronologically resulting in mixed artifact deposits. Due to dry climate and capricious geological processes, these artifacts rarely become integrated in-situ. Lacking a milieu hospitable to the preservation of cultural midden, Mojave chronologies have relied upon temporally diagnostic artifacts, such as projectile points, or upon the presence/absence of other temporal indicators, such as groundstone. Such methods are instructive, but can be limited by prehistoric occupants' concurrent use of different artifact styles, or by artifact re-use or re-sharpening, as well as researchers' mistaken diagnosis, and other factors. Recognizing the shortcomings of comparative temporal indicators, the Cultural Resources Assessment recommends the following commonly cited and relatively comprehensive chronology.

## **Ethnography**

The Uto-Aztecan “Serrano” people occupied the western Mojave Desert periphery. The generic term “Serrano” is applied to four groups, each with distinct territories: the Kitanemuk, Tataviam, Vanyume, and Serrano. Only one group, in the San Bernardino Mountains and West-Central Mojave Desert, ethnically claims the term Serrano. The Vanyume, an obscure Takic population, was found along the Mojave River near Apple Valley at the time of Spanish contact. The Kitanemuk lived to the north and west, while the Tataviam lived to the west. The Serrano lived mainly to the south. All may have used the western Mojave area seasonally. Historical records are unclear concerning precise territory, although archaeological studies have established village locations and trade routes.

## **History**

Historic-era California is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

*Spanish Period.* The first European to pass through the Project area is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena. This is the first recorded group crossing of the Mojave Desert and, according to Father Garces’ journal, they camped at the headwaters of the Mojave River, one night less than a day’s march from the mountains. Today, this is estimated to have been approximately 11 miles southeast of Victorville. Garces was followed by Alta California Governor Pedro Fages, who briefly explored the western Mojave region in 1772. Searching for San Diego Presidio deserters, Fages had traveled north through Riverside to San Bernardino, crossed over the mountains into the Mojave Desert, and then journeyed westward to the San Joaquin Valley.

*Mexican Period.* In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes.

*American Period.* The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day.

### **4.10.3 EXISTING POLICIES AND REGULATIONS**

#### **4.10.3.1 Federal**

##### **National Historic Preservation Act**

The National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties. Historic properties are cultural resources (e.g., archeological sites, historic built environment features, or Native American sites) that are listed, or determined to be eligible for listing, on the National Register of Historic Places. The implementing regulations of this mandate, found in the Code of Federal Regulations (36 CFR 800), outline an involved consultative process known as the Section 106 process. The Section 106 process requires a Project lead federal agency to consult with the State Historic Preservation Officer.

### **American Indian Religious Freedom Act**

The American Indian Religious Freedom Act, passed in 1978, serves to protect and preserve the traditional religious rights of American Indians, Eskimos, Aleuts, and Native Hawaiians. Before the Act was passed, certain federal laws interfered with the traditional religious practices of many American Indians.

### **Native American Graves Protection and Repatriation Act of 1990**

*The Native American Graves Protection and Repatriation Act* establishes a federal policy of respect for, and protection of, Native American religious practices. It also has provisions for allowing limited access to Native American religious sites. The Act provides for the repatriation of certain items from the federal government and certain museums to the native groups to which they once belonged. The Act defines “cultural items,” “sacred objects,” and “objects of cultural patrimony” and establishes a means for determining ownership of these items. However, the provisions for repatriation only apply to items found on federal lands.

### **Executive Order 13007 and Executive Order 13084**

Executive Order 13007 requires federal agencies with land management responsibilities to allow access to and use of Indian sacred sites on public lands, and to avoid adversely affecting these sites. Executive Order 13084 reaffirms the government-to-government relationship between the federal government and recognized Indian tribes, and requires federal agencies to establish procedures for consultation with tribes. These executive orders only apply to Projects that include federal undertakings.

#### **4.10.3.2 State**

### **CEQA and the California Register of Historical Resources**

Historical resources are recognized as part of the environment under the California Environmental Quality Act (CEQA). The California Register of Historical Resources (California Register) is the authoritative guide for the State’s historical resources, and properties included in the California Register are considered significant for the purposes of CEQA. The California Register includes resources listed, or formally determined

eligible for listing, on the National Register of Historic Places, and some California State Landmarks and Points of Historical Interest. Properties of local significance designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the California Register and are presumed to be significant resources for the purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC § 5024.1, 14 CCR § 4850).

An archaeological site may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (PRC § 5020.1(j)), or if it meets the criteria for listing on the California Register (14 CCR § 4850).

The *CEQA Guidelines* direct lead agencies to evaluate an archaeological site to determine if it meets the criteria for listing in the California Register. If it does, potential adverse impacts must be considered. If an archaeological site is not a historical resource, but meets the definition of a “unique archaeological resource” as defined in PRC §21583.2, then it should be treated in accordance with the provisions of that section.

Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired (PRC § 5020.1(q)). While demolition and destruction would constitute significant impacts, it is sometimes more difficult to assess when change, alteration, or relocation results in a substantial adverse change. The *CEQA Guidelines* provide that a Project that alters those physical characteristics of a historical resources that convey its significance (i.e., its character-defining features), can be considered to materially impair the resource’s significance.

### **California Native American Graves Protection and Repatriation Act (2001)**

The California Health and Safety Code, Division 7, Part 2, Chapter 5 (Sections 8010-8030) contains broad provisions for the protection of Native American cultural resources. The California Native American Graves Protection and Repatriation Act establishes policy to ensure that California Native American human remains and cultural items are treated

with respect and dignity. The Act also provides the mechanism for disclosure and return of these items held by publicly funded agencies and museums in California. Additionally, the Act outlines the mechanism by which California Native American tribes not recognized by the federal government may file claims for human remains and cultural items held in agencies or museums.

### **California Public Resources Code**

The California Public Resources Code contains several sections applicable to the preservation of cultural resources and human remains. These sections detail procedures to be followed whenever Native American remains are found, and delineate the unauthorized disturbance or removal of archaeological, historical, paleontological resources, or human remains as an act punishable by law (Sections 5020, 5097.5, 5097.9-5097.996, 7050.5, 7051). As matter of law, the Project would comply with applicable provisions of the California Public Resources Code addressing preservation and protection of cultural resources and human remains.

### **California Code of Regulations**

Under Title 14, Division 3, Section 4308, no person shall remove, injure, disfigure, deface, or destroy any object of archeological or historical interest or value.

### **Senate Bill 18 (SB 18, 2004)**

SB 18 (2004) requires cities and counties to notify, and if requested to do so, consult with California Tribal Governments anytime a General Plan is proposed for adoption or amendment. Tribes, once notified of the proposed adoption of or amendment(s) to a general plan, have 90 days to request consultation.

Because the Project proposes to amend the City of Eastvale General Plan (Land Use) the City is required to consult with requesting California Native American tribes for the purpose of preserving or mitigating potential impacts to Cultural Places. The requirements of SB 18 are separate from the CEQA process.

### **Assembly Bill 52 (AB 52) Tribal Cultural Resources**

Enacted as of July 1, 2015, AB 52 established a new category of resources under CEQA called “tribal cultural resources” that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigations. The Bill was built on the concept that California Native American tribes have the expertise “with regard to tribal history and practices” to identify significant cultural resources. To this end, AB 52 requires early consultation in the CEQA process to ensure that local and Tribal governments, public agencies, and Project proponents have information available, early in the CEQA environmental review process, for the purpose of identifying and addressing potential adverse impacts to tribal cultural resources.

AB 52 requires that the lead agency contact (in writing) all culturally affiliated tribes that could be affected by a Project, within 14 days of deeming a development application complete. The notice commences a 30-day period for the tribe to request consultation. Upon receipt of a request consultation, the lead agency has an additional 30 days to begin the consultation process. AB 52 states that the consultation concludes when either “1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal resource, or 2) a party, acting on good faith and after a reasonable effort, concludes that mutual agreement cannot be reached.” AB 52 notes that the consultation can be ongoing throughout the CEQA process.

#### **4.10.4 STANDARDS OF SIGNIFICANCE**

Consistent with the standards of significance outlined in the *CEQA Guidelines*, Project-related impacts to cultural/tribal resources would be considered potentially significant if they cause or result in any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of dedicated cemeteries; or
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

#### **4.10.5 POTENTIAL IMPACTS AND MITIGATION MEASURES**

The following discussions focus on areas where it has been determined that the Project may result in potentially significant impacts, based on the analysis presented within this Section and included within the EIR Initial Study (EIR Appendix A). Of the CEQA threshold considerations at Section 4.10.4, and as substantiated in the Initial Study, the Project's potential impacts under the following topic are determined to be less-than-significant, and are not further discussed in this Section:

- Disturb any human remains, including those interred outside of dedicated cemeteries.

Please refer also to Appendix A, Initial Study and NOP Responses; Initial Study Checklist Items V., *Cultural Resources* and XVII., *Tribal Cultural Resources*.

**Potential Impact:** *Cause a substantial adverse change in the significance of historic and archaeological resources as defined in §15064.5.*

**Impact Analysis:**

Research completed through the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton, revealed that 40 cultural resources studies have taken place resulting in the recording of 19 cultural resources within one mile of the Project site. Of the previous studies, one has assessed a portion of the Project site, and no cultural resources have been previously recorded within its boundaries.

During the field survey, the Project site exhibited approximately 80 percent surface visibility. Artificial disturbances have resulted from off-road vehicle activity, trash dumping, and a dilapidated modern concrete water basin. A series of storm channels on the eastern portion of the site were identified, indicating a high level of sediment movement across the Project site. Excluding the intermittent drainages, the site is relatively flat. Vegetation includes creosote scrub and some seasonal grasses. Soils include silty sand with 10-15 percent gravels measuring less than five centimeters in diameter. Inspection failed to produce evidence of significant soil changes or potential subsurface remains. No historic-period or prehistoric cultural resources of any kind, or evidence for subsurface were identified during the field survey.

Based on the results of the research and field survey of the site, the Cultural Resources Assessment concluded that no additional cultural resources work or monitoring is necessary.

Although the Cultural Resources Assessment has not indicated sensitivity for cultural resources within the Project site boundaries, ground disturbing activities always have the potential to reveal buried deposits not observed on the surface during previous surveys. Mitigation Measures 4.10.1 and 4.10.2 below would avoid or minimize potential Project

impacts to historic and archaeological resources. With implementation of these measures, the potential for the Project to cause a substantial adverse change in the significance of historic and archaeological resources as defined in §15064.5 and would be reduced to levels that would be less-than-significant.

**Level of Significance:** Potentially Significant.

**Mitigation Measures:**

*4.10.1 If previously-unidentified archaeological or historic resources of potential significance are encountered during grading and/or other ground-disturbing activities, work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist (Project archaeologist) meeting Secretary of Interior standards shall be contacted to identify and interpret the encountered resources. The Project archaeologist shall have the authority to stop or divert construction excavation, as necessary. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted regarding the find and be provided information as to the archaeologist's assessment of the find, so as to provide Tribal input with regards to significance and treatment. Monitoring shall be considered complete and may be discontinued at the conclusion of grading/ground-disturbing activities, or at an earlier date should the qualified professional, in cooperation with SMBMI, determine that on-site activities would not disturb cultural resources of potential significance.*

*4.10.2 If the Project archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find shall be developed. Drafts of these plans shall be provided to SMBMI for review and comment.*

**Level of Significance After Mitigation:** Less-Than-Significant.

**Potential Impact:** *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

**Impact Analysis:**

The City of Victorville (City) contains ancient lake bed deposits estimated to date back to the Pleistocene Epoch (10,000 to 900,000 years ago). These lake beds contain numerous mammalian fossils, including teeth, limb fragments, phalanges and metacarpal from horses, camels and other large animals. As a result of requiring monitoring during previous earth disturbance activities, several resources have been identified and recovered. The most recent significant find was a mammoth discovered in June of 1993. With the exception of those areas above the 2,985 foot contour or below the 2,727 foot contour, the City is underlain by fossil bearing strata. The entire City is considered to be sensitive regarding paleontological resources due to the existence of recovery sites throughout (General Plan EIR, p. 4-11).

The results of record searches, literature review, and field reconnaissance conducted during preparation of the General Plan EIR suggest that the likelihood of encountering paleontological resources within the City is location-dependent, is affected by the depth of disturbance and underlying lithologies. The General Plan EIR ranks area lithologies according to their paleontological sensitivity, ranging from “low” to “high.” Areas of paleontological sensitivity are mapped at General Plan Figure 5.5-5 *Sensitivity Assessment for Paleontological Resources*. Per General Plan EIR Figure 5.5-5, the Project site is located in an area considered to be of “low sensitivity” for encountering paleontological resources. The General Plan EIR nonetheless recognizes that most if not all areas of the City may be underlain by geologic formations that may contain significant paleontological resources. Accordingly, the General Plan EIR notes that future development proposals will require monitoring to ensure that potentially important paleontological resources are identified and protected. (General Plan EIR, p. 5.5-30). On this basis, there is considered to be the potential for the Project to result in a potentially significant impact to a unique paleontological resource, site, or unique geologic feature. Mitigation Measures 4.10.3 and 4.10.4 below would avoid or minimize potential Project impacts to unique paleontological/geologic resources. With implementation of these

measures, the potential for the Project to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature would be reduced to levels that would be less-than-significant.

**Level of Significance:** Potentially Significant.

**Mitigation Measures:**

4.10.3 *At least 30 days prior to application for a grading permit and prior to any Project ground-disturbing activities, the Applicant shall retain a qualified paleontologist, selected in consultation with the City (Project Paleontological Monitor/Consultant). The Project Paleontological Monitor/Consultant shall be on-site and shall conduct on-going monitoring of affected areas for potential discovery of potentially of potentially significant paleontological resources. Alternatively, the Project Paleontological Monitor/Consultant shall prepare and submit to the City, a letter substantiating that monitoring is not necessary.*

4.10.4 *If monitoring is required, the Project Paleontological Monitor/Consultant shall have the authority to temporarily halt ground-disturbing activities if paleontological resources (finds) of potential significance are encountered. At the direction of the Project Paleontological Monitor/Consultant, ground-disturbing activities in the immediate vicinity of the find shall cease until the potential significance of the encountered find can be assessed. Work may continue in other areas of the Project site and for other Project elements while the encountered find is evaluated.*

*If potentially significant paleontological resources are encountered, they shall be analyzed in accordance with standard guidelines, recovered, and curated with the appropriate facility. if disturbed resources are required to be collected and preserved, the applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.*

*At the conclusion of monitoring activities, the Project Paleontological Monitor/Consultant shall document monitoring results together with disposition of any encountered finds in a report to the City.*

**Level of Significance After Mitigation:** Less-Than-Significant.

**Potential Impact:** *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

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

**Impact Analysis:** A sacred lands search request was sent to the Native American Heritage Commission (NAHC). The Sacred Lands File search conducted by the NAHC had negative results, however this does not indicate absence of Native American cultural resources in the Project area.

The City has contacted applicable tribes on its most current AB 52 Consultation list. Responses were received from both the Twenty-Nine Palms Band of Mission Indians (TNPBMI) and the San Manuel Band of Mission Indians (SMBMI), as discussed below. AB 52 consultation correspondence received from TNPBMI and SMBMI is provided at EIR Appendix J.

In a letter dated January 25, 2019, the TNPBMI stated that the site contains no known tribal cultural resources that pertain to the Tribe, and the TNPBMI has no concerns relating to development of the Project.

In an e-mail dated February 12, 2019, the SMBMI stated that while the Tribe does not have any concerns with development of the Project, the site is located in an area that is of interest to the SMBMI. The Tribe provided specific language to be included within the mitigation measures developed for the Project and presented within this Section. Mitigation Measures 4.10.5 and 4.10.6 below would avoid or minimize potential Project impacts to Tribal Cultural Resources (TCRs). With implementation of these measures, the potential for the Project to cause a substantial adverse change in the significance of TCR would be reduced to levels that would be less-than-significant.

**Level of Significance:** Potentially Significant.

**Mitigation Measures:**

*4.10.5 The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted if any pre-contact cultural resources are discovered during Project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the Project archaeologist (see MM 4.10.1), in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the Project, should SMBMI elect to place a monitor on-site.*

*4.10.6 Any and all archeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or Applicant shall, in good faith, consult with SMBMI throughout the life of the Project.*

**Level of Significance After Mitigation:** Less-Than-Significant.

## **5.0 OTHER CEQA CONSIDERATIONS**

## 5.0 OTHER CEQA CONSIDERATIONS

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This Section of the EIR addresses other environmental considerations and topics mandated under the California Environmental Quality Act (CEQA). These topics include Cumulative Impacts, Alternatives to the Project, Growth Inducement, Significant Environmental Effects of the Project, Significant and Irreversible Environmental Changes, and Energy.

### 5.1 CUMULATIVE IMPACT ANALYSIS

The *CEQA Guidelines* require that an EIR identify any significant cumulative impacts associated with a project [*CEQA Guidelines*, Section 15130(a)]. When potential cumulative impacts are not deemed significant, the document should explain the basis for that conclusion. Cumulative impacts are “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” [*CEQA Guidelines*, Section 15355]. Thus, a legally adequate cumulative impact analysis is an analysis of a given project viewed over time and with other related past, present, and foreseeable probable future projects, whose impacts might compound or interrelate with those of the Project considered here.

CEQA notes that the discussion of cumulative impacts should be guided by standards of practicality and reasonableness [*CEQA Guidelines*, Section 15130(b)]. Only those projects whose impacts might compound or interrelate with those of the Project under consideration require evaluation. CEQA does not require as much detail in the analysis of cumulative environmental impacts as must be provided for the Project alone.

The *CEQA Guidelines* identify two basic methods for satisfying the cumulative impacts analysis requirement: the list-of-projects methodology, and the summary-of-projections methodology. Because each environmental resource is affected by its surroundings in

different manners, either of the two methodologies, or a combination of both, may be applied to the analysis of cumulative impacts to each resource. For example, because the approval and construction elements of development typically takes at least one to two years, the list-of-projects method is likely to provide a more accurate projection of growth in the near term. This method may overstate potential cumulative impacts because the considered list-of-projects may include proposals that would never be developed. Because development proposals are rarely publicly known until within five years of the expected development, the summary-of-projections method provides a more accurate projection of growth over the long term. This method may not accurately predict growth in any given year but aggregates various growth trends over the long term.

Where appropriate to the analysis in question, cumulative impacts are assessed with reference to a list of off-site “related projects,” as described at *CEQA Guidelines* §15130(b). In this manner, the EIR appropriately characterizes and evaluates potential cumulative impacts. Consistent with direction provided in the *CEQA Guidelines*, related projects considered in these cumulative analyses are “only those projects whose impacts might compound or interrelate with those of the Project under consideration require evaluation.” In this regard, it is recognized that within the context of the cumulative impacts analysis, varied criteria are employed in determining the scope and type of “cumulative projects” considered. For example, the analysis of cumulative transportation/traffic impacts evaluates the Project’s transportation/traffic impacts in the context of other known or probable “related” development proposals that would discernibly affect traffic conditions within the Traffic Impact Analysis Study Area. As another example, cumulative air quality impacts are considered in terms of the Project’s contribution to other air emissions impacts affecting the encompassing Air Basin.

For each topical discussion, the cumulative geographic context is identified. This in turn relates to the amount and type of growth that is anticipated to occur within the geographic area under consideration. The manner in which each resource may be affected also dictates the geographic scope of the cumulative impacts analysis. For example, cumulative transportation/traffic impacts would typically be localized to the vicinity of a given project site because, after a relatively short distance, traffic patterns tend to normalize; whereas cumulative air quality impacts are more appropriately analyzed with

a Basin-wide approach because the Basin's meteorological and geographic conditions generally define the extent of cumulative air quality considerations. Similar considerations are discussed in evaluating potential cumulative impacts for each of the EIR's environmental topics (Land Use and Planning, Transportation/Traffic, Air Quality, Global Climate Change and Greenhouse Gas Emissions, Noise, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Biological Resources, and Cultural Resources/Tribal Cultural Resources).

### 5.1.1 DISCUSSION OF CUMULATIVE IMPACTS

Unless otherwise noted herein, the cumulative impact analysis ultimately evaluates effects of the Project within the context of anticipated buildout of the City of Victorville (City) as envisioned under the City General Plan and related regional plans. Specific cumulative projects have also been identified where this information may be different, more detailed than that provided within the General Plan or applicable regional plans, or where such specific information otherwise benefits the cumulative impact analyses.

Section 15130(a) of the *CEQA Guidelines* notes that,

“... an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not 'cumulatively considerable,' a lead agency need not consider that effect significant but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.”

Potential cumulative impacts for each of the EIR's environmental topics are presented below and include:

- Air Quality;
- Biological Resources;
- Cultural Resources/Tribal Cultural Resources;
- Geology and Soils;

- Global Climate Change/Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Noise; and
- Transportation/Traffic.

For other topical areas of consideration, Project impacts have been determined to be less-than-significant. Further, under these topics, there are no known or anticipated projects or conditions whose impacts might compound or interrelate with those of the Project, and thereby result in potentially significant cumulative impacts. No further substantive analysis is provided under these topics, which include:

### **Aesthetics**

- Potential to have a substantial adverse effect on a scenic vista;
- Potential to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Potential to substantially degrade the existing visual character or quality of the site and its surroundings; and
- Potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

### **Agriculture and Forest Resources**

- Potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;

- Potential to conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Potential to conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned “Timberland Production;”
- Potential to result in the loss of forest land or conversion of forest land to non-forest use; or
- Potential to 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.

### **Air Quality**

- Potential to create objectionable odors affecting a substantial number of people.

### **Biological Resources**

- Potential to conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

### **Cultural Resources**

- Potential to disturb any human remains, including those interred outside of formal cemeteries.

## **Geology and Soils**

- Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault;
- Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides is considered less-than-significant.
- Potential to result in substantial soil erosion or the loss of topsoil; and
- Potential to result in or cause adverse impacts associated with septic systems or alternative waste water disposal systems.

## **Hazards and Hazardous Materials**

- Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Potential to generate hazardous emissions or involve hazardous materials handling within one-quarter mile of an existing or proposed school;
- Potential to result in exposure of persons or structures to airport/airstrip safety hazards;
- Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Potential to expose people to, or result in a significant risk of loss, injury or death involving wildland fires.

## Hydrology and Water Quality

- Potential to violate any water quality standards or waste discharge requirements;
- Potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge;
- Potential to otherwise substantially degrade water quality;
- Potential to place housing within a 100-year flood hazard area; or place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Potential to create or expose people or property to a significant risk of loss due to flood hazards;
- Potential to expose people or structures to a significant risk due to seiche, tsunami, or mudflow.

## Land Use and Planning<sup>1</sup>

- Potential to physically divide an established community;
- Potential to conflict with an applicable jurisdictional land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; and
- Potential to conflict with any applicable habitat conservation plan or natural communities conservation plan.

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<sup>1</sup> The Project is not anticipated to result in potentially significant Land Use and Planning impacts. To provide general context for the Project, a discussion of cumulative Land Use and Planning impacts is nonetheless included in this Section.

## **Mineral Resources**

- Potential to result in loss of availability of a known mineral resource that would be of value to the region and to the residents of the state; and
- Potential to result in loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

## **Noise**

- Potential to expose people residing or working in the Project area to excessive noise levels from public airport or public use airport operations; and
- Potential to expose people residing or working in the Project area to excessive noise levels from private airstrip operations.

## **Population and Housing**

- Potential to induce substantial population growth in the area, either directly indirectly;
- Potential to displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and
- Potential to displace substantial numbers of people necessitating the construction of replacement housing elsewhere.

## **Public Services**

- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts;
- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts.
- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts;
- Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered recreational facilities, the construction of which could cause significant environmental impacts; and
- Potential to result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, the construction of which could cause significant environmental impacts.

## **Recreation**

- Potential to increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial deterioration of the facility would occur or be accelerated; and
- Potential to require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

## **Transportation/Traffic**

- Potential to 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; and
- Potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

## **Utilities and Service Systems**

- Potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Potential to 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;
- Potential to 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;
- Potential to have insufficient water supplies available to serve the project from existing entitlements and resources;
- Potential to result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Potential to exceed permitted capacity of serving landfills; and

- Potential to conflict with federal, state, and local statutes and regulations related to solid waste.

Please refer also to EIR Section 1.4, *Impacts Not Found to be Potentially Significant*.

#### **5.1.1.1 Cumulative Impacts Related to Land Use and Planning**

The cumulative impact area when considering potential cumulative land use and planning issues includes areas that are currently, or are anticipated to be, subject to provisions of the City of Victorville General Plan, Zoning Ordinance, and/or any applicable Special Planning Documents (e.g., Specific Plans). The cumulative impact area includes incorporated areas of the City of Victorville.

#### **General Plan and Zoning Considerations**

The General Plan Land Use designation of the site is “Commercial.” Zoning designation of the Project site is “C-2” (General Commercial). The Project does not propose or require any General Plan Land Use or Zoning modifications. Please refer also to EIR Section 3.0, *Project Description*, Figure 3.3-2.

The Project is consistent with, and appropriately responds to, applicable General Plan Commercial Land Use Goals and Policies; and standards and requirements of the C-2 General Commercial Zoning designation.

Regional agencies employ development-specific information and General Plan/Zoning information provided by the City in developing regional plans and growth projections. In combination, these actions ensure that potential cumulative effects of evolving land use plans are appropriately addressed at local and regional levels. Project compliance with the applicable land use plans is substantiated at EIR Section 4.1, *Land Use and Planning*.

Based on the preceding discussions, the Project’s contributions to potential cumulative land use and planning impacts is not considerable, and the cumulative effects of the Project would be less-than-significant.

Other development projects within the cumulative impact area would incorporate, and would be required to comply with, requirements of necessary land use and planning discretionary actions and permits, acting to preclude or minimize potential land use and planning impacts.

### **Summary**

The Project land uses, development concepts, and operations conform to all governing land use plans, regulations, and development standards. The Project would not conflict with or obstruct relevant local and regional plans. The Project's contributions to potential cumulative land use and planning impacts is therefore not considerable, and the cumulative effects of the Project would be less-than-significant.

Other related projects within the cumulative impact area would incorporate, and would be required to comply with requirements of necessary land use and planning discretionary actions and permits. This would act to preclude or minimize potential land use and planning impacts. On this basis, with respect to land use and planning, impacts of the Project in combination with impacts of other related projects within the cumulative impact area would be less-than-significant.

#### **5.1.1.2 Cumulative Impacts Related to Transportation/Traffic**

The cumulative impact area for transportation/traffic impacts is the Study Area identified in *SWC US-395/Palmdale Road (SR-18) Traffic Impact Analysis* (Blue Peak Engineering, Inc.) March 13, 2019 (Project TIA, TIA). The TIA Study Area (illustrated at EIR Section 4.2, *Transportation/Traffic*, Figure 4.2-1) includes all potentially affected facilities within the cumulative impact area.

#### **Cumulative Traffic Growth**

The Project TIA comprehensively reflects anticipated cumulative traffic increases affecting the Study Area and addresses related potential cumulative transportation/traffic impacts. Future year traffic forecasts reflect traffic that would be generated by related projects and ambient traffic growth resulting from non-specific regional development.

Consistent with direction provided by the Lead Agency, Opening Year (2019) Traffic Conditions without the Project reflect 2 years of background (ambient) traffic growth at 3 percent per year for the period 2017 – 2019.

Since the Project is anticipated to be completed and generating trips in 2019, the interim year corresponds to roughly year 2029/2030, or approximately at the mid-point between the Opening Year (2019) and General Plan Buildout (2040) analysis scenarios. Traffic volumes for Interim Year (2029/2030) Traffic Conditions without the Project have been derived by interpolating post-processed General Plan Buildout (2040) traffic volumes at the study intersections and roadway segments based on model data provided by SANBAG.

General Plan Buildout (2040) Traffic Conditions have been derived by calculating post-processed General Plan Buildout (2040) traffic volumes at the Study Area intersections and roadway segments based on model data provided by SANBAG. SANBAG model data and model post-processing worksheets are presented at TIA Appendix F.

### **Cumulative Impacts**

Cumulatively significant Study Area transportation/traffic impacts are summarized below. The Project would construct, or pay required fees toward, completion of necessary transportation/traffic system improvements. At the significantly-impacted locations noted, improvements are under the control of jurisdictions other than the City of Victorville, and/or payment of fees would not assure timely completion of improvements. On this basis, impacts at the facilities identified below would be cumulatively significant and unavoidable.

### **Existing (2017) Conditions:**

#### ***Intersections***

Pending completion of required improvements, the Project's incremental contributions to Existing Conditions transportation/traffic impacts at or affecting the following

intersections would be cumulatively significant. Detailed discussions of specific impacts at each facility/location are presented at EIR Section 4.2, *Transportation/Traffic*.

<b>ID #</b>	<b>Intersection Location</b>
1	Pearmain St./SR-18
3	US-395/Seneca Rd.
4	US-395/SR-18

### **Roadway Segments**

Pending completion of required improvements, the Project’s incremental contributions to Existing Conditions transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:

<b>ID #</b>	<b>Rdwy.</b>	<b>Segment Limits</b>
7	US-395	SR-18 to Dos Palmas Rd.
9	US-395	Luna Rd. to La Mesa Rd.
10	US-395	La Mesa Rd. to Bear Valley Rd.

### **Opening Year (2019) Conditions:**

Opening Year (2019) background traffic volumes and levels of service reflect anticipated conditions at Project completion and opening in the year 2019. Consistent with direction provided by the Lead Agency, Opening Year (2019) Conditions without the Project reflect 2 years of background (ambient) traffic growth at 3 percent per year for the period 2017 – 2019. Traffic from known or probable related projects is also reflected in the Opening Year Condition.

The lane configurations and traffic controls assumed to be in place for the Opening Year Condition are consistent with Existing Conditions plus the following additional improvements:

- Completion of the planned connecting E – W segment of La Mesa Road at US-395 and signalization of the US-395/La Mesa Road intersection.

### **Intersections**

Pending completion of required improvements, the Project's incremental contributions to Opening Year transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:

<b>ID #</b>	<b>Intersection Location</b>
1	Pearmain St./SR-18
3	US-395/Seneca Rd.
4	US-395/SR-18
11	Mesa Linda Rd./Dos Palmas Rd.
14	Topaz Rd./Luna Rd.

### **Roadway Segments**

Pending completion of required improvements, the Project's incremental contributions to Opening Year transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:

<b>ID #</b>	<b>Rdwy.</b>	<b>Segment Limits</b>
7	US-395	SR-18 to Dos Palmas Rd.
8	US-395	Dos Palmas Rd. to Luna Rd.
9	US-395	Luna Rd. to La Mesa Rd.
10	US-395	La Mesa Rd. to Bear Valley Rd.

### **Interim Year (2029/2030) Conditions:**

Since the Project is anticipated to be completed and generating trips in 2019, the interim year corresponds to roughly year 2029/2030, or approximately at the mid-point between the Opening Year (2019) and General Plan Buildout (2040) analysis scenarios. or approximately at the mid-point between the Opening Year (2019) and General Plan Buildout (2040) analysis scenarios. Traffic volumes for Interim Year (2029/2030) Traffic Conditions without the Project have been derived by interpolating post-processed General Plan Buildout (2040) traffic volumes at the study intersections and roadway segments based on model data provided by SANBAG.

The lane configurations and traffic controls assumed to be in place for the Interim Year Condition include those provided under Existing Conditions, plus the following additional improvements:

- Construction of the east and west legs and signalization of the US-395/La Mesa Road intersection;
- Construction of the west leg of the US-395/Seneca Road intersection;
- Construction of the south leg and signalization of the Pearmain Street/Palmdale Road (SR-18) intersection;
- Construction of the south leg of the Cantina Street/SR-18 intersection.

### ***Intersections***

Pending completion of required improvements, the Project’s incremental contributions to Interim Year transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:

<b>ID #</b>	<b>Intersection Location</b>
3	US-395/Seneca Rd.
4	US-395/SR-18
6	US-395/Dos Palmas Rd.
11	Mesa Linda Rd./Dos Palmas Rd.

### **Roadway Segments**

Pending completion of required improvements, the Project’s incremental contributions to Interim Year transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:

<b>ID #</b>	<b>Rdwy.</b>	<b>Segment Limits</b>
6	US-395	Seneca Rd. to SR-18
7	US-395	SR-18 to Dos Palmas Rd.
8	US-395	Dos Palmas Rd. to Luna Rd.
9	US-395	Luna Rd. to La Mesa Rd.

<b>ID #</b>	<b>Rdwy.</b>	<b>Segment Limits</b>
10	US-395	La Mesa Rd. to Bear Valley Rd.

**General Plan Buildout (2040) Conditions:**

General Plan Buildout (2040) Traffic Conditions have been derived by calculating post-processed General Plan Buildout (2040) traffic volumes at the Study Area intersections and roadway segments based on model data provided by SANBAG. SANBAG model data and model post-processing worksheets are presented at TIA Appendix F.

The lane configurations and traffic controls assumed to be in place for the General Plan Buildout analysis scenario include those provided under Existing Conditions, plus the following additional improvements:

- Construction of the east and west legs and signalization of the US-395/La Mesa Road intersection;
- Construction of the west leg of the US-395/Seneca Road intersection;
- Construction of the south leg and signalization of the Pearmain Street/SR-18 intersection;
- Construction of the south leg of the Cantina Street/SR-18 intersection.

***Intersections***

Pending completion of required improvements, the Project’s incremental contributions to General Plan Buildout transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:

<b>ID #</b>	<b>Intersection Location</b>
3	US-395/Seneca Rd.
4	US-395/SR-18
6	US-395/Dos Palmas Rd.
7	US-395/Luna Rd.
9	US-395/Bear Valley Rd.
11	Mesa Linda Rd./Dos Palmas Rd.

<b>ID #</b>	<b>Intersection Location</b>
25	US-395/Crossroads

### **Roadway Segments**

Pending completion of required improvements, the Project’s incremental contributions to General Plan Buildout transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:

<b>ID #</b>	<b>Rdwy.</b>	<b>Segment Limits</b>
6	US-395	Seneca Rd. to SR-18
7	US-395	SR-18 to Dos Palmas Rd.
8	US-395	Dos Palmas Rd. to Luna Rd.
9	US-395	Luna Rd. to La Mesa Rd.
10	US-395	La Mesa Rd. to Bear Valley Rd.

### **Summary**

To mitigate incremental contributions to cumulative transportation/traffic impacts affecting Study Area facilities, the Project Applicant would pay requisite fees toward the construction of necessary improvements. At the significantly-impacted locations noted, the required improvements are under the control of jurisdictions other than the City of Victorville, and/or payment of fees would not assure timely completion of improvements.

On this basis, pending completion of required improvements, the Project’s contributions to cumulative impacts identified above are considered cumulatively significant. All other Project transportation/traffic impacts would be individually and cumulatively less-than-significant.

#### **5.1.1.3 Cumulative Impacts Related to Air Quality**

The cumulative impact area for air quality considerations is generally defined by the encompassing Air Basin and boundaries of the jurisdictional air quality management agency. In this case, the Mojave Desert Air Basin (Basin) and the Mojave Desert Air Quality Management District (MDAQMD), respectively. Project air pollutant emissions

within the context of MDAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts in the Basin. Due to the defining geographic and meteorological characteristics of the Basin, criteria pollutant emissions that could cumulatively impact air quality would be, for practical purposes, restricted to the Basin. Accordingly, the geographic area encompassed by the Basin is the appropriate limit for the cumulative Air Quality analysis.

### **Construction-source Air Quality Impacts**

#### **MDAQMD Significance Thresholds**

Project construction-source air pollutant emissions would not exceed applicable MDAQMD significance thresholds and would be less-than-significant. Less-than-significant impacts at the Project level are not cumulatively considerable.<sup>2</sup>

Other related projects within the cumulative impact area would be required to minimize construction-source air pollutant emissions consistent with MDAQMD permitting requirements and construction emissions control measures, thereby minimizing potential cumulative air quality impacts within the Basin. Mitigation would be implemented, if applicable.

#### **Nonattainment Impacts**

The Project is located within ozone and PM<sub>10</sub>/PM<sub>2.5</sub> nonattainment areas (NO<sub>x</sub> is a precursor to ozone and PM<sub>10</sub>/PM<sub>2.5</sub>). Project construction-source emissions would not exceed applicable MDAQMD thresholds, and would therefore not result in a cumulatively considerable net increase in criteria pollutants (ozone and PM<sub>10</sub>/PM<sub>2.5</sub>) for

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<sup>2</sup> The MDAQMD relies on South Coast Air Quality Management District (SCAQMD) guidance in evaluation of the significance of cumulative impacts. The SCAQMD recognizes that there is typically insufficient information to quantitatively evaluate the cumulative contributions of multiple independent projects because each project applicant has no control over other projects. Per SCAQMD criteria, development proposals that exceed the project-specific significance thresholds are considered to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

which the encompassing region is nonattainment. Project-level and cumulative impacts would be less-than-significant.

### **AQMP Consistency Impacts**

The Federal Particulate Matter Attainment Plan and Ozone Attainment Plan (Attainment Plans) for the Mojave Desert established under the Western Mojave Desert Air Quality Management Plans (AQMPs) establish a comprehensive set of programs that will lead the MDAB into compliance with federal and state air quality standards. Project construction-source emissions would not exceed applicable MDAQMD thresholds and Project construction activities would not otherwise be inconsistent with or obstruct implementation of the AQMPs. Project-level and cumulative impacts would be less-than-significant.

### **Impacts to Sensitive Receptors**

Project attributes/operations that could result in substantial pollutant concentrations affecting sensitive receptors include: Vehicular-source CO emissions that could result in adverse localized CO emissions concentrations (CO “hot spots”); and potential impacts to sensitive receptors resulting from the Project gas station operations. Project construction activities would not require or result in significant vehicular-source emissions and would not affect or be affected by the Project gas station operations. Project-level and cumulative impacts would be less-than-significant.

### **Contributions by Related Projects**

Other related projects within the cumulative impact area would be required to minimize construction-source air pollutant emissions consistent with MDAQMD programs and strategies, thereby minimizing potential cumulative air quality impacts within the Basin. Mitigation would be implemented, if applicable.

## **Operational-Source Air Quality Impacts**

### **MDAQMD Significance Thresholds**

The Project would incorporate contemporary energy-efficient technologies and operational programs, and would be required to comply with MDAQMD emissions reductions measures and rules, acting to reduce Project air pollutant emissions generally. However, even with implementation of Project design features and operational programs, and compliance with all MDAQMD requirements, the Project would generate operational-source emissions of Oxides of Nitrogen (NO<sub>x</sub>) that would exceed applicable MDAQMD regional thresholds. This is a significant Project-level and cumulative air quality impact.

### **Nonattainment Impacts**

The Project is located within ozone and PM<sub>10</sub>/PM<sub>2.5</sub> nonattainment areas (NO<sub>x</sub> is a precursor to ozone and PM<sub>10</sub>/PM<sub>2.5</sub>). Over the life of the Project, operational-source NO<sub>x</sub> emissions exceedances noted above would result in a cumulatively considerable net increase in criteria pollutants (ozone and PM<sub>10</sub>/PM<sub>2.5</sub>) for which the encompassing region is nonattainment. This is a cumulatively significant air quality impact.

### **AQMP Consistency Impacts**

The Federal Particulate Matter Attainment Plan and Ozone Attainment Plan (Attainment Plans) for the Mojave Desert established under the Western Mojave Desert Air Quality Management Plans (AQMPs) establish a comprehensive set of programs that will lead the MDAB into compliance with federal and state air quality standards. The region encompassing the Project site is currently nonattainment for PM<sub>10</sub>/PM<sub>2.5</sub> (particulate matter) and ozone. NO<sub>x</sub> is a PM<sub>10</sub>/PM<sub>2.5</sub> and ozone precursor. The MDAQMD Attainment Plans in part present goals strategies to control and reduce NO<sub>x</sub> emissions in the Basin. Project operational-source NO<sub>x</sub> emissions would exceed applicable MDAQMD NO<sub>x</sub> emissions regional thresholds and would be a significant Project air quality impact. Project operational-source NO<sub>x</sub> emissions exceedances would contribute to existing nonattainment particulate matter and ozone conditions affecting the region, and could increase the frequency or severity of violations of the federal or state ambient air quality

standards for PM<sub>10</sub>/PM<sub>2.5</sub> and ozone. Project operational-source NO<sub>x</sub> emissions exceedances would also potentially delay or otherwise obstruct particulate matter and ozone attainment strategies and goals of the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert. This is a cumulatively significant air quality impact.

### **Impacts to Sensitive Receptors**

Project attributes/operations that could result in substantial pollutant concentrations affecting sensitive receptors include: Vehicular-source CO emissions that could result in adverse localized CO emissions concentrations (CO “hot spots”); and potential impacts to sensitive receptors resulting from the Project gas station operations.

#### ***CO Hotspot Impacts***

The potential for the Project to cause or result in potential CO hotspot impacts would be less-than-significant. Per MDAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable. The potential for Project CO emissions to result in or cause cumulatively significant CO hotspot impacts is therefore considered less-than-significant.

#### ***Gas Station Operations***

The Project gasoline service operations may generate toxic air contaminants (TACs) (e.g., benzene, hexane, MTBE, toluene, xylene) that have the potential to contribute to health risks in the Project vicinity. The MDAQMD currently does not have an established procedure for determining screening-level health risk estimates for gasoline dispensing operations. MDAQMD relies on the SCAQMD Health Risk Assessment (HRA) methodology (SCAQMD’s *Risk Assessment Procedures for Rules 1401, 1401.1 & 212*). Per the SCAQMD HRA methodology, a potentially significant impact would occur if a project would increase the cancer-risk at affected receptors by 10 persons per million population (10 per million).

At the nearest residential receptor, the maximum cancer risk attributable to the Project gasoline dispensing operations would be 0.27 in one million. The maximum cancer-risk to workers would be 0.02 in one million.<sup>3</sup> In both instances, potential cancer risks attributable to the Project gasoline station operations would be well below the SCAQMD threshold of 10 in one million, and would therefore be less-than-significant. Risks at school receptors, the nearest of which is located more than one-mile from the Project site, would be non-detectable. The SCAQMD HRA protocol does not allow for definitive calculation of non-cancer risks from retail fuel dispensing operations. Given the nominal cancer-risk exposure noted above, little or no incremental non-cancer risks would be anticipated from the Project retail fuel dispensing operations.

The Project does not otherwise propose or require uses or activities that would result in or create substantial pollutant concentrations. On this basis, the potential for the Project gas station operations to generate substantial TACs, and thereby expose sensitive receptors to substantial pollutant concentrations is considered less-than-significant.

Based on the preceding, the potential for Project air pollutant emissions to result in or cause cumulatively significant impacts at sensitive receptors would be less-than-significant.

### **Contributions by Related Projects**

Other related projects within the cumulative impact area would be required to minimize operational-source air pollutant emissions consistent with MDAQMD programs and strategies, thereby minimizing potential cumulative air quality impacts within the Basin. Mitigation would be implemented, if applicable.

### **Summary**

- Project operational-source NO<sub>x</sub> emissions in exceedance of applicable MDAQMD regional thresholds would be cumulatively significant.

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<sup>3</sup> Project AQIA, p. 31.

- Project operational-source NO<sub>x</sub> emissions exceedances would result in a cumulatively considerable net increase in criteria pollutants (ozone and PM<sub>10</sub>/PM<sub>2.5</sub>) for which the Project region is non-attainment. This is a cumulatively significant impact.
- Project inconsistency with the MDAQMD Attainment Plans and AQMPs is a cumulatively significant impact.
- All other potential air quality impacts of the Project would be less-than-significant or would be reduced to less-than-significant levels with application of proposed mitigation measures. Per MDAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable.
- Other related projects within the cumulative impact area would be required to minimize construction-source and operational-source air pollutant emissions consistent with MDAQMD programs and strategies, thereby minimizing potential cumulative air quality impacts within the Basin. Mitigation would be implemented, if applicable.

#### **5.1.1.4 Cumulative Impacts Related to Greenhouse Gas (GHG) Emissions/Global Climate Change (GCC)**

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (*CEQA Guidelines* Section 15130(f)). The Project Greenhouse Gas Analysis (GHGA) is by nature a cumulative analysis. Because GHG emissions and climate change are a global issue, any approved project regardless of its location has the potential to contribute to a cumulative global accumulation of GHG emissions. The geographic context of the cumulative contributions to GHGs and climate change is worldwide. Practically however, lead agencies and responsible agencies are only able to regulate GHG emissions within their respective jurisdictions. Accordingly, for the purposes of this analysis, the cumulative impact area for GHG/GCC considerations is the City of Victorville and the encompassing MDAQMD jurisdictional area.

Consistent with *CEQA Guidelines* direction, the Project GHG Analysis and this EIR evaluate Project GHG emissions under the following topical headings:

- Potential for the Project to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment;
- Potential for the Project to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The City has further determined that each of the above thresholds establish a separate and independent basis upon which to substantiate the significance of the Project's potential GHG emissions impact. Project impacts within the context of the above threshold considerations are evaluated in the following discussions.

The Project would conform to applicable provisions of the City of Victorville Climate Action Plan (CAP). Projects that conform to the City CAP are not substantive sources of GHG emissions. The potential for the Project to generate GHG emissions that would either directly or indirectly have a significant impact on the environment would therefore be less-than-significant.

Project GHG emissions would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The Project is consistent with and supports all applicable City and State of California GHG emissions reductions goals and policies. More specifically, the Project is consistent with the City CAP and promotes the goals of the California Air Resources Board (CARB) Scoping Plan (Scoping Plan) through implementation of design measures that reduce energy consumption and thereby facilitate reductions in GHG emissions. In addition, the Project is required to comply with the regulations that have been adopted to implement the Scoping Plan and to achieve AB 32 (year 2020) and SB 32 (year 2030) GHG emissions reductions targets. The Project would also be required to conform to measures that may be included in the 2017 Scoping Plan Update as these would be regulatory requirements (when adopted).

Based on the preceding, the potential for the Project to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases is therefore less-than-significant and not cumulatively considerable.

Other related projects within the cumulative impact area would be required to demonstrate compliance with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and implement mitigation if applicable.

### **Summary**

The Project would comply with the City of Victorville CAP and would not be a substantive source of GHG emissions. Quantified Project GHG emissions impacts would be less-than-significant and would not be cumulatively considerable or cumulatively significant. Other related projects would be required to demonstrate compliance with the City CAP and implement mitigation if applicable.

The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases would therefore be less-than-significant and not cumulatively considerable. Other related projects would be required to demonstrate compliance with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions and implement mitigation if applicable. On this basis, with respect to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases, impacts of the Project in combination with impacts of other related projects within the cumulative impact area would be less-than-significant.

#### **5.1.1.5 Cumulative Impacts Related to Noise**

The cumulative impact area for noise considerations is generally defined as surrounding properties that could receive Project-generated noise (either construction-source or operational-source), and would also include roadway corridors affected by Project-related traffic and associated vehicular noise. Potential noise impacts of the Project are discussed at EIR Section 4.5, *Noise*.

### **Construction-Source Noise**

Project construction-source noise would not exceed applicable thresholds, and would not result in or contribute to ambient conditions and thereby resulting in cumulatively significant noise impacts. Other planned and approved projects would be required to mitigate construction-source noise impacts that could affect sensitive receptors.

### **Operational-Source Noise**

#### **Area Sources**

Project operational noise from area sources would not exceed applicable thresholds. Noise levels resulting from Project operations would not substantively contribute to ambient noise conditions or to other related noise sources. Project operational area-source noise would therefore not result in or cause cumulatively significant noise impacts. Other planned and approved projects would be required to conform to City standards. Mitigation would be implemented, if applicable.

#### **Mobile Sources**

Maximum cumulative effects of vehicular (mobile-source) noise are demonstrated by comparing noise levels under Existing Conditions (2017) and General Plan Buildout Conditions (2040). Noise contours for Study Area roadway segments are based on roadway average daily trip (ADT) estimates, Project trip generation, and trip distribution as presented in the Project TIA. Per the Federal Interagency Committee on Noise (FICON)<sup>4</sup> guidance discussed at EIR Section 4.5, *Noise*, when ambient noise conditions are less than 60 dBA CNEL and cumulative effects of vehicular-source noise would be readily perceptible ( $\geq 5$  dBA CNEL), cumulative vehicular-source noise impacts would be considered potentially significant. When ambient baseline conditions approximate 60 – 65 dBA CNEL and subsequent increases in noise levels would be barely perceptible ( $\geq 3$  dBA CNEL) cumulative vehicular-source noise impacts would be considered potentially significant. When ambient baseline conditions exceed 65 dBA CNEL increases in noise levels of  $\geq 1.5$  dBA CNEL would be considered potentially significant.

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<sup>4</sup> *Federal Agency Review of Selected Airport Noise Analysis (Federal Interagency Committee on Noise) 1992.*

As indicated at Table 5.1-1, the maximum cumulative noise increases along roadways within the Study Area over the considered 23-year cumulative time frame would range from 0.7 dBA CNEL to 3.3 dBA CNEL. Maximum incremental effect of Project vehicular-source noise would be 1.6 dBA. Irrespective of the Project, certain cumulatively significant vehicular-source noise impacts are projected to occur due to ambient traffic growth and associated increases in vehicular-source noise. These impacts would occur along roadways that currently experience noise levels greater than 65 dBA CNEL, and the cumulative increase in noise is  $\geq 1.5$  dBA CNEL. These impacts are indicated in ***bold italicized*** text. In no instance would the Project contribution to vehicular-source noise increases be individually or cumulatively significant.

**Table 5.1-1  
Cumulative Vehicular-Source Noise**

Roadway	Segment	CNEL at Affected Property Line				
		Existing (2017)	2040 w/o Project	2040 w/Project	Max. Cumulative CNEL Increase	Max. Project Increment
US-395	n/o SR-18	70.8	<b>73.4</b>	<b>73.5</b>	2.7	0.1
US-395	n/o Dos Palmas Rd.	71.3	<b>73.5</b>	<b>73.9</b>	2.6	0.4
US-395	n/o Luna Rd.	70.6	<b>73.6</b>	<b>73.8</b>	3.2	0.2
US-395	n/o La Mesa Rd.	74.5	<b>77.7</b>	<b>77.8</b>	3.3	0.1
US-395	n/o Bear Valley Rd.	74.1	<b>77.3</b>	<b>77.3</b>	3.2	---
SR-18	w/o US-395	70.6	71.0	71.3	0.7	0.3
Luna Rd.	e/o US-395	63.6	64.1	65.7	2.1	1.6
SR-18	e/o Cantina St.	70.1	<b>71.4</b>	<b>71.7</b>	<b>1.6</b>	0.3
SR-18	e/o Cobalt Rd.	70.3	<b>71.6</b>	<b>71.8</b>	<b>1.5</b>	0.2
SR-18	e/o Amethyst Rd.	70.3	71.4	71.6	1.3	0.2

**Source:** Desert Grove Retail Project, Noise Impact Analysis, City of Victorville (Urban Crossroads, Inc.) March 21, 2019.

**Notes:** e/o = east of; w/o = west of; n/o = north of; s/o = south of.

## Summary

- Project construction-source noise levels received at nearby properties would not exceed applicable thresholds and would not be individually or cumulatively significant.

- Other related projects within the cumulative impact area would be required to conform to City construction-source noise standards. Mitigation would be incorporated if applicable. On this basis, with respect to construction-source noise, impacts of the Project in combination with impacts of other related projects within the cumulative impact area would be less-than-significant.
- Project operational area-source noise levels received at nearby properties would not exceed applicable thresholds and would not be individually or cumulatively significant.
- Other related projects within the cumulative impact area would be required to conform to City operational-source noise standards. Mitigation would be incorporated if applicable. On this basis, with respect to operational area-source noise, impacts of the Project in combination with impacts of other related projects within the cumulative impact area would be less-than-significant.
- Noise increases along certain Study Area roadway segments would be cumulatively significant over the time frame 2017 – 2040. In no instance would the Project contribution to vehicular-source noise increases be individually or cumulatively significant.

#### **5.1.1.6 Cumulative Impacts Related to Geology and Soils**

The Project site and all of Southern California lie within a seismically active area, generally susceptible to earthquake hazards. In this sense, Southern California is considered the cumulative impact area for geology and soils considerations. As substantiated at EIR Section 4.6, *Geology and Soils*, the Project's potential geology and soils impacts would be less-than-significant. No unique geologic features are present within the Project site or vicinity.

The Project would result in the construction of new commercial/retail land uses and supporting facilities. Infrastructure improvements and utility extensions implemented by the Project would include transportation system improvements, water lines, sewer lines,

gas lines, electricity lines, storm water management systems, and communications lines (cable, telephone).

Based on the creation and occupation of additional uses and implementation of supporting infrastructure described above, the Project would incrementally increase concentrations of persons, structures, and infrastructure systems on a previously undeveloped site within an earthquake-prone region. Potential impacts of increased exposure to seismic effects as a result of new development were considered and determined to be less-than-significant based on conformance to seismic design and engineering practices and requirements of the California Building Code (CBC), State Seismic Mapping Act, and City building standards. Similarly, potential impacts related to erosion, subsidence, shrinkage, expansion, and soil consolidation would be less-than-significant based on conformance with local, regional, state, and federal permitting and regulatory requirements. The Project does not propose or require uses or operations that would substantively contribute to or exacerbate any existing significant adverse geology and soils conditions.

Other related projects within the cumulative impact area would be subject to uniform site development and construction standards that protect public safety and structures and to reduce adverse effects to soils, such as erosion. Other related projects within the cumulative impact area would be subject to requirements of site- and development-specific geotechnical investigations, minimizing potential earthquake and seismically-induced impacts.

### **Summary**

Mandated compliance with seismic design and engineering standards, soil conservation and erosion protection reduce the Project's potential contribution to cumulative impacts in regard to geology and soils to levels that would be less-than-significant. The Project would not substantively contribute to any existing significant adverse geology and soils conditions.

Other related projects within the cumulative impact area would be subject to uniform site development and construction standards that protect public safety and structures and to reduce adverse effects to soils, such as erosion. Other related projects within the cumulative impact area would be subject to requirements of site- and development-specific geotechnical investigations. On this basis, with respect to geology and soils, impacts of the Project in combination with impacts of other related projects within the cumulative impact area would be less-than-significant.

#### **5.1.1.7 Cumulative Impacts Related to Hazards and Hazardous Materials**

For the purposes of this analysis, the cumulative impact area when considering potential hazards and hazardous materials issues generally includes the area to be developed within the Project site, as well as off-site locations that might be affected by or contribute to hazards or hazardous conditions resulting from the Project and its operations. These areas generally include neighboring properties within the City of Victorville. The cumulative hazards and hazardous materials impact analysis evaluates effects of the Project construction and operations and reflects long-term buildout conditions within the cumulative impact area.

The Project does not propose or require uses or operations that would result in potentially significant hazards or hazardous material impacts. That is, the Project does not propose uses or activities that would require substantive handling or use of hazardous materials, hazardous substances, or hazardous waste that could result in potential adverse effects. To the extent that such materials or substances may be present during Project construction or operations they would be transported, stored, used and disposed of consistent with the multiple and broad regulatory requirements, reducing potential impacts to levels that would be less-than-significant. Other related projects within the cumulative impact area would also be subject regulatory requirements that would act to avoiding hazards/hazardous materials impacts or reduce impacts to levels that would be less-than-significant.

The Project would not substantively contribute to any existing adverse hazards/hazardous materials conditions.

Specific consideration has been given to potentially significant pollutant concentrations and related hazards as they may affect vicinity land uses. The analysis presented at EIR Section 4.3, *Air Quality*, substantiates that Project air pollutant emissions would not result in potentially significant hazards at the nearest residential land uses, and the potential for the Project to result in substantial pollutant concentrations affecting sensitive receptors would be less-than-significant. Per MDAQMD criteria, less-than-significant air quality impacts at the Project level are not cumulatively significant.

### **Summary**

The Project's potential contribution to cumulative hazards/hazardous materials impacts is not considerable; and the cumulative effects of the Project would be less-than-significant. The Project would not substantively contribute to any existing adverse hazards/hazardous materials conditions.

Other related projects within the cumulative impact area would also be subject to regulatory requirements, acting to avoiding hazards/hazardous materials impacts or reduce impacts to levels that would be less-than-significant.

On this basis, with respect to hazards and hazardous materials, impacts of the Project in combination with impacts of other related projects within the cumulative impact area would be less-than-significant.

#### **5.1.1.8 Cumulative Impacts Related to Hydrology and Water Quality**

The cumulative impact area for hydrology/water quality impact considerations is defined as the area encompassed by the Lahontan Regional Water Quality Control Board (LRWQCB). Local oversight is also provided by the City of Victorville and San Bernardino County. Development of the Project site would incrementally increase impervious surfaces within the cumulative impact area, with related potential increases in the rate and quantity of local storm water discharges. The Project incorporates storm water management components that would convey post-development storm water discharges to available receiving systems and would not exceed those systems' capacities.

As substantiated at EIR Section 4.8, *Hydrology and Water Quality*, and within the Project Drainage Study and Preliminary Water Quality Management Plan (EIR Appendix H), storm water discharges from the developed Project site would not exceed receiving systems capacities. Project storm water discharges would be required to comply with City NPDES Permit requirements and LRWQCB water quality policies and plans as outlined in the Santa Ana Region Basin Plan.<sup>5</sup> Related projects would also be subject to NPDES Permit requirements and LRWQCB water quality policies and plans. Compliance with NPDES permit and LRWQCB water quality policies and plans would avoid potentially significant contributions to cumulative impacts or would reduce cumulative impacts to levels that would be less-than-significant.

The Project storm water management system would be developed and operated in compliance with City/LRWQCB regulations and water quality standards. The City of Victorville is required to comply with the Municipal Separate Storm Sewer System (MS4) Permit issued by the LRWQCB. Design, configuration, and locations of proposed drainage system improvements would be reviewed and approved by the City prior to, or concurrent with, application for grading permits.

### **Summary**

The Project incorporates all necessary development-specific storm water management systems and facilities. The Project would be required to comply with established storm water management and storm water treatment policies and regulations. On this basis, the Project's potential contribution to cumulative impacts in regard to hydrology/water quality is not considerable, and the cumulative effects of the Project would be less-than-significant.

Other related projects within the cumulative impact area would be required to implement development-specific storm water management systems, and comply with established storm water management and storm water treatment policies and regulations. On this basis, with respect to hydrology and water quality, impacts of the Project in combination

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<sup>5</sup> See: [https://www.waterboards.ca.gov/santaana/water\\_issues/programs/basin\\_plan/](https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/)

with impacts of other related projects within the cumulative impact area would be less-than-significant.

#### **5.1.1.9 Cumulative Impacts Related to Biological Resources**

The cumulative impact areas for biological resources are generally defined by available habitat, species' range(s), physical constraints, and other limiting factors as discussed within the Project Biological Report, EIR Appendix I.

As discussed at EIR Section 4.9, *Biological Resources*, the Project site evidences two Joshua Trees in good condition. These trees would be protected/relocated pursuant to City of Victorville Municipal Code Chapter 13.33, *Preservation and Removal of Joshua Trees*. Additionally, a number of special-status plant species and special-status wildlife were identified as present on-site, or having the potential to occur on-site. Project construction or Project operations that could adversely affect these species would be considered potentially significant impacts. Mitigation proposed in the EIR reduces potential impacts to special-status plant species and special-status wildlife to levels that would be less-than-significant. Mitigation of Project-specific biological resources impacts would also reduce the Project's potential incremental contributions to cumulative biological resources impacts within the region.

The Project would have no substantive effect on other biological resources including riparian habitat or other sensitive natural community; and federally protected wetlands as defined by Section 404 of the Clean Water Act. These Project impacts would be individually and cumulatively less-than-significant.

To the extent that each development proposal within the cumulative impact area(s) provides appropriate mitigation, cumulative impacts to biological resources are reduced below significance thresholds. Pursuant to the provisions of CEQA, each development project within the cumulative impact area that requires a discretionary action by a public agency will be assessed for its potential impacts on biological resources. Appropriate biological resources mitigation will also be required of other projects within the cumulative impact areas.

Based on the preceding, the Project's potential contribution to cumulative impacts in regard to biological resources is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

#### **5.1.1.10 Cumulative Impacts Related to Cultural Resources/Tribal Cultural Resources**

The cumulative impact area for prehistoric, archaeological, and historic resources generally includes the City of Victorville and surrounding areas of San Bernardino County. Impacts to any cultural resources/tribal cultural resources within this area would be site-specific. Consistent with CEQA requirements, in the event that potentially significant cultural resources/tribal cultural resources are encountered within the cumulative impact area, mitigation measures would be applied to ensure the preservation and protection of potentially significant resources. (*CEQA Guidelines* §15064.5. et al.) As substantiated at EIR Section 4.10, *Cultural Resources/Tribal Cultural Resources*, the Project's potential impacts to cultural resources/tribal cultural resources would be less-than-significant as mitigated. With the application of proposed mitigation measures, the Project's potential contribution to cumulative impacts in regard to cultural resources/tribal cultural resources is not considerable, and the cumulative effects of the Project would be less-than-significant.

As with the Project, in the event that potentially significant cultural resources/tribal cultural resources are encountered at other sites within the cumulative impact area, mitigation measures would be applied to ensure the preservation and protection of potentially significant resources.

#### **Summary**

With the application of proposed mitigation measures, the Project's contributions to potential cumulative cultural resources/tribal cultural resources impacts would be less-than-significant and the cumulative effects of the Project would be less-than-significant. In the event that potentially significant cultural resources/tribal cultural resources are encountered at other sites within the cumulative impact area, mitigation measures would be applied to ensure the preservation and protection of potentially significant resources.

On this basis, with respect to cultural resources/tribal cultural resources, impacts of the Project in combination with impacts of other related projects within the cumulative impact area would be less-than-significant.

## 5.2 ALTERNATIVES ANALYSIS

### 5.2.1 Alternatives Overview

Consistent with provisions of the *CEQA Guidelines*, this EIR evaluates alternatives to the Project that would lessen its significant environmental effects while allowing for attainment of the basic Project Objectives.

Alternatives to the Project considered in detail within this EIR include:

- No Project Alternative;
- Reduced Intensity Alternative.

Alternatives considered and rejected include:

- Alternative Sites; and
- Avoidance of Significant Transportation/Traffic Impacts Alternative.

These Alternatives are described in greater detail at Section 5.2.2, *Description of Alternatives*. To provide context for the subsequent consideration of Alternatives, significant Project impacts are summarized below at Table 5.2-1.

**Table 5.2-1  
Summary of Significant Impacts**

Environmental Topic	Comments
Transportation/ Traffic	To address potentially significant impacts affecting Study Area facilities, the Applicant would pay all requisite fees, offsetting the Project's proportional contributions to cumulative transportation/traffic impacts, thereby fulfilling the Applicant mitigation responsibilities. Notwithstanding, at the significantly-impacted locations noted herein, the required improvements are under the control of jurisdictions other than the City of Victorville, and/or payment of fees would not assure timely completion of improvements. Thus, while the physical improvements

**Table 5.2-1  
Summary of Significant Impacts**

Environmental Topic	Comments																						
	<p>identified in the EIR would be capable of mitigating potentially significant impacts, these improvements cannot be timely assured.</p> <p>On this basis, pending completion of required improvements, Project impacts at the facilities listed below would be cumulatively considerable, and impacts would be cumulatively significant.</p> <p><b>Existing (2017) Conditions:</b></p> <p><i>Intersections</i> Pending completion of required improvements, the Project’s incremental contributions to Existing Conditions transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:</p> <table border="0"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Intersection</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Pearmain St./SR-18</td> </tr> <tr> <td>3</td> <td>US-395/Seneca Rd.</td> </tr> <tr> <td>4</td> <td>US-395/SR-18</td> </tr> </tbody> </table> <p><i>Roadway Segments</i> Pending completion of required improvements, the Project’s incremental contributions to Existing Conditions transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:</p> <table border="0"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Roadway Segment</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>US-395: SR-18 to Dos Palmas Rd.</td> </tr> <tr> <td>9</td> <td>US-395: Luna Rd. to La Mesa Rd.</td> </tr> <tr> <td>10</td> <td>US-395: La Mesa Rd. to Bear Valley Rd.</td> </tr> </tbody> </table> <p><b>Opening Year (2019) Conditions:</b> The lane configurations and traffic controls assumed to be in place for the Opening Year Condition are consistent with Existing Conditions plus the following additional improvements:</p> <ul style="list-style-type: none"> <li>• Completion of planned connecting E – W segment of La Mesa Road at US-395 and signalization of the US-395/La Mesa Road intersection.</li> </ul> <p>Opening Year With-Project traffic volumes comprise 2019 background traffic volumes, plus traffic generated by the Project.</p> <p><i>Intersections</i> Pending completion of required improvements, the Project’s incremental contributions to Opening Year transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:</p> <table border="0"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Intersection</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Pearmain St./SR-18</td> </tr> <tr> <td>3</td> <td>US-395/Seneca Rd.</td> </tr> </tbody> </table>	ID No.	Intersection	1	Pearmain St./SR-18	3	US-395/Seneca Rd.	4	US-395/SR-18	ID No.	Roadway Segment	7	US-395: SR-18 to Dos Palmas Rd.	9	US-395: Luna Rd. to La Mesa Rd.	10	US-395: La Mesa Rd. to Bear Valley Rd.	ID No.	Intersection	1	Pearmain St./SR-18	3	US-395/Seneca Rd.
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**Table 5.2-1  
Summary of Significant Impacts**

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	<p align="center">4      US-395/SR-18 11      Mesa Linda Rd./Dos Palmas Rd. 14      Topaz Rd./Luna Rd.</p> <p><b>Roadway Segments</b> Pending completion of required improvements, the Project’s incremental contributions to Opening Year transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:</p> <table border="0"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Roadway Segment</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>US-395: SR-18 to Dos Palmas Rd.</td> </tr> <tr> <td>8</td> <td>US-395: Dos Palmas Rd. to Luna Rd.</td> </tr> <tr> <td>9</td> <td>US-395: Luna Rd. to La Mesa Rd.</td> </tr> <tr> <td>10</td> <td>US-395: La Mesa Rd. to Bear Valley Rd.</td> </tr> </tbody> </table> <p><b>Interim Year (2029/2030) Conditions:</b> The lane configurations and traffic controls assumed to be in place for the Interim Year Condition include those provided under Existing Conditions, plus the following additional improvements:</p> <ul style="list-style-type: none"> <li>• Construction of the east and west legs and signalization of the US-395/La Mesa Road intersection;</li> <li>• Construction of the west leg of the US-395/Seneca Road intersection;</li> <li>• Construction of the south leg and signalization of the Pearmain Street/Palmdale Road (SR-18) intersection;</li> <li>• Construction of the south leg of the Cantina Street/Palmdale Road (SR-18) intersection.</li> </ul> <p>Interim Year With-Project Condition traffic volumes comprise background Interim Condition traffic volumes plus Project-generated traffic.</p> <p><b>Intersections</b> Pending completion of required improvements, the Project’s incremental contributions to Interim Year transportation/traffic impacts at or affecting the following intersections would be cumulatively significant:</p> <table border="0"> <thead> <tr> <th align="left">ID No.</th> <th align="left">Intersection</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>US-395/Seneca Rd.</td> </tr> <tr> <td>4</td> <td>US-395/SR-18</td> </tr> <tr> <td>6</td> <td>US-395/Dos Palmas Rd.</td> </tr> <tr> <td>11</td> <td>Mesa Linda Rd./Dos Palmas Rd.</td> </tr> </tbody> </table> <p><b>Roadway Segments</b> Pending completion of required improvements, the Project’s incremental contributions to Interim Year transportation/traffic impacts at or affecting the following roadway segments would be cumulatively significant:</p>	ID No.	Roadway Segment	7	US-395: SR-18 to Dos Palmas Rd.	8	US-395: Dos Palmas Rd. to Luna Rd.	9	US-395: Luna Rd. to La Mesa Rd.	10	US-395: La Mesa Rd. to Bear Valley Rd.	ID No.	Intersection	3	US-395/Seneca Rd.	4	US-395/SR-18	6	US-395/Dos Palmas Rd.	11	Mesa Linda Rd./Dos Palmas Rd.
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**Table 5.2-1  
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**Table 5.2-1  
Summary of Significant Impacts**

Environmental Topic	Comments
	<p align="center">9            US-395: Luna Rd. to La Mesa Rd. 10            US-395: La Mesa Rd. to Bear Valley Rd.</p>
<b>Air Quality</b>	<p><b>NOx Regional Threshold Exceedance</b> Project operational-source emissions of nitrogen oxides (NO<sub>x</sub>) would exceed applicable MDAQMD regional thresholds. This is a Project-level and cumulatively significant impact.</p> <p><b>Contributions to Non-Attainment Conditions</b> The Project is located within ozone and PM<sub>10</sub>/PM<sub>2.5</sub> non-attainment areas (NO<sub>x</sub> is a precursor to ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>). Project operational-source NO<sub>x</sub> emissions exceedances would therefore result in a cumulatively considerable net increase in criteria pollutants (ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.</p> <p><b>AQMP Inconsistency</b> Project operational-source NO<sub>x</sub> emissions exceedances have the potential to increase the frequency or severity of a violation in the federal or state ambient air quality standards. Project operational-source NO<sub>x</sub> emissions exceedances may delay or obstruct goals and strategies articulated in the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert (Attainment Plans). These Attainment Plans comprise the Air Quality Management Plan (AQMP) for the MDAB. On this basis, the Project would conflict with the referenced Attainment Plans and the governing AQMP. This is a Project-level and cumulatively significant impact.</p>

## 5.2.2 Description of Alternatives

Alternatives to the Project that are considered in this analysis are described below.

### 5.2.2.1 No Project Alternative Overview

The *CEQA Guidelines* specifically require that an EIR include evaluation of a No Project Alternative. The No Project Alternative should make a reasoned assessment as to future disposition of the subject site should the Project under consideration not be developed. In this latter regard, the *CEQA Guidelines* state in pertinent part:

“If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the “no project” alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the

proposal of some other project, this “no project” consequence should be discussed. In certain instances, the no project alternative means “no build” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment (*CEQA Guidelines*, Section 15126.6 (e)(3)(b)).”

In the case considered here, the subject site is a vacant and available property absent any significant environmental or physical constraints. Further, the Project area is fully served by proximate available utilities and supporting public services; and is provided appropriate access. Areas around the subject site are developed with or are being developed with urban uses. The Project area is not substantively constrained by physical conditions or environmental considerations.

Given the availability of infrastructure/services, lack of environmental or physical constraints; and proximity of other urban development, it is considered unlikely that the subject site would remain vacant or in a “No Build” condition. Evaluation of a No Build condition would therefore “analyze a set of artificial assumptions that would be required to preserve the existing physical environment.” This is inconsistent with direction provided at *CEQA Guidelines*, Section 15126.6 (e)(3)(b), as presented above. On this basis, a No Build condition is rejected as a potential EIR No Project Alternative.

### **Evaluated No Project Alternative**

In light of the preceding discussions, for the purposes of this Alternatives Analysis, and to provide for analysis differentiated from the Project, the No Project Alternative considered here assumes development of the 14.8-acre Project site in total with general retail uses. The No Project Alternative reflects development of the Project site at a mid-range development intensity (30 percent lot coverage) allowed under the Project site’s

current C-2 *General Commercial* Zoning designation.<sup>6</sup> Translated over the entire 14.8-acre site, the No Project Alternative would yield approximately 193,400 square feet of general retail development.

The No Project Alternative would result in generally decreased environmental impacts when compared to the Project. As with the Project, transportation/traffic impacts would be significant. Significant NO<sub>x</sub> regional threshold exceedances and related nonattainment impacts and AQMP inconsistency impacts otherwise resulting from the Project would be avoided. Other impacts under the No Project Alternative would likely be less-than-significant or could be mitigated to levels that would be less-than-significant.

#### **5.2.2.2 Reduced Intensity Alternative Overview**

The Project would result in certain significant air quality impacts (NO<sub>x</sub> emissions regional threshold exceedances and associated nonattainment contribution impacts and AQMP inconsistency impacts) and significant transportation/traffic impacts (roadway segments and intersections). The Reduced Intensity Alternative considered in this EIR is directed at reduction of the Project's significant air quality impacts and would also diminish the scope of Project significant traffic impacts. Other already less-than-significant Project impacts would be generally reduced.

#### **Evaluated Reduced Intensity Alternative**

The Reduced Intensity Alternative considers a development scenario that would reduce vehicular-source NO<sub>x</sub> emissions via reduction of Project traffic. For purposes of the EIR Alternatives Analysis, the Reduced Intensity Alternative is based on an overall reduction in Project trip generation of 25 percent. This 25 percent reduction in Project trip generation would reduce vehicular-source NO<sub>x</sub> emissions by approximately 25 percent, and would reduce Project operational-source NO<sub>x</sub> emissions to levels that would be less-than-significant. To achieve the 25 percent reduction in trip generation, the scope of

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<sup>6</sup> The C-2 Zone District allows development at up to 60 percent lot coverage (City of Victorville Development Code, Table 10-1: *Commercial Development Standards*).

Project uses could be reduced, and/or the types and variety of occupancies proposed by the Project could be modified.

In addition to a general reduction in significant transportation/traffic impacts and avoidance of significant air quality impacts, the Reduced Intensity Alternative would further reduce other already less-than-significant impacts otherwise occurring under the Project.

### **5.2.2.3 Alternatives Considered and Rejected**

#### **Alternative Sites Considered and Rejected**

As stated in the *CEQA Guidelines* §15126.6 (f)(1)(2)(A), the “key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” *CEQA Guidelines* §15126.6 (f) (1) also provides that when considering the feasibility of potential alternative sites, the factors that may be taken into account include: “site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives.”

As discussed in the body of the Draft EIR and summarized previously at Table 5.2-1, the Project would result in the following significant impacts:

- Certain significant transportation/traffic impacts under Existing (2018), Opening Year (2019), Interim Year (2029/2030) and General Plan Buildout (2040) Conditions;

- Operational-source NO<sub>x</sub> emissions exceeding MDAQMD regional thresholds and related nonattainment impacts and AQMP inconsistency impacts.

All other potential Project impacts would be either less-than-significant, or less-than-significant after mitigation.

Relocation to an Alternative Site is not likely to achieve any measurable reduction in the Project's transportation/traffic impacts. Specifically, implementation of traffic improvements as envisioned under the City General Plan Circulation Element are ongoing processes undertaken in conjunction with the development of vacant or underutilized properties throughout the City. It is unlikely that a suitable Alternative Site could be identified that would distribute Project trips only to roadways that have already been improved to their ultimate General Plan configurations. Additionally, it is unlikely that a suitable Alternative Site could be identified that would preclude required improvements at any extra-jurisdictional locations. Moreover, there are no alternative sites under control or likely control of the Applicant that would allow for relocation of the Project and that would preclude or substantially reduce the Project's significant transportation/traffic impacts.

Relocation to an Alternative Site would not likely achieve any measurable reduction in the Project's NO<sub>x</sub> emissions exceedances impacts. Specifically, Project operational-source NO<sub>x</sub> emissions would exceed the applicable MDAQMD regional threshold. The Project operational-source NO<sub>x</sub> exceedance is a regional air quality impact. Relocation of the Project anywhere within the Mojave Desert Air Basin would not alter or diminish the significance of this impact. Similarly, the Project operational-source NO<sub>x</sub> exceedances are the source of the Project non-attainment impacts and inconsistency with the governing AQMP. Relocation of the Project anywhere within the affected non-attainment areas and within the AQMP jurisdictional area (both of which encompass all of the City of Victorville) would not alter or diminish the significance of these impacts.

Moreover, there are no alternative sites under control or likely control of the Applicant that would allow for relocation of the Project and that would preclude or substantially reduce the Project's significant NOx emissions exceedances impacts.

Based on the preceding considerations, analysis of an Alternative Site was not further considered.

### **Avoidance of Significant Transportation/Traffic Impacts Alternative Considered and Rejected**

Specific improvements identified in the Project TIA and summarized at EIR Section 4.2, *Transportation/Traffic*, would, to the extent feasible, provide a physical solution to identified potentially significant transportation/traffic impacts. Notwithstanding, timely implementation of the improvements required as mitigation for potentially significant transportation/traffic impacts cannot be assured. Impacts are therefore considered significant pending completion of the required improvements.

Any viable development of the subject site would generate trips likely affecting some or all of the facilities that would be affected by Project traffic. Additional traffic contributed to these facilities would result in significant transportation/traffic impacts similar to those occurring under the Project. No feasible mitigation exists that would avoid these impacts or reduce these impacts to levels that would be less-than-significant. However, this impact would be diminished under the EIR Reduced Intensity Alternative.

### **5.2.3 Comparative Impacts of Alternatives**

For each environmental topic addressed in the EIR, environmental impacts associated with each of the considered Alternatives are described relative to impacts of the Project. At the conclusion of these discussions, Table 5.2-6 summarizes and compares relative impacts of the considered Alternatives. Comparative attainment of the Project Objectives is also presented at Table 5.2-6.

### 5.2.3.1 Comparative Land Use Impacts

In order to implement the Project, while precluding or reducing potential land use impacts, the following City discretionary and permitting actions are necessary:

- EIR Certification. The City must certify the EIR prior to, or concurrent with, any approval of the Project.
- Approval of Tentative Parcel Map(s);
- Approval(s) of Conditional Use Permits;
- Site Plan Approval(s);
- Approval of Infrastructure Improvement Plans including, but not limited to: roads, sewer, water, and storm water management systems; and
- City of Victorville construction, grading, and encroachment permits.

Other anticipated consultation and permits necessary to realize the proposal would likely include, but would not be limited to the following:

- Permitting by/through the Lahontan Water Quality Control Board (LRWQCB) consistent with requirements of the City's National Pollutant Discharge Elimination System (NPDES) Permit.
- Permitting by/through the Mojave Desert Air Quality Management District (MDAQMD) for certain equipment or land uses that may be implemented within the Project area; and
- Various construction, grading, and encroachment permits allowing implementation of the Project facilities.

Approval of the requested discretionary actions, completion of required consultations, acquisition of required permits and Project compliance with associated requirements incorporated therein, would reduce potential land use impacts of the Project below levels of significance.

### ***No Project Alternative***

The No Project Alternative reflects development of the Project site at a mid-range development intensity (single story development, 30 percent lot coverage) allowed under the Project site's current C-2 *General Commercial* Zoning designation.<sup>7</sup> Translated over the entire 14.8-acre site, the No Project Alternative would yield approximately 193,400 square feet of general retail development.

The No Project Alternative reflects development of the Project site consistent with site's current General Plan Land Use and Zoning designations. Discretionary actions and permits/consultation(s) required under the Project, or similar actions, would likely be required under the No Project Alternative. Under the No Project Alternative and the Project land use and planning impacts would be less-than-significant.

### ***Reduced Intensity Alternative***

The Reduced Intensity Alternative would reflect an overall reduction in development scope or modification in occupancies that would reduce the Project ADT by 25 percent. Discretionary actions required under the Reduced Intensity Alternative and the Project would be likely be the same. Under either the Project or the Reduced Intensity Alternative, land use and planning impacts would be less-than-significant.

#### **5.2.3.2 Comparative Transportation/Traffic Impacts**

At buildout, implementation of the Project would generate approximately 8,463 net ADT on the Study Area roadway system. Traffic improvements constructed as components of the Project would act to preclude on-site and site-adjacent transportation/traffic impacts.

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<sup>7</sup> The C-2 Zone District allows development at up to 60 percent lot coverage (City of Victorville Development Code, Table 10-1: *Commercial Development Standards*).

Additionally, the Project Applicant would pay required fees toward completion of City of Victorville transportation/traffic system improvements. At the significantly-impacted transportation/traffic facilities identified in this EIR, one or more of the following conditions are present: the Project cannot feasibly construct the required improvements; the required improvements are under the control of jurisdictions other than the City of Victorville; and/or payment of fees would not assure timely completion of improvements. On this basis, impacts at the affected facilities would be significant.

The Project designs respond to existing and anticipated alternative transportation modes. The Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The Project does not propose inherently hazardous traffic/circulation design features. The Project would not impair or conflict with emergency access. The Project Site Plan Concept provides for adequate and safe access. Final Site Plan design, including site access, internal circulation, and parking are subject to review and approval by the City. On this basis, the potential for the Project to result in or cause adverse impacts related to hazardous features or improper access and internal circulation features would be less-than-significant. See also EIR Section 4.2, *Transportation/Traffic*.

### ***No Project Alternative***

The Project would generate approximately 8,463 net ADT. In comparison, the No Project Alternative would generate approximately 7,301 net ADT.<sup>8</sup>

The 7,301 net ADT generated under the No Project Alternative would represent an approximate 13.7 percent reduction in the 8,463 net ADT that would be generated by the Project. Resulting potential transportation/traffic impacts under the No Project Alternative would likely be comparably reduced. Based on the 13.7 percent reduction in

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<sup>8</sup> Based on ITE Land Use Code 820 Shopping Center (37.75 ADT/TSF) = 37.75 ADT/TSF x 193.4 TSF = 7,301 ADT. Assumes no internal trip capture.

ADT, the extent Study Area traffic improvements required under this Alternative would likely be reduced when compared to the Project. Because the No Project Alternative would generate less traffic than the Project, fair share fee responsibilities, (which are based on proportional traffic contributions), would be reduced when compared to the Project.

It is assumed that like the Project, development of the subject site under the No Project Alternative would incorporate those site adjacent and on-site circulation system improvements necessary to avoid or mitigate development-specific transportation/traffic impacts. As with the Project, potentially significant transportation/traffic impacts may affect certain Study Area facilities under the No Project Alternative. Pending physical construction of the necessary improvements, these impacts under the No Project Alternative would be considered cumulatively significant.

#### *Reduced Intensity Alternative*

The Reduced Intensity Alternative would reduce Project trip generation by 25 percent. Project trip generation = 8,463 ADT. The Reduced Intensity Alternative trip generation =  $0.75 \times 8,463 \text{ ADT} = 6,348 \text{ ADT}$ .

Based on the 25 percent reduction in ADT, the extent of Study Area traffic improvements required under this Alternative would likely be reduced when compared to the Project. Because the Reduced Intensity Alternative would generate less traffic than the Project, fair share fee responsibilities, (which are based on proportional traffic contributions), would be reduced when compared to the Project. It is assumed that like the Project, development of the subject site under the Reduced Intensity Alternative would incorporate those site adjacent and on-site circulation system improvements necessary to avoid or mitigate development-specific transportation/traffic impacts. As with the Project, the Reduced Intensity Alternative would result in potentially significant transportation/traffic impacts at certain Study Area facilities. Pending physical construction of the necessary improvements, these impacts under the Reduced Intensity Alternative would be considered cumulatively significant.

### 5.2.3.3 Comparative Air Quality Impacts

Project construction and operations would generate additional air pollutant emissions. All Project construction-source air quality impacts would be less-than-significant. Operational-source NO<sub>x</sub> emissions impacts would be significant (MDAQMD regional threshold exceedance, nonattainment contributions, AQMP inconsistency). See also EIR Section 4.3, *Air Quality*.

#### *No Project Alternative*

Under the No Project Alternative and the Project, similar construction activities and use of construction equipment would occur. The maximum daily area of disturbance would be the same under both scenarios. Under the No Project Alternative and the Project, construction-source emissions impacts would be less-than-significant.

The reduction in vehicular trips under the No Project Alternative would reduce operational-source air pollutant emissions. The approximately 13.7 percent reduction in ADT generation under the No Project alternative would translate to roughly proportional reductions in air pollutant emissions. Table 5.2-2 provides a comparison of operational-source air pollutant emissions under the Project and No Project Alternative.

**Table 5.2-2**  
**Project and No Project Alternative**  
**Operational-Source Emissions Comparison**  
(Pounds per Day, Maximum Total Summer/Winter Emissions)

Pollutant	MDAQMD Threshold	Project		No Project Alternative	
		Emissions	Threshold Exceeded?	Emissions	Threshold Exceeded?
VOC	137	30.40	No	26.24	No
NO <sub>x</sub>	137	147.14	<b>YES</b>	126.98	No
CO	548	188.04	No	162.28	No
SO <sub>x</sub>	137	0.56	No	0.48	No
PM <sub>10</sub>	82	31.70	No	27.36	No
PM <sub>2.5</sub>	65	8.90	No	7.68	No

**Sources:** Project operational-source emissions estimates from: *Desert Grove Retail Project, Air Quality Impact Analysis* (Urban Crossroads, Inc.) March 13, 2019; No Project Alternative operational-source emissions estimates—Applied Planning, Inc.

As indicated at Table 5.2-2, the reduced trip generation under the No Project Alternative, would result in reductions in all Project operational-source air pollutant emissions. Operational-source NO<sub>x</sub> threshold exceedances and related nonattainment and AQMP inconsistency impacts otherwise occurring Project would be avoided.

Other operational-source air quality impacts under the No Project Alternative would be generally reduced when compared to the Project and would be less-than-significant.

### ***Reduced Intensity Alternative***

Under the Reduced Intensity Alternative, the overall trip generation of the Project would be reduced by 25 percent. Construction activities and use of construction equipment would be similar to the Project. As with the Project, mitigated construction-related air pollutant emissions would not exceed SCAQMD emissions thresholds.

Air quality impacts of light industrial/commercial developments are largely correlated to a development's trip generation. The 25 percent reduction in trip generation under the Reduced Intensity Alternative would translate roughly to a 25 percent reduction in air pollutant emissions when compared to the Project. Table 5.2-3 provides a comparison of operational-source air pollutant emissions under the Project and Reduced Intensity Alternative.

**Table 5.2-3**  
**Project and Reduced Intensity Alternative**  
**Operational-Source Air Pollutant Emissions Comparison**  
(Pounds per Day, Maximum Total Summer/Winter Air Pollutant Emissions)

Pollutant	MDAQMD Threshold	Project		Reduced Intensity Alternative	
		Air Pollutant Emissions	Threshold Exceeded?	Air Pollutant Emissions	Threshold Exceeded?
VOC	137	30.40	No	22.80	No
NO <sub>x</sub>	137	147.14	YES	110.36	No
CO	548	188.04	No	141.03	No
SO <sub>x</sub>	137	0.56	No	0.42	No
PM <sub>10</sub>	82	31.70	No	23.78	No
PM <sub>2.5</sub>	65	8.90	No	6.68	No

**Sources:** Project operational-source air pollutant emissions estimates from: *Desert Grove Retail Project, Air Quality Impact Analysis* (Urban Crossroads, Inc.) March 13, 2019; Reduced Intensity Alternative operational-source air pollutant emissions estimates—Applied Planning, Inc.

As indicated at Table 5.2-3, when compared to the Project, operational-source air pollutant emissions would be incrementally reduced for all criteria pollutants under the Reduced Intensity Alternative. Operational-source NO<sub>x</sub> threshold exceedances and related nonattainment and AQMP inconsistency impacts otherwise occurring Project would be avoided.

Other operational-source air quality impacts under the Reduced Intensity Alternative would be generally reduced when compared to the Project and would be less-than-significant.

#### **5.2.3.4 Comparative Greenhouse Gas/Global Climate Change Impacts**

The Project would comply with the City of Victorville Climate Action Plan and would not be a substantive source of GHG emissions. On this basis, the potential for the Project to generate greenhouse gas emissions, either directly or indirectly, that would have an adverse impact on the environment is less-than-significant.

The Project is consistent with the City of Victorville's adopted CAP and is therefore consistent with and supports the California Air Resources Board (CARB) Scoping Plan GHG emissions reduction targets for Year 2020 and 2030. The Project would not otherwise interfere with any future City-mandated, state-mandated, or federally-mandated retrofit obligations enacted or promulgated to legally require development City-wide, state-wide, or nation-wide to assist in meeting state-adopted greenhouse gas emissions reduction targets. Such measures include those established under Executive Order S-3-05, Executive Order B-30-15, and SB 32. On this basis, the potential for the Project to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases is considered less-than-significant. See also EIR Section 4.4, *Global Climate Change and Greenhouse Gas Emissions*.

#### ***No Project Alternative***

The No Project Alternative would implement approximately 193,400 square feet of general retail merchandise commercial uses. The majority of Project-source GHG emissions would be generated by mobile sources. More specifically, Project mobile sources would generate an estimated 7,460.97 MTCO<sub>2</sub>E/year. Similarly, the majority of

GHG emissions under the No Project Alternative would be generated by mobile sources. Based on the comparative decrease in trip generation under the No Project Alternative (an approximate 13.7 percent decrease when compared to the Project trip generation), mobile sources under the No Project Alternative would generate an estimated 6,438.82 MTCO<sub>2</sub>E/year. For analysis purposes, it is assumed that GHG emissions from all other sources would be consistent under the Project and No Project Alternative. A comparison of Project and No Project GHG emissions is presented at Table 5.2-4.

**Table 5.2-4  
Project and No Project Alternative  
GHG Emissions Comparison**

Source	Project MTCO <sub>2</sub> E/year	No Project Alternative Total MTCO <sub>2</sub> E/yr.
<b>Mobile Sources</b>	7,460.97	6,438.82
<b>All Other</b>	1,000.32	1,000.32
<b>Total</b>	8,461.29	7,439.14

**Sources:** Project GHG emissions estimates from: *Desert Grove Retail Project, Greenhouse Gas Analysis* (Urban Crossroads, Inc.) March 13, 2019. No Project Alternative GHG emissions estimates—Applied Planning, Inc.

GHG emissions generated by the No Project Alternative would be decreased when compared to the Project. It is assumed that the No Project Alternative would incorporate design features and operational programs to ensure conformance with the City CAP. Under the No Project Alternative and the Project, net GHG emissions impacts would be less-than-significant.

The No Project Alternative is assumed to comply with applicable plans and policies addressing GHG emissions. On this basis, the No Project Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be comparable to the Project.

### ***Reduced Intensity Alternative***

Reduced trip generation, and associated reduction in mobile-source GHG emissions under the Reduced Intensity Alternative would result in diminished GHG emissions when compared to the Project. For the purposes of this analysis, mobile-source GHG emissions under the Reduced Intensity Alternative are estimated to be reduced roughly

proportional to the reduction in trip generation (approximately 25 percent) that would result from this Alternative. For analytic purposes, GHG emissions from all other sources are assumed to be consistent under the Project and the Reduced Intensity Alternative. A comparison of Project and Reduced Intensity Alternative GHG emissions is presented at Table 5.2-5.

**Table 5.2-5  
Project and Reduced Intensity Alternative  
GHG Emissions Comparison**

Source	Project GHG Emissions MTCO <sub>2</sub> E/year	Reduced Intensity Alternative GHG Emissions MTCO <sub>2</sub> E/year
<b>Mobile Sources</b>	7,460.97	5,595.73
<b>All Other</b>	1,000.32	1,000.32
<b>Total</b>	8,461.29	6,596.05

**Sources:** Project GHG emissions estimates from: *Desert Grove Retail Project, Greenhouse Gas Analysis* (Urban Crossroads, Inc.) March 13, 2019. No Project Alternative GHG emissions estimates—Applied Planning, Inc.

GHG emissions generated by the Reduced Intensity Alternative would be decreased when compared to the Project. It is assumed that the Reduced Intensity Alternative would incorporate design features and operational programs to ensure conformance with the City CAP. Under Reduced Intensity Alternative and the Project, net GHG emissions impacts would be less-than-significant.

The Reduced Intensity Alternative is assumed to comply with applicable plans and policies addressing GHG emissions. On this basis, the Reduced Intensity Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be comparable to the Project.

### 5.2.3.5 Comparative Noise Impacts

Project construction-source noise and construction-source vibration impacts would be less-than-significant. Project operational area-source noise impacts would be less-than-significant. Project operational-source vibration impacts would be less-than-significant. The Project would not be adversely affected by airport/airfield noise. The Project would

not contribute to any existing adverse airport/airfield noise conditions. See also EIR Section 4.5, *Noise*.

### ***No Project Alternative***

Under the No Project Alternative, the types of construction activities and equipment employed would likely be similar to those associated with construction of the Project. Maximum construction-source noise/vibration levels received at off-site locations would be comparable to those resulting from construction of the Project. Under the No Project Alternative and the Project, construction-source noise/vibration would be less-than-significant.

The No Project Alternative does not propose uses that would generate or result in operational area-source noise or vibration impacts substantively different than would result from uses proposed by the Project. The No Project Alternative would not require or implement uses that would be substantive vibration sources. Under the No Project Alternative and the Project, operational area-source noise impacts and operational area-source vibration impacts would be less-than-significant as mitigated.

The decrease in vehicle trips under the No Project Alternative would likely decrease vehicular-source noise levels along area roadways. However, any decrease in roadway noise would likely be imperceptible.<sup>9</sup> Under the No Project Alternative and the Project, vehicular-source noise impacts would be less-than-significant.

The No Project Alternative would not otherwise substantively contribute to or be affected by any existing adverse noise conditions.

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<sup>9</sup> Assuming all other factors are constant, a doubling (of halving) of roadway traffic volumes is typically required to generate a perceptible (> 3.0 dBA) noise level. The No Project Alternative would generate approximately 7,301 ADT, an approximate 13.7 percent reduction in traffic generated by the Project. The No Project Alternative would not perceptibly affect area vehicular-source noise levels.

### ***Reduced Intensity Alternative***

Under the Reduced Intensity Alternative, the types of construction activities and equipment employed would likely be similar to those associated with construction of the Project. Maximum construction-source noise/vibration levels received at off-site locations would be comparable to those resulting from construction of the Project. Under the Reduced Intensity Alternative and the Project, construction-source noise/vibration would be less-than-significant.

The Reduced Intensity Alternative uses would not generate or result in operational area-source noise substantively different than would result from uses proposed by the Project. The Reduced Intensity Alternative would not require or implement uses that would be substantive vibration sources. Under the Reduced Intensity Alternative and the Project, operational area-source noise impacts and operational vibration impacts would be less-than-significant as mitigated.

The decrease in vehicle trips under the Reduced Intensity Alternative would likely decrease vehicular-source noise levels along area roadways. However, any decrease in roadway noise would likely be imperceptible.<sup>10</sup> Under the Reduced Intensity Alternative and the Project, vehicular-source noise impacts would be less-than-significant.

The Reduced Intensity Alternative would not otherwise substantively contribute to or be affected by any existing adverse noise conditions. Under the Reduced Intensity Alternative and the Project airfield/airport noise impacts would be less-than-significant.

### **5.2.3.6 Comparative Geology and Soils Impacts**

As concluded in the Project Geotechnical Investigation, the subject site can be developed as proposed under the Project, contingent on adherence to the recommendations and requirements of the Geotechnical Investigation and incorporation of applicable City and California Building Code (CBC) design/construction requirements. Based on mandated

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<sup>10</sup> The Reduced Intensity Alternative would generate approximately 6,348 ADT, an approximate 25 percent reduction in traffic generated by the Project. The Reduced Intensity Alternative would not perceptibly affect area vehicular-source noise levels.

compliance with seismic design and building code requirements, potential geology/soils impacts affecting the Project would be less-than-significant. The Project would connect to the existing City sanitary sewer system and would not implement or require use of septic tanks or alternative waste water disposal systems. The Project would not implement uses or programs that would exacerbate any existing adverse geology/soils conditions. See also EIR Section 4.6, *Geology and Soils*.

### ***No Project Alternative***

Under the No Project Alternative compliance with requirements and recommendations identified in the geotechnical investigation, and incorporation of applicable City and CBC design/construction requirements would reduce potential geology/soils impacts to levels that would be less-than-significant. The No Project Alternative would connect to the existing City sanitary sewer system and would not implement or require use of septic tanks or alternative waste water disposal systems. The No Project Alternative would not require uses or programs that would exacerbate any existing adverse geology/soils conditions. Potential geology/soils impacts of the No Project Alternative and the Project would be comparable and would be less-than-significant.

### ***Reduced Intensity Alternative***

Under the Reduced Intensity Alternative compliance with requirements and recommendations identified in the geotechnical investigation, and incorporation of applicable City and CBC design/construction requirements would act to reduce potential geology/soils impacts to levels that would be less-than-significant. Because the scope of development under the Reduced Intensity Alternative may be diminished, the overall exposure of facilities and persons to seismic events would be reduced. The Reduced Intensity Alternative would connect to the existing City sanitary sewer system and would not implement or require use of septic tanks or alternative waste water disposal systems. The Reduced Intensity Alternative would not require uses or programs that would exacerbate any existing adverse geology/soils conditions. Potential geology/soils impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant.

### **5.2.3.7 Comparative Hazards and Hazardous Materials Impacts**

The Project would not implement uses or programs that would exacerbate any existing adverse hazards/hazardous materials conditions. The Project would not be substantively affected by, or affect airport/airfield operations.

#### *No Project Alternative*

The No Project Alternative uses would not result in hazards and hazardous materials impacts substantively different than those resulting from the Project. The No Project Alternative would not implement uses or programs that would exacerbate any existing adverse hazards/hazardous materials conditions. Potential hazards/hazardous materials impacts of the No Project Alternative and the Project would be comparable and would be less-than-significant.

#### *Reduced Intensity Alternative*

The Reduced Intensity Alternative land uses would be similar to the Project and would not result in hazards and hazardous materials impacts substantively different than those resulting from the Project. The Reduced Intensity Alternative would not implement uses or programs that would exacerbate any existing adverse hazards/hazardous materials conditions. Potential hazards/hazardous materials impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant.

### **5.2.3.8 Comparative Hydrology and Water Quality Impacts**

The Project would implement storm water management systems that would connect to existing storm drains with sufficient capacities. The Project would implement a construction Storm Water Pollution Prevention Plan (SWPPP) and operational Water Quality Management Plan (WQMP) reducing potential impacts to water quality to levels that would be less-than-significant. On this basis, the Project's impacts to hydrology and water quality would be less-than-significant. See also EIR Section 4.8, *Hydrology and Water Quality*.

### ***No Project Alternative***

The area subject to development with impervious surfaces under the No Project Alternative and the Project would be comparable. The No Project Alternative and Project would therefore result in comparable rates and quantities of post-development storm water runoff. The No Project Alternative would be required to implement storm water management systems, reducing impacts to existing storm drain capacities to levels that would be less-than-significant. The No Project Alternative would be required to comply with applicable SWPPP and WQMP provisions, thereby reducing potential water quality impacts to levels that would be less-than-significant. Potential hydrology and water quality impacts of the No Project Alternative and the Project would be comparable and would be less-than-significant.

### ***Reduced Intensity Alternative***

When compared to the Project, the area subject to development with impervious surfaces under the Reduced Intensity Alternative may be reduced. The Reduced Intensity Alternative may therefore result in reduced rates and quantities of post-development storm water runoff. The Reduced Intensity Alternative would be required to implement storm water management systems, reducing impacts to existing storm drain capacities to levels that would be less-than-significant. The Reduced Intensity Alternative would be required to comply with applicable SWPPP and WQMP provisions, thereby reducing potential water quality impacts to levels that would be less-than-significant. Hydrology and water quality impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant.

### **5.2.3.9 Comparative Biological Resources Impacts**

Mitigation proposed in the EIR reduces potential Project impacts to special-status plant species and special-status wildlife to levels that would be less-than-significant. The Project would have no substantive effect on other biological resources including riparian habitat or other sensitive natural community; and/or federally protected wetlands. Project impacts would be individually and cumulatively less-than-significant. See also EIR Section 4.9, *Biological Resources*.

### **No Project Alternative**

Areas of disturbance and potential impacts to biological resources under the No Project Alternative would be comparable to those resulting from the Project. It is assumed that required biological resources impact mitigation would be implemented under the No Project Alternative. As with the Project, biological resources impacts under the No Project Alternative would be less-than-significant as mitigated.

### **Reduced Intensity Alternative**

Areas of disturbance and potential impacts to biological resources under the Reduced Intensity Alternative would be comparable to those resulting from the Project. It is assumed that required biological resources impact mitigation would be implemented under the Reduced Intensity Alternative. As with the Project, biological resources impacts under the Reduced Intensity Alternative would be less-than-significant as mitigated.

#### **5.2.3.10 Comparative Cultural Resources/Tribal Cultural Resource Impacts**

There are no known historic, archaeological, paleontological, or Tribal Cultural Resources (TCRs) within the Project site. The City has complied with Tribal consultation requirements identified under *AB 52, Gatto. Native Americans: California Environmental Quality Act*. Responding Tribes (Twenty-Nine Palms Band of Mission Indians, and San Manuel Band of Mission Indians [SMBMI]) indicate that the Project would likely not result in potentially significant impacts to cultural resources or TCRs (please refer to Tribal Consultation correspondence provided at EIR Appendix J). Mitigation measures including those recommended by SMBMI have been included in the EIR. These measures address the potential for encountering as yet unknown cultural resources or TCRs that may exist within the Project site. Please refer also to EIR Section 4.10, *Cultural Resources/Tribal Cultural Resources*.

### **No Project Alternative**

Maximum site disturbance and potential impacts to cultural resources would similar to those of the Project. It is assumed that the No Project Alternative would incorporate mitigation that would reduce potential impacts to cultural resources/tribal cultural resources to levels that would be less-than-significant. Cultural resources/tribal cultural

resources impacts of the No Project Alternative and the Project would be comparable and would be less-than-significant as mitigated.

### ***Reduced Intensity Alternative***

Maximum site disturbance and potential impacts to cultural resources would be similar to those of the Project. It is assumed that the Reduced Intensity Alternative would incorporate mitigation that would reduce potential impacts to cultural resources/tribal cultural resources to levels that would be less-than-significant. Cultural resources/tribal cultural resources impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant as mitigated.

## **5.2.4 Comparative Attainment of Project Objectives**

The following discussions compare attainment of the Project Objectives under the No Project and Reduced Intensity Alternatives. For ease of reference, the Project Objectives are restated below. See also EIR Section 3.5, *Project Objectives*.

### **5.2.4.1 Project Objectives**

Project Objectives include the following:

- Create a new mix of uses that capitalizes on the site's location in proximity to surrounding commercial retail facilities;
- Provide a commercial retail shopping center that serves the local market area and beyond;
- Attract new customers and retailers to the City of Victorville;
- Transition the Project site from its current unimproved state to a commercial development, with resulting new fiscal benefits to the City of Victorville. Benefits will include new sales tax revenues and increased property tax revenues; and
- Provide a commercial development that creates new jobs for City residents.

### **No Project Alternative Attainment of Project Objectives**

Because the No Project Alternative would implement general retail uses similar to those of the Project, the No Project Alternative would likely substantively achieve the Project Objectives.

### **Reduced Intensity Alternative Attainment of Project Objectives**

The Reduced Intensity Alternative would reduce the scope and/or modify the types of uses otherwise resulting from the Project. Under the Reduced Intensity Alternative, limited attainment of Project Objectives would be achieved.

### **5.2.5 Comparison of Alternatives**

Table 5.2-6 provides a summary, by topic, of the preceding alternatives analysis, indicating comparative impacts of the Project and the considered Alternatives.

**Table 5.2-6  
Summary of Potential Impacts, Alternatives Compared to Project, By Topic**

EIR Topic: Project Impacts	No Project Alternative	Reduced Intensity Alternative
<p><b>Land Use and Planning:</b> Project impacts would be less-than-significant.</p>	<p>Impacts would be similar to those of the Project and would be less-than-significant.</p>	<p>Impacts would be similar to those of the Project and would be less-than-significant.</p>
<p><b>Transportation/Traffic:</b> Project-related transportation/traffic impacts would be cumulatively significant at the Study Area facilities listed at Table 5.2-1.</p>	<p>Significant impacts otherwise occurring under the Project would likely be reduced.</p> <p>Trip generation would be reduced by approximately 13.7 percent under the No Project Alternative. Related, under the No Project Alternative, the scope of off-site Study Area circulation system improvements would likely be reduced.</p>	<p>Significant impacts otherwise occurring under the Project would likely persist. Trip generation would be incrementally reduced by an estimated 25.0 percent under the Reduced Intensity Alternative. Related, under the Reduced Intensity Alternative, the scope of off-site Study Area circulation system improvements would likely be reduced.</p>
<p><b>Air Quality:</b> Construction-source air quality impacts would be less-than-significant.</p> <p>Operational-source NOx emissions impacts would be significant (MDAQMD regional threshold exceedance, nonattainment contributions, AQMP inconsistency).</p>	<p>Construction-source air quality impacts would be similar to those of the Project and would be less-than-significant.</p> <p>Significant operational-source NOx emissions impacts otherwise resulting from the Project would be avoided.</p>	<p>Construction-source air quality impacts would be similar to those of the Project and would be less-than-significant.</p> <p>Significant operational-source NOx emissions impacts otherwise resulting from the Project would be avoided.</p>
<p><b>Greenhouse Gas Emissions (GHG)/Global Climate Change (GCC):</b></p> <p>The Project would conform to provisions of the City CAP. Quantified GHG/GCC impacts of the Project would be less-than-significant.</p> <p>The Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>	<p>When compared to the Project, GHG emissions would be reduced under the No Project Alternative. It is assumed the No Project Alternative would conform to provisions of the City CAP. Quantified GHG/GCC impacts of the No Project Alternative would be less-than-significant.</p> <p>The No Project Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be similar to the Project and would be less-than-significant.</p>	<p>When compared to the Project, GHG emissions would be reduced under the Reduced Intensity Alternative. It is assumed the Reduced Intensity Alternative would conform to provisions of the City CAP. Quantified GHG/GCC impacts of the Reduced Intensity Alternative would be less-than-significant.</p> <p>The Reduced Intensity Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be similar to the Project and would be less-than-significant.</p>
<p><b>Noise:</b> Project construction-source noise and vibration impacts would be less-than-significant.</p> <p>Operational area-source noise and vibration impacts would be less-than-significant.</p> <p>Vehicular-source noise impacts would be less-than-significant.</p>	<p>Construction-source noise and vibration impacts would be similar to those of the Project and would be less-than-significant.</p> <p>Operational area-source noise and vibration impacts would be similar to those of the Project and would be less-than-significant.</p> <p>Vehicular-source noise impacts may decrease and would remain less-than-significant. Any incremental decreases in roadway noise relative to effects of the Project would be imperceptible.</p>	<p>Construction-source noise and vibration impacts would be similar to those of the Project and would be less-than-significant.</p> <p>Operational area-source noise and vibration impacts would be similar to those of the Project and would be less-than-significant.</p> <p>Vehicular-source noise impacts may decrease and would remain less-than-significant. Any incremental decreases in roadway noise relative to effects of the Project would be imperceptible.</p>

**Table 5.2-6  
Summary of Potential Impacts, Alternatives Compared to Project, By Topic**

<b>EIR Topic: Project Impacts</b>	<b>No Project Alternative</b>	<b>Reduced Intensity Alternative</b>
<b>Geology and Soils:</b> Project geology and soils impacts would be less-than-significant.	Geology and soils impacts under the No Project Alternative would be similar to the Project and would be less-than-significant.	Geology and soils impacts under the Reduced Intensity Alternative would be similar to the Project and would be less-than-significant.
<b>Hazards/Hazardous Materials:</b> Project hazards/hazardous materials impacts would be less-than-significant.	Hazards/hazardous materials impacts of the No Project Alternative would be similar to the Project and would be less-than-significant.	Hazards/hazardous materials impacts under the Reduced Intensity Alternative would be similar to the Project and would be less-than-significant.
<b>Hydrology/Water Quality:</b> Project hydrology/water quality impacts would be less-than-significant.	Hydrology/water quality impacts under the No Project Alternative would be similar to those of the Project and would be less-than-significant.	Hydrology/water quality impacts under the Reduced Intensity Alternative would be similar to those of the Project and would be less-than-significant.
<b>Biological Resources:</b> Project biological resources impacts would be less-than-significant as mitigated.	Biological resources impacts under the No Project Alternative would be similar to those of the Project and would be less-than-significant as mitigated.	Biological resources impacts under the Reduced Intensity Alternative would be similar to those of the Project and would be less-than-significant as mitigated.
<b>Cultural Resources/Tribal Cultural Resources:</b> Project cultural resources/tribal cultural resources impacts would be less-than-significant as mitigated.	Cultural resources impacts under the No Project Alternative would be similar to those of the Project and would be less-than-significant as mitigated.	Cultural resources impacts under the Reduced Intensity Alternative would be similar to those of the Project and would be less-than-significant as mitigated.
<b>Relative Attainment of Project Objectives:</b> All Project Objectives would be attained.	Because the No Project Alternative would implement general retail uses similar to those of the Project, the No Project Alternative would likely substantively achieve the Project Objectives.	The Reduced Intensity Alternative would reduce the scope and/or modify the types of uses otherwise resulting from the Project. Under the Reduced Intensity Alternative, limited attainment of Project Objectives would be achieved.

### **5.2.6 Environmentally Superior Alternative**

The *CEQA Guidelines* require that the environmentally superior alternative (other than the No Project Alternative) be identified among the Project and other Alternatives considered in an EIR.

As indicated at Table 5.2-6, with exclusion of the No Project Alternative as provided of under CEQA,<sup>11</sup> the Reduced Intensity Alternative would likely result in a general reduction in other environmental effects when compared to the Project. For the purposes of CEQA, the Reduced Intensity Alternative is identified as the “environmentally superior alternative.”

#### ***Significant Transportation/Traffic Impacts Diminished but Not Eliminated or Avoided Under the Reduced Intensity Alternative***

The Reduced Intensity Alternative would reduce but would not avoid significant transportation/traffic impacts otherwise occurring under the Project. However, significant transportation/traffic impacts otherwise occurring under the Project would persist.

#### ***Significant Air Quality Impacts Avoided Under the Reduced Intensity Alternative, but with Limited Attainment of Project Objectives***

Significant air quality impacts (NO<sub>x</sub> regional threshold exceedances, nonattainment contributions, AQMP inconsistency) otherwise occurring under the Project would be reduced to levels that would be avoided under the Reduced Intensity Alternative. This reduction in scope may however be considered infeasible by the Lead Agency as it would restrict attainment of the Project Objectives. Notably, the 25 percent reduction in Project scope under the Reduced Intensity Alternative would:

- Reduce the scope and mix of uses otherwise realized under the Project;

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<sup>11</sup> If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (*CEQA Guidelines* Section 15126.6 (e)(2)).

- Reduce commercial retail shopping opportunities otherwise available under the Project;
- Reduce the number patrons and scope and variety of retailers that would be attracted to the City;
- Diminish the potential for development of the site with uses and an intensity the City considers to be the highest and best use for the subject property;
- Diminish fiscal benefits available to the City of Victorville. Benefits would include new sales tax revenues and increased property tax revenues; and
- Diminish job creation otherwise realized under the Project.

### **Summary and Conclusions**

The Reduced Intensity Alternative would reduce but would not avoid significant transportation/traffic impacts otherwise occurring under the Project. Under the Reduced Intensity Alternative, significant air quality impacts of the Project would be avoided. Limited attainment of Project Objectives would be achieved.

## **5.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION**

### **5.3.1 Overview**

The California Environmental Quality Act requires a discussion of the ways in which a project could be growth-inducing. (Public Resources Code, §21100, subd. (b)(5); *CEQA Guidelines*, § 15126, subd. (d), 15126.2, subd (d).) The *CEQA Guidelines* identify a project as growth-inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. New employees from commercial or industrial development and new population from residential development represent direct forms

of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth by reducing or removing barriers to growth, or by creating a condition that attracts additional population or new economic activity. However, a project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors. Development pressures are a result of localized economic investments. These pressures help to structure the local politics of growth and the local jurisdiction's posture on growth management and land use policy. The land use policies of local municipalities and counties regulate growth at the local level.

Impacts related to growth inducement would also be realized if a project provides infrastructure or service capacity which accommodates growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

### **5.3.2 Direct Growth-Inducing Effects**

The Project does not propose housing or a change in land use that would result in additional residential development and associated direct growth in the City resident population.

The Project would realize new general retail uses and associated employment opportunities. The extent to which new job opportunities are filled by the existing resident population tends to reduce any growth-inducing effect of a project. It is anticipated that employment opportunities arising from the Project would be filled predominantly by local residents and would not induce substantial growth or result in substantial permanent relocation of persons.

Based on the preceding discussion, the Project would not directly result in unanticipated significant population growth or other unanticipated direct growth-inducing effects.

### **5.3.3 Indirect Growth-Inducing Effects**

Investment in the Project would engender local and regional economic growth which may result in indirect growth-inducing effects. The Project's potential economic benefits could indirectly result in employment growth in the region. This growth, in combination with other anticipated employment growth in the region, could indirectly result in population growth. Such growth has a variety of potential effects on the physical environment, including but not limited to, effects on air quality, ambient noise levels, transportation/traffic impacts, and water quality.

Development of the Project as envisioned would entail upgrades to infrastructure in the immediate Project vicinity, including abutting roadways. Infrastructure improvements necessitated by the implementation of the Project could serve to facilitate and encourage development of nearby properties. The characteristics and intensities of development that could occur on properties near the Project site are governed by governing General Plan documents. Development of these properties within the context of approved General Plan(s) should not result in unforeseen or unmitigable impacts.

## **5.4 SIGNIFICANT ENVIRONMENTAL EFFECTS**

An EIR must identify any significant environmental effects that would result from the Project. (Public Resources Code, §21100, subd. (b)(2)(B).) Significant environmental impacts of the Project are identified previously at Table 5.2-1.

## **5.5 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES**

*CEQA Guidelines* sections 15126 (c), 15126.2 (c) & 15127 require that for certain types or categories of projects, an EIR must address significant irreversible environmental changes that would occur should the project be implemented. As presented at *CEQA Guidelines* section 15127, the topic of Significant Irreversible Environmental Changes need be addressed in EIRs prepared in connection with any of the following activities:

- (a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;
- (b) The adoption by a local agency formation commission of a resolution making determinations; or
- (c) A project which will be subject to the requirements for preparing of an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. Section 4321- 4347.

The Project would not require or result in actions listed at *CEQA Guidelines Section 15127*. Accordingly, this EIR is not required to address potential significant irreversible environmental changes involved in the proposed action should it be implemented.

## 5.6 ENERGY

### 5.6.1 Overview

Consistent with *CEQA Guidelines Appendix F*, this Section of the EIR addresses the potential for the Project to result in the inefficient, wasteful, or unnecessary consumption of energy.

The Project would provide for, and promote, energy efficiencies consistent with applicable state or federal standards and regulations, and in so doing would meet or exceed all Title 24 standards. Moreover, energy consumed by the Project would be comparable to, or less than, energy consumed by other development proposals of similar scale and intensity. On this basis, the Project would not result in the inefficient, wasteful or unnecessary consumption of energy, and potential Project impacts in these regards would be less-than-significant.

Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems. The Project, therefore, would not create or otherwise result in a potentially significant impact on energy resources.

## 5.6.2 Background and Introduction

In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs; license thermal power plants of 50 megawatts or larger; develop energy technologies and renewable energy resources; plan for and direct responses to energy emergencies. Perhaps most importantly the CEC promotes energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards.

AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the potential for wasteful, inefficient, and/or unnecessary consumption of energy caused by or resulting from a project. Appendix F to the *CEQA Guidelines* assists EIR preparers in this regard. More specifically, Appendix F is an advisory document establishing parameters and context for determining whether a project would result in the inefficient, wasteful, and unnecessary consumption of energy.

## 5.6.3 Existing Conditions

### 5.6.3.1 Overview

A summary of, and context for, energy consumption and energy demands within the State is presented in *U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts* excerpted below:

- Excluding federal offshore areas, California ranked third in the nation in crude oil production in 2015, despite an overall decline in production rates since the mid-1980s.
- California also ranked third in the nation in refining capacity as of January 2016, with a combined capacity of almost 2 million barrels per calendar day from its 18 operable refineries.

- In 2014, California's per capita energy consumption ranked 49th in the nation; the state's low use of energy was due in part to its mild climate and its energy efficiency programs.
- In 2015, California ranked fourth in the nation in conventional hydroelectric generation, second in net electricity generation from other renewable energy resources, and first as a producer of electricity from geothermal energy.
- In 2015, California ranked 15th in net electricity generation from nuclear power after one of its two nuclear plants was taken out of service in January 2012; as of June 2013, operations permanently ceased at that plant, the San Onofre Nuclear Generating Station.<sup>12</sup>

As indicated above, California is one of the nation's leading energy-producing states, and California per capita energy use is among the nation's most efficient.

### 5.6.3.2 Electricity and Natural Gas Resources

#### Electricity

Electricity would be provided to the Project by Southern California Edison (SCE). SCE provides electric power to an estimated 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles.<sup>13</sup> SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities

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<sup>12</sup> U.S. Energy Information Administration. "California State Profile and Energy Estimates. California Energy Consumption by End-Use Sector." *U.S. Energy Information Administration*. Web. 07 March 2018.

<sup>13</sup> Southern California Edison. "About Us. Who We Are." *Southern California Edison*. Web. 07 March 2018.

to ensure that electrical power is provided to consumers. The California Independent Service Operator (“ISO”) is a nonprofit public benefit corporation and is the impartial operator of the State’s wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California residential and commercial users. While utilities [such as SCE] still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that sufficient power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities.<sup>14</sup>

Part of the ISO’s charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission owners (investor-owned utilities such as SCE) file annual transmission expansion/modification plans to accommodate the State’s growing electrical needs. The ISO reviews and either approves or denies the proposed additions. Additionally, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

### **Natural Gas**

Natural gas would be provided to the Project by The Southwest Gas Corporation (Southwest Gas). The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (PUC).

The California Public Utilities Commission (PUC) regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas

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<sup>14</sup>California ISO. “Understanding the ISO.” *California ISO - Our Business*. California ISO, n.d. Web. 07 March 2018.

(SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers, who accounted for approximately 32% of the natural gas delivered by California utilities in 2012. Large consumers, like electric generators and industrial customers, referred to as "noncore" customers, accounted for approximately 68% of the natural gas delivered by California utilities in 2012.

Most of the natural gas used in California comes from out-of-state natural gas basins. In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California. California gas utilities may soon also begin receiving biogas into their pipeline systems.

Most of the natural gas transported via the interstate pipelines, as well as some of the California-produced natural gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California's "backbone" natural gas pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline systems, while core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. The PUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% of the total amount of natural gas delivered to California's gas consumers in 2012.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, and currently receive all of their natural gas from the SoCalGas system (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Some other municipal wholesale customers are the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

California's regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980's and is determined by "market forces." However, the PUC decides whether California's utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers.<sup>15</sup>

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The PUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the state.

### **5.6.3.3 Transportation Energy Resources**

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline. Gasoline (and other vehicle fuels) are commercially-provided commodities and would be available to the Project patrons and employees via commercial outlets.

More than 22.2 billion gallons of gasoline equivalent (GGE) were consumed in California in 2014. Gasoline and diesel are the primary fuels used in the transportation sector,

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<sup>15</sup> California Public Utilities Commission. "Natural Gas and California." *Natural Gas and California*. CPUC, 2017. Web. 07 March 2018.

including 14.7 billion gallons of finished gasoline and 3.8 billion gallons of diesel in 2014. Generally, gasoline is used primarily to fuel personal automobiles, diesel is the primary fuel for goods movement and long-distance transit, and natural gas is the primary fuel for short-distance urban mass transit.<sup>16</sup>

Policies, rules, and regulations at the federal and state levels have been enacted to improve vehicle fuel efficiency; promote the development and use of alternative fuels; reduce transportation-source air pollutants and GHG emissions; and reduce vehicle miles traveled (VMT). Market forces and technological advances have made use of alternative energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, while availability of other alternative fuels/energy sources has increased. In total, the quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state.

#### **5.6.4 Regulatory Setting**

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below. Project consistency with applicable federal and state regulations is summarized.

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<sup>16</sup> *Transportation Energy Demand Forecast 2016-2026* (CEC) February 2016, p. 4.

#### **5.6.4.1 Federal Energy Policy and Conservation Act**

The Federal Energy Policy and Conservation Act of 1975 (Act) intends that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Under the Act, the National Highway Traffic and Safety Administration, which is part of the United States Department of Transportation, is responsible for establishing additional vehicle standards and for revising existing standards.

**Project Consistency:** *Vehicles accessing the Project site are subject to the Federal Energy Policy and Conservation Act (Act). The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of the Act.*

#### **5.6.4.2 Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)**

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

**Project Consistency:** *Access to the Project site is provided primarily by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct ISTEA intermodal transportation plans or projects.*

#### **5.6.4.3 The Transportation Equity Act for the 21st Century (TEA-21)**

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the

foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

**Project Consistency:** *The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access; takes advantage of existing infrastructure systems; and as approved by the Lead Agency, would introduce compatible development at the subject site. In this manner, the Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.*

#### **5.6.4.4 State of California Energy Plan**

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

**Project Consistency:** *The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access; takes advantage of existing infrastructure systems; and as approved by the Lead Agency, would introduce compatible commercial/retail development at the subject site. The Project therefore supports urban design and planning processes identified in the State of California Energy Plan, is consistent with, and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.*

#### **5.6.4.5 California Code Title 24, Part 6, Energy Efficiency Standards**

California Code Title 24, Part 6 (also referred to as the California Energy Code), was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, the Energy Commission's energy efficiency standards have saved Californians more than \$74 billion in reduced electricity bills since 1977.<sup>17</sup>

California energy efficiency standards are updated on an approximately three-year cycle. CEC 2016 building energy efficiency standards went in to effect January 1, 2017. The Project would be required to comply with energy efficiency standards in effect at the time of building permit application(s).

The 2016 Energy Efficiency Standards in their entirety can be reviewed at: <http://www.energy.ca.gov/title24/>. Energy Efficiency Standards can be obtained at the California Energy Commission, 1516 Ninth Street, MS-37, Sacramento, CA 95814-5512.

**Project Consistency:** *The Project would be designed, constructed and operated to meet or exceed incumbent Title 24 Energy Efficiency Standards. On this basis, the Project is determined to be consistent with, and would not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards.*

#### **5.6.5 Project Energy Demands and Energy Efficiency/Conservation Measures**

Estimated energy demands of Project construction and Project operations are summarized in the following discussions. Project design features and operational programs, as well as regulations that promote energy conservation end energy conservation are also identified. The Project in total would be required to comply with incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title

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<sup>17</sup> CEC. "California's Energy Efficiency Standards Have Saved Billions." *California's Energy Efficiency Standards Have Saved Billions*. CEC, n.d. Web. August 2017.

24, Energy Efficiency Standards). Also, developers and owners/tenants have vested financial incentives to avoid imprudent energy consumption practices. In this regard, there is growing recognition among developers and owners/tenants that efficient and sustainable construction and operational practices yield both environmental and economic benefits. On this basis, and as further supported by the following discussions, the Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy.

### **5.6.5.1 Construction Energy Demands and Energy Efficiency/Conservation Measures**

#### **Construction Energy Demands**

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented at Table 5.6-1. Eight-hour daily use of all equipment is assumed. The aggregate fuel consumption rate for all construction equipment is estimated at 18.5 hp-hr-gal., obtained from CARB 2013 Emissions Factors Tables, and fuel consumption rate factors cited at Table D24 of the Moyer guidelines.<sup>18</sup> For the purposes of this analysis, it is assumed that all construction equipment would be diesel-powered. Diesel fuel would be supplied by existing commercial fuel providers serving the City and region. As presented at Table 5.6-1, Project on-site construction activities would consume an estimated 3,374.02 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel/gasoline demand and would not require ongoing or permanent commitment of fuel resources for this purpose.

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<sup>18</sup> *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects for Evaluating Motor Vehicle Registration Fee Projects and Congestion Mitigation and Air Quality Improvement (CMAQ) Projects, Emission Factor Tables* (California Air Resources Board) May 2013; Table D24 Moyers Guidelines Fuel Consumption Rate Factors All Engines < 750 hp = 18.5 hp-hr-gal.

**Table 5.6-1  
Construction-Source Fuel Consumption Estimates**

Activity/ Duration	Equipment	HP Rating	Quantity	Load Factor	HP- hrs./day	Total HP-hrs.	Total Fuel Consumption (gal. diesel fuel)
Site Preparation (10 days)	Rubber Tired Dozers/ Metal Track Dozers	247	3	0.40	296.4	2964	160.22
	Tractors/Loaders/ Backhoes	97	4	0.37	143.56	1,435.56	77.60
Grading (30 days)	Scrapers	367	2	0.48	352.32	1,0569.60	571.33
	Excavators	158	2	0.38	120.08	3,602.40	194.72
	Graders	187	1	0.41	76.67	2,300.10	124.33
	Rubber Tired Dozers/ Metal Track Dozers	247	1	0.40	98.80	2,964.00	160.22
	Tractors/Loaders/ Backhoes	97	2	0.37	71.78	2,153.40	116.40
Building Construction (100 days)	Cranes	231	1	0.29	66.99	6,699.00	362.11
	Forklifts	89	3	0.20	53.40	5,340.00	288.65
	Generator Sets	84	1	0.74	62.16	6,216.00	336.00
	Tractors/Loaders/ Backhoes	97	3	0.37	107.67	10,767.00	582.00
	Welders	46	1	0.45	20.7	2,070.00	111.89
Architectural Coating (20 days)	Air Compressors	78	1	0.48	37.44	37.44	2.02
Paving (20 days)	Pavers	130	2	0.42	109.2	2,184.00	118.05
	Paving Equipment	132	2	0.36	95.04	1,900.80	102.75
	Rollers	80	2	0.38	60.8	1,216.00	65.73
<b>TOTAL CONSTRUCTION FUEL DEMAND (gallons diesel fuel)</b>							<b>3,374.02</b>

**Notes:** Construction equipment schedules, power ratings, load factors populated from CalEEMod data presented in *Desert Grove Retail Project, Air Quality Impact Analysis, City of Victorville* (Urban Crossroads, Inc.) March 13, 2019. All equipment assumed to operate 8 hours/day.

### Construction Energy Efficiency/Conservation Measures

Equipment used for Project construction would be required to conform to CARB regulations and California emissions standards, and would demonstrate related fuel efficiencies. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions

standards and related fuel efficiencies. Project construction equipment operations would therefore not result in inefficient, wasteful, or unnecessary consumption of fuel.

Additionally, certain construction-source energy efficiencies would derive from implementation from mandated compliance with California regulations. More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) *Idling*, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Where feasible, indirect construction energy efficiencies and energy conservation would be achieved through the use of recycled/recyclable materials and related procedures, and energy efficiencies realized from bulk purchase, transport and use of construction materials. Use of recycled and recyclable materials and use of materials in bulk also reduces energy demands associated with preparation and transport of construction materials as transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

### **Construction Waste Management Plan**

Consistent with Section 5.408, *Construction Waste Reduction, Disposal, and Recycling* of the California Green Building Standards Code (CALGreen Code), as adopted by the City of Victorville, the Project would recycle or salvage for reuse a minimum of 50 percent of the nonhazardous construction and demolition waste. A Project Construction Waste Management Plan would also be prepared consistent with Section 5.408.1.1 of the CALGreen Code.

### **Summary**

Construction equipment used by the Project would result in single event consumption of approximately 3,374.02 gallons of diesel fuel. Diesel fuel would be supplied by City and

regional commercial vendors. Construction equipment use of fuel would not be atypical for the type of construction proposed, and Project construction equipment would conform to CARB emissions standards, acting to promote equipment fuel efficiencies. CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) *Idling*, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints. Where feasible, indirect construction energy efficiencies and energy conservation would be achieved through the use of recycled/recyclable materials and related procedures, and energy efficiencies realized from bulk purchase, transport and use of construction materials. As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

#### **5.6.5.2 Operational Energy Demands and Energy Efficiency/Conservation Measures**

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

#### **Transportation Energy Demands**

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. With respect to estimated VMT, the Project would generate an estimated total 12,172,070 annual VMT along area roadways.<sup>19</sup> With regard to vehicle fuel economies, approximately 92 percent of the Project VMT (or 11,198,304 VMT) would be generated by Light/Medium Duty/or “Other” Vehicles (collectively LDVs); with the remaining approximately 8 percent (or 973,766 VMT) generated by Medium Heavy Duty, Heavy Duty, or Heavy-Heavy Duty Vehicles (collectively HDVs). Gasoline is assumed to be the primary fuel for LDVs; and

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<sup>19</sup> Estimated VMT from: *Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville (Urban Crossroads, Inc.)* March 13, 2019.

diesel fuel is assumed as the primary fuel for HDVs. As presented in *Annual Energy Outlook 2019, With Projections to 2050* (U.S. Energy Information Administration USEIA) April 2019, average fuel economies of LDVs are projected to improve from approximately 23.0 mpg in 2017, to approximately 38.5 mpg by 2050.<sup>20</sup> *Annual Energy Outlook 2019* also estimates that average fuel economies of HDVs are projected to improve from approximately 7.1 mpg in 2013, to approximately 10.5 mpg by 2050.<sup>21</sup> Reflecting these ranges of fuel economies, estimated Project transportation energy demands resulting from vehicle fuel consumption are summarized at Table 5.6-2. Fuel demands of all vehicles accessing the Project site would be met through commercial fuel providers.

**Table 5.6-2  
Project-Generated Traffic Annual Fuel Consumption**

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
<b>Light Duty Vehicles</b>		
11,198,304	23.0	486,883
11,198,304	38.5	290,865
<b>Heavy Duty Vehicles</b>		
973,766	7.1	137,150
973,766	10.5	92,740

**Source:** *Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville* (Urban Crossroads, Inc.) March 13, 2019, Appendix 3.1: *CalEEMod Emissions Model Outputs*, p. 10.

**Notes:** Estimated VMT from: Average fuel economies from: *Annual Energy Outlook 2019, Table: Transportation Sector Key Indicators and Delivered Energy Consumption*.

### Facilities Energy Demands

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by Southwest Gas; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized at Table 5.6-3.

<sup>20</sup> U.S. Energy Information Administration - USEIA. *Annual Energy Outlook 2019*. <https://www.eia.gov/outlooks/aeo/index.php>, USEIA, 24 Jan. 2019, [www.eia.gov/outlooks/aeo/index.php](http://www.eia.gov/outlooks/aeo/index.php). Web. 18 Feb. 2019.

<sup>21</sup> Ibid.

**Table 5.6-3  
Project Annual Operational Energy Demand Summary**

<b>Natural Gas Demand</b>	<b>kBTU/year</b>
Automobile Care Center	97,470
Convenience Market with Gas Pumps	11,695
Fast Food Restaurant with Drive Thru	2,406,270
High Turnover (Sit Down Restaurant)	1,230,480
Parking Lot	0
Regional Shopping Center	166,500
<b>Total Natural Gas Demand</b>	<b>3,912,415</b>
<b>Electricity Demand</b>	<b>kWh/year</b>
Automobile Care Center	30,450
Convenience Market with Gas Pumps	66,535
Fast Food Restaurant with Drive Thru	417,824
High Turnover (Sit Down Restaurant)	213,660
Parking Lot	68,320
Regional Shopping Center	947,250
<b>Total Electricity Demand</b>	<b>1,744,039</b>

*Source: Desert Grove Retail Project, Greenhouse Gas Analysis, City of Victorville (Urban Crossroads, Inc.) March 13, 2019. Appendix 3.1: CalEEMod Emissions Model Outputs, pp. 13, 14.*

### **Operational Energy Efficiency/Conservation Measures**

The Project would meet standards established under the California Code Title 24, Part 6 (the California Energy Code) and California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11) as implemented by the City of Victorville.

### **Enhanced Vehicle Fuel Efficiencies**

Estimated annual fuel consumption estimates presented previously at Table 5.6-3 represent likely potential maximums that would occur under Project Opening Year (2019) Conditions. Under future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation. Average fuel economies of vehicles accessing the Project site can also be expected to improve over time in response to fuel economy and emissions standards imposed on newer vehicles entering the transportation system.

## **Project Design and Access**

The Project proposes auto sales and auto service uses within an urban context, proximate to, and readily accessible from regional and local roadways. In these regards, the Project's urbanized setting promotes local patronage of the proposed uses; and availability of regional and local roadways acts to facilitate access to the Project generally.

## **Alternative Transportation – Pedestrian, Bicycle/Multi-Use Trails, Transit Facilities**

Alternative transportation modes and services available to the Project site and vicinity are described below. In combination, availability of alternative transportation modes would act to reduce fuel/energy consumption otherwise resulting from use of privately-owned vehicles.

### ***Bus Services***

The Study Area is served by the Victor Valley Transit Authority (VVTA). VVTA provides bus service throughout the Victor Valley region. There are three transit routes currently provide direct service the Project site, VVTA Routes 31 (Victorville – South Adelanto), 33 (Adelanto Circulator) and 54 (Highway 395-Palmdale – Victor Valley Mall). Detailed bus routes and schedules are available at: <https://vvta.org>.

### ***Bicycle Facilities***

There are no existing bicycle facilities in the Study Area. The City of Victorville Non-Motorized Transportation Plan does however identify the following planned bicycle facilities within the Study Area:

#### **Class II On-Street Bicycle Lanes**

- SR-18 from Baldy Mesa Rd. to Amargosa Rd.
- Dos Palmas Rd. from Baldy Mesa Rd. to Amargosa Rd.
- Bear Valley Rd. from Mesa View Rd. to the Oro Grande Wash
- Cantina St.
- Mesa Linda St. from northern City limits to La Mesa Rd.
- El Evado Rd. from SCLA to La Mesa Rd.
- Amargosa Rd. south of Dos Palmas Rd.

### Class III Bicycle Routes

- Palmdale Rd. east of Amargosa Rd.
- Luna Rd. from Mesa View Rd. to Amargosa Rd.
- La Mesa Rd. from Mesa View Rd. to Amargosa Rd.
- Topaz Rd. from Luna St. to Mesa View Rd.
- Cobalt Rd.
- Amethyst Rd. from Hopland St. to Bear Valley Rd.
- El Evado Rd. south of La Mesa Rd.
- Amargosa Rd. from Hopland St. to Dos Palmas Rd.

The Project concept does not propose or require facilities or programs that would conflict or interfere with development and implementation planned or proposed bicycle facilities. The Applicant would coordinate final Project designs to ensure accommodation of planned or proposed bicycle facilities. On-site Project bicycle amenities would be provided consistent with City requirements.

See also: [http://sustain.scag.ca.gov/Documents/CBResources/Victorville\\_Non-Motorized\\_Plan\\_Final\\_Report.pdf](http://sustain.scag.ca.gov/Documents/CBResources/Victorville_Non-Motorized_Plan_Final_Report.pdf)

### **Pedestrian Access**

Pedestrian access would be facilitated by Project construction of the ultimate half-section of abutting US-395 and SR-18 to include curb and gutter and sidewalk improvements. All right-of-way improvements, including any temporary or interim improvements would be designed and constructed consistent with City Conditions of Approval. Additionally, sidewalk connections between the Project uses would facilitate pedestrian access within the Project site.

### **Landscaping**

Drought-tolerant plants would be used where appropriate. Project landscaping would be required to conform to requirements of City Municipal Code (Title 16, Development Code; Article 24, *General Development Requirements and Exceptions*, et al.).

## **Solid Waste Diversion/Recycling**

The Project would be required to comply with applicable State of California, County of San Bernardino, and City of Victorville solid waste diversion/recycling rules and regulations. These laws and regulations include but are not limited to: State AB 939, State AB 341; CALGreen Code Section 5.408, *Construction Waste Reduction, Disposal, and Recycling*; and City of Victorville Municipal Code Chapter 6.36 *Solid Waste Services*. In combination, these laws and regulations act to reduce the amount of solid waste transported to, and disposed at area landfills. Corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations would likely result.

## **Summary**

### ***Transportation Energy Demands***

LDV trips and related VMT generated by the Project would result in an estimated 290,865 – 486,883 gallons of gasoline consumption per year. HDV trips and related VMT generated by the Project would result in an estimated 92,740 – 137,150 gallons of diesel consumption per year. Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other uses of similar scale and configuration. The Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT. On this basis, the Project would not result in excess and wasteful vehicle energy consumption.

Enhanced fuel economies resulting from federal and state regulatory actions, and transition of vehicles to alternative energy sources (e.g., electricity, natural gas, bio fuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT.

The Project would also implement sidewalks, pedestrian paths, and bicycle amenities encouraging pedestrian and bicycle access. The Project would not interfere or conflict with existing or proposed pedestrian or bicycle facilities.

Bus stop facility recommendation(s) provided by VVTA are recognized. As part of the City's standard development review process, the need for and appropriateness of transit-related facilities including, but not limited to, bus shelters would be coordinated between the City and the Project Applicant, with input from VVTA.

### ***Facilities Energy Demands***

Project facility operational energy demands are estimated at 3,912,415 kBTU/year natural gas and 1,744,039 kWh/year electricity. Natural gas would be supplied to the Project by Southwest Gas; electricity would be supplied by SCE. The Project proposes conventional development types, reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other similar projects of like scale and configuration.

The Project would be required to comply with incumbent Title 24 energy efficiency mandates. Project energy demands are further reduced through compliance with CalGreen standards and requirements, and City Ordinance requirements.

Based on the preceding, Project facilities energy demands and energy consumption would not be inefficient, wasteful, or otherwise unnecessary.

### **5.6.6 Conclusion**

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy, and potential Project impacts in these regards would be less-than-significant. Further, energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or energy transmission facilities and would not create, or otherwise result in, a potentially significant impact affecting energy resources or energy delivery systems.

## **6.0 ACRONYMS AND ABBREVIATIONS**

## 6.0 ACRONYMS AND ABBREVIATIONS

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ADT	average daily trip
af	acre-feet
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BACM	best available control measures
BAU	business as usual
bgs	below ground surface
BMP	Best Management Practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CF <sub>4</sub>	Tetrafluoromethane

C <sub>2</sub> F <sub>6</sub>	Hexafluoroethane
CFC	Chlorofluorocarbon
cfs	cubic feet per second
CH <sub>4</sub>	Methane
C <sub>2</sub> H <sub>6</sub>	Ethane
CIP	Capital Improvement Plan
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CPUC	California Public Utilities Commission
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report
DIF	Development Impact Fees
DPM	Diesel Particulate Matter
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Floor-to-Area Ratio
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FTA	Federal Transit Administration
GCC	Global Climate Change
GFA	gross floor area
Gg	Gigagram
GHG	Greenhouse Gas

GWP	Global Warming Potential
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFC	Hydrofluorocarbon
HI	Hazard Index
H <sub>2</sub> O	Water
HOV	high-occupancy vehicle
HRA	Health Risk Assessment
HVAC	Heating, Ventilation, & Air Conditioning
ICU	Intersection Capacity Utilization
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
IWWTP	Industrial/Wastewater Treatment Plant
lbs/day	pounds per day
Ldn	day/night average sound level
LED	light-emitting diodes
Leq	equivalent sound level
LEED	Leadership in Energy and Environmental Design
LOS	Level of Service
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MDAQMD	Mojave Desert Air Quality Management District
MEIR	Maximally Exposed Individual Receptor
MEISC	Maximally Exposed Individual School Child
MEIW	Maximally Exposed Individual Worker
mgd	million gallons per day
MMTCO <sub>2</sub> e	Million Metric Ton of Carbon Dioxide Equivalent
MOE	measures of effectiveness
MPO	Metropolitan Planning Organization
MSHCP	Multiple Species Habitat Conservation Plan
msl	mean sea level

MUTCD	Manual of Uniform Traffic Control Devices
µg/m <sup>3</sup>	micrograms per cubic meter
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Health and Safety
N <sub>2</sub> O	Nitrous Oxide
NOP	Notice of Preparation
NO <sub>x</sub>	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	Ozone
OEHHA	California Office of Environmental Health Hazard Assessment
OPR	State of California Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	Lead
PCE	passenger car equivalency
PFC	Perfluorocarbon
PM <sub>2.5</sub>	Particulate Matter Less Than 2.5 Microns in Diameter
PM <sub>10</sub>	Particulate Matter Less Than 10 Microns in Diameter
ppb	parts per billion
ppm	parts per million
ppt	parts per trillion
RBBD	Road and Bridge Benefit District
RECs	Recognized Environmental Conditions
REL	Reference Exposure Level
RMP	Risk Management Plan
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board

SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SCLA	Southern California Logistics Airport
SCS	Sustainable Communities Strategy
SF <sub>6</sub>	Sulfur Hexafluoride
SIP	State Implementation Plan
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SO <sub>x</sub>	Oxides of sulfur
SRRE	Source Reduction and Recycling Element
SSC	Species of Special Concern
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TEA-21	Transportation Equity Act for the 21st Century
TIA	Traffic Impact Analysis
TUMF	Transportation Uniform Mitigation Fee
UBC	Uniform Building Code
URF	Unit Risk Factor
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VFP	Vehicle fueling position
V/C	Volume to Capacity
VdB	vibration decibel
VMT	vehicle miles traveled
VOC	Volatile Organic Compound
VWD	Victorville Water District
WQMP	Water Quality Management Plan

## **7.0 REFERENCES**

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# 7.0 REFERENCES

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## PERSONS AND ORGANIZATIONS CONSULTED

### **City of Victorville**

Mike Szarzynski, Senior Planner

### **Project Applicant**

Blue Peak Engineering, Inc.

18543 Yorba Linda Blvd., Suite 235

Yorba Linda, CA 92886

## EIR PREPARERS

### **Applied Planning, Inc.**

Ross S. Geller, Principal

Charly Ray, Senior Project Manager

Amy Flores, Assistant Project Manager

Jennifer Gilbert, Staff Editor

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