Draft
Environmental Impact Report
Walmart Expansion

Prepared for:
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This DEIR has been prepared in compliance with the California Environmental Quality Act and City of Riverside CEQA Resolution No. 21106, and reflects the independent judgment of the City of Riverside.

Ken Gutierrez, Planning Director

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Acronyms, Units of Measurement, Chemical Symbols
Acronyms, units of measurement and chemical symbols used throughout the DEIR are identified in this section.

Acronyms
AB  Assembly Bill
AB 32  California Global Warming Solutions Act of 2006
AB 939  California Integrated Waste Management Act of 1989
AF  Acre-feet
ALUC  Riverside County Airport Land Use Commission
ALUCP  Airport Land Use Compatibility Plan
APN  Assessor’s Parcel Number
AQA  Air Quality and Greenhouse Gas Impact Analysis
AQMP  Air Quality Management Plan
ASTs  Aboveground storage tanks
ASTM  American Society of Testing and Materials
Basin  South Coast Air Basin
BMPs  Best Management Practices
C&D  Construction and demolition
CA FID UST  California Facility Inventory Database of Underground Storage Tanks
CAA  Clean Air Act
CAAQS  California ambient air quality standards
Cal/ARP  California Emergency Management Agency’s Accidental Release Prevention
CalEPA  California Environmental Protection Agency
CalRecycle  California Department of Resources Recycling and Recovery
Caltrans  California Department of Transportation
CARB  California Air Resources Board
CBC  California Building Code
CCM  Circulation and Community Mobility Element
CCR  California Code of Regulations
CDFG  California Department of Fish and Game
CEC  California Energy Commission
CEQA  California Environmental Quality Act
CERCLA  Comprehensive Environmental Response, Compensation, and Liability Act
CESA  California Endangered Species Act
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>CHMIRS</td>
<td>California Hazardous Material Incident Report System</td>
</tr>
<tr>
<td>CHWMP</td>
<td>Riverside County Hazardous Waste Management Plan</td>
</tr>
<tr>
<td>City</td>
<td>City of Riverside</td>
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<tr>
<td>CLUP</td>
<td>Comprehensive Land Use Plans</td>
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<tr>
<td>CMA</td>
<td>Congestion Management Agency</td>
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<tr>
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<td>Congestion Management Program</td>
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<td>Cortese</td>
<td>Hazardous Waste &amp; Substances Sites List</td>
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<td>County</td>
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<tr>
<td>CPUC</td>
<td>California Public Utilities Commission</td>
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<td>CR</td>
<td>Commercial Retail Zone</td>
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<td>CR-S-2-X</td>
<td>Commercial Retail – Two-Story Building and Building Setback Overlay Zones</td>
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<td>CWA</td>
<td>Clean Water Act</td>
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<td>DAMP</td>
<td>Riverside County Drainage Area Management Plan</td>
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<tr>
<td>DEIR</td>
<td>Draft Environmental Impact Report</td>
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<tr>
<td>DIF</td>
<td>Development Impact Fee</td>
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<td>DSOD</td>
<td>State Division of Safety of Dams</td>
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<tr>
<td>DTSC</td>
<td>California Department of Toxic Substance Control</td>
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<tr>
<td>DU</td>
<td>dwelling unit(s)</td>
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<td>EDD</td>
<td>Employment Development Department</td>
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<tr>
<td>EER</td>
<td>Energy Efficiency Ratio</td>
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<tr>
<td>EIA</td>
<td>Energy Information Administration</td>
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<tr>
<td>EIFS</td>
<td>Exterior Insulation and Finish System</td>
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<td>EIR</td>
<td>Environmental Impact Report</td>
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<td>EMS</td>
<td>Energy Management System</td>
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<tr>
<td>EPCA</td>
<td>Federal Energy Policy and Conservation Act</td>
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<tr>
<td>ESA</td>
<td>Endangered Species Act of 1973</td>
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<tr>
<td>FAA</td>
<td>Federal Aviation Administration</td>
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<tr>
<td>FAR</td>
<td>Federal Aviation Regulations</td>
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<tr>
<td>FINDS</td>
<td>Facility Index System/Facility Registry System</td>
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<tr>
<td>FRP</td>
<td>Fiber Reinforced Plastic</td>
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<tr>
<td>GHG</td>
<td>Greenhouse gases</td>
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<td>GP 2025</td>
<td>City of Riverside General Plan 2025</td>
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## Acronyms

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<tr>
<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>GP 2025 FPEIR</td>
<td>City of Riverside General Plan 2025 Final Program Environmental Impact Report</td>
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<td>HAZNET</td>
<td>Hazardous facility and manifest data</td>
</tr>
<tr>
<td>HCP</td>
<td>Habitat Conservation Plan</td>
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<tr>
<td>HID</td>
<td>High-intensity discharge</td>
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<tr>
<td>HIST UST</td>
<td>Hazardous Substance Storage Container Database</td>
</tr>
<tr>
<td>HMBP</td>
<td>Hazardous materials management business plan</td>
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<tr>
<td>HMMA</td>
<td>California Hazardous Material Management Act</td>
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<tr>
<td>HMTA</td>
<td>Hazardous Materials Transportation Act</td>
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<tr>
<td>HVAC</td>
<td>Heating, ventilating, and air-conditioning</td>
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<tr>
<td>HWCL</td>
<td>California Hazardous Waste Control Law</td>
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<tr>
<td>ISTEA</td>
<td>Intermodal Surface Transportation Efficiency Act of 1991</td>
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<tr>
<td>IS/NOP</td>
<td>Initial Study and Notice of Preparation</td>
</tr>
<tr>
<td>ITE</td>
<td>Institute of Transportation Engineers</td>
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<tr>
<td>LDMF</td>
<td>Local Development Mitigation Fee</td>
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<tr>
<td>LED(s)</td>
<td>Light Emitting Diodes</td>
</tr>
<tr>
<td>LOS</td>
<td>Level of service</td>
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<tr>
<td>LST</td>
<td>Localized significance thresholds</td>
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<td>LUST</td>
<td>Geotracker’s Leaking Underground Fuel Tank Report</td>
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<tr>
<td>MBTA</td>
<td>Migratory Bird Treaty Act</td>
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<td>MDP</td>
<td>Master Drainage Plan</td>
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<tr>
<td>MGD</td>
<td>Million Gallons per Day</td>
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<td>MRZ</td>
<td>Mineral Resource Zone</td>
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<td>MS4s</td>
<td>Municipal Separate Storm Sewer Systems</td>
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<td>MSHCP</td>
<td>Western Riverside County Multiple Species Habitat Conservation Plan</td>
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<td>MUTCD</td>
<td>California Manual on Uniform Traffic Control Devices</td>
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<td>NAAQS</td>
<td>National Ambient Air Quality Standards</td>
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<td>NCCP</td>
<td>Natural Communities Conservation Plan</td>
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<td>NPDES</td>
<td>National Pollutant Discharge Elimination Systems</td>
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<td>NPS</td>
<td>Non-point source</td>
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<tr>
<td>NRC</td>
<td>Nuclear Regulatory Commission</td>
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<td>NRP</td>
<td>Non-Reinforced Thermoplastic Panel</td>
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<tr>
<td>OEHHA</td>
<td>Office of Environmental Health Hazard Assessment</td>
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<tr>
<td>OPR</td>
<td>Governor’s Office of Planning and Research</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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Acronyms

P1ESA Phase I Environmental Site Assessment
PLD Porous Landscape Detention
POC Pollutants of concern
PRC California Public Resources Code
RCA Western Regional Conservation Authority
RCALUCP Riverside County Airport Land Use Compatibility Plan
RCFC&WCD Riverside County Flood Control and Water Conservation District
RCP Reinforced concrete pipe
RCRA Resource Conservation and Recovery Act
RCRA-SQG Resource Conservation and Recovery Act – Small Quantity Generators
RCTC Riverside County Transportation Commission
RCTLMA Riverside County Transportation and Land Management Agency
RERC Riverside Energy Resource Center
RFD Riverside Fire Department
RMA Riverside Municipal Airport
RMC Riverside Municipal Code
RPD Riverside Police Department
RPS Renewable Portfolio Standard
RPU City of Riverside Public Utilities Department
RST Regional significance threshold
RTA City of Riverside Transit Agency
RTAC Regional Targets Advisory Committee
RWQCB Regional Water Quality Control Board
RWQCP Regional Water Quality Control Plant
SAR Site Assessment Report
SARA Superfund Amendments and Reauthorization Act
SARWQCB Santa Ana Regional Water Quality Control Board
SB Senate Bill
SCAG Southern California Association of Governments
SCAQMD South Coast Air Quality Management District
SCG Southern California Gas Company
SIP State Implementation Plan
SLIC Spills, Leaks, Investigations and Clean-ups
SMGB State Mining and Geology Board
SRA Source receptor area
### Acronyms

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<tr>
<th>Acronym</th>
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<tr>
<td>SRPS</td>
<td>Sustainable Riverside Policy Statement</td>
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<td>SRRE</td>
<td>Source Reduction and Recycling Element</td>
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<td>SWEEPS UST</td>
<td>Statewide Environmental Evaluation and Planning System, Underground Storage Tanks</td>
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<td>SWPPP</td>
<td>Storm Water Pollution Prevention Plan</td>
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<td>SWQCB</td>
<td>State Water Quality Control Board</td>
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<td>SWRCB</td>
<td>State Water Resources Control Board</td>
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<td>SWRCY</td>
<td>California Recycler Database</td>
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<td>T-BACT</td>
<td>Toxic Best Available Control Technology</td>
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<td>TIA</td>
<td>Traffic Impact Analysis</td>
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<td>TRI</td>
<td>Toxics Release Inventory</td>
</tr>
<tr>
<td>TS</td>
<td>Traffic signal</td>
</tr>
<tr>
<td>TSF</td>
<td>Thousand square feet</td>
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<td>TUMF</td>
<td>Transportation Uniform Mitigation Fee</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations’ Framework Convention on Climate Change</td>
</tr>
<tr>
<td>USDOT</td>
<td>United States Department of Transportation</td>
</tr>
<tr>
<td>USEPA</td>
<td>United States Environmental Protection Agency</td>
</tr>
<tr>
<td>USTs</td>
<td>Underground storage tanks</td>
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<td>WDRs</td>
<td>Waste Discharge Requirements</td>
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<td>WMUDS/SWAT</td>
<td>Waste Management Unit Database</td>
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<td>WQMP</td>
<td>Water Quality Management Plan</td>
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<td>WRCOG</td>
<td>Western Riverside Council of Governments</td>
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### Units of Measurement and Chemical Symbols

- **>** Greater than
- **≥** Greater than or equal to
- **≤** Less than or equal to
- **ADT** Average daily traffic
- **AFY** Acre-feet per year
- **Bcf** billion cubic feet
- **CFCs** Chlorofluorocarbons
- **CFS** Cubic feet per second
- **CH₄** Methane
- **CNEL** Community Noise Equivalent Level
- **CO** Carbon monoxide
Units of Measurement and Chemical Symbols

CO₂  Carbon dioxide
dB     Decibels
dBA    A-weighted decibels
gWh/yr gigawatt-hours per year
HC     Hydrocarbons
HCFCs  Hyrdro-chlorofluorocarbons
HFCs   Hydrofluorocarbons
lb(s)   Pound
LST    Localized Significance Threshold
MT/yr  Metric tonnes per year
MTCO₂E Metric tonnes of carbon dioxide equivalent
MMTCO₂e Million metric tonnes of carbon dioxide equivalent
mph    Miles per hour
MW     Megawatts
N₂O    Nitrous oxide
NO     Nitric oxide
NO₂    Nitrogen dioxide
NOₓ    Oxides of nitrogen
O₃     Ozone
Pb     Lead
PCBs   Polychlorinated biphenyls
PM-10  Particulate matter 10 microns or less in diameter
PM-2.5 Particulate matter 2.5 microns or less in diameter
ppm    Parts per million
ROG    Reactive organic gases
ROG/VOC Reactive Organic Gases/Volatile Organic Compounds
SF     Square feet/foot
SF₆    Sulfur hexafluoride
SO₂    Sulfur dioxide
SOₓ    Oxides of sulfur
TACs   Toxic air contaminants
TCA    1,1,1-trichloroethane or methyl chloroform
TMDLs  Total Maximum Daily Loads
VOC    Volatile organic compounds
Section 1 – Executive Summary

1.1 Introduction
The purpose of this Draft Environmental Impact Report (DEIR) is to evaluate and disclose potential environmental impacts resulting from the implementation of the proposed expansion of the Walmart store located at 5200 Van Buren Boulevard, Riverside, California, along with its associated street and utility improvements (hereinafter referred to as the Walmart Expansion Project or the Project), as further described below and in Section 3 of this DEIR.

1.1.1 Lead and Responsible Agencies
This DEIR has been prepared by the City of Riverside (City) as “lead agency” in accordance with the Guidelines for the Implementation of the California Environmental Quality Act (State CEQA Guidelines), (Sections 15000–15387 of the California Code of Regulations), and the City’s CEQA Guidelines. The City’s address is:

    City of Riverside
    Community Development Department
    Planning Division
    3900 Main Street, 3rd Floor
    Riverside, California 92522
    Contact: Ms. Patricia Brenes, Senior Planner

There are no responsible agencies for the Project.

1.1.2 Environmental Process
The DEIR process typically consists of three parts—the Initial Study/Notice of Preparation (IS/NOP), DEIR, and Final EIR. Pursuant to Section 15063 of the State CEQA Guidelines, the City prepared an Initial Study for the Project in order to determine if implementation of the Project may have a significant effect on the environment. It should be noted that because the proposed Project will not affect facilities under the jurisdiction of the Department of Transportation and is not deemed to be of statewide, regional, or areawide significance, no public scoping meeting was required per State CEQA Guidelines Section 21083.9; thus no public scoping meeting was held. Based on the information presented within the Initial Study, the City concluded that an EIR should be prepared.

An IS/NOP for a DEIR and a description of potential adverse impacts were distributed to the State Clearinghouse, responsible agencies, and other interested parties, on or about September 30, 2010. Pursuant to Section 15082 of the State CEQA Guidelines, recipients of the IS/NOP were requested to provide responses within 30 days after their receipt of the IS/NOP. Copies of the IS/NOP and the IS/NOP distribution list are located in Appendix A. Copies of comments regarding the IS/NOP, received by the City, are also included in Appendix A.
1.1.2.1 Effects Not to be Significant During Preparation of the IS/NOP
The IS/NOP prepared for the Project concluded the Project will not result in significant impacts to the following issue areas:

- Agriculture & Forest Resources
- Geology/Soils
- Mineral Resources
- Public Services
- Utilities/Service Systems
- Cultural Resources
- Land Use/Planning
- Population/Housing
- Recreation

1.1.2.2 Potentially Significant Environmental Effects
Section 5 of the DEIR addresses each environmental effect that was determined to be potentially significant during preparation of the Project’s IS/NOP (Appendix A). The issue areas that are analyzed and the section of the DEIR in which the analysis is contained are listed below:

- Aesthetics (Section 5.1)
- Air Quality (Section 5.2)
- Biological Resources (Section 5.3)
- Greenhouse Gas Emissions (Section 5.4)
- Hazards and Hazardous Materials (Section 5.5)
- Hydrology and Water Quality (Section 5.6)
- Noise (Section 5.7)
- Transportation/Traffic (Section 5.8)
- Urban Decay (Section 5.9)
- Energy Conservation (Section 5.10)

Remainder of page intentionally blank
1.2 Project Information

1.2.1 Project Applicant

The Project Applicant is:

Wal-Mart Real Estate Business Trust  
2001 Southeast 10th Street  
Bentonville, Arkansas 72712  
Contact: Mr. John Clarke, Regional Vice President

1.2.2 Project Location

The proposed Walmart Expansion Project (Project) is located in northwestern Riverside County in the City of Riverside (City). Figure 1-1 – Vicinity Map shows the overall Project vicinity. The Project is located in the City’s Arlanza neighborhood at 5200 Van Buren Boulevard (Assessor’s Parcel Numbers 151-290-020 and 151-380-048) and encompasses approximately 13.73 acres (Project site). Figure 1-2 – Location Map shows an aerial photograph of the Project site location. The Project site is located adjacent on the west side of Van Buren Boulevard, approximately one-half mile south of Arlington Avenue.

1.2.3 Existing Site Description

The Project site is fully developed and includes the existing 125,827-square-foot (SF) Walmart store with associated 5,300-SF exterior Garden Center and parking areas. The existing store also includes a 5,170-SF Tire & Lube Express facility located on the east side of the Project site, adjacent to Van Buren Boulevard.

Access to the Project site is currently provided by three driveways: one at Audrey Avenue toward the middle of the site, and one each at the north and south ends of the site hereinafter referred to as N. Project Driveway and S. Project Driveway, respectively. The primary entrance of the three is the central driveway at Audrey Avenue, which operates as a signalized, full access driveway. S. Project Driveway and N. Project Driveway provide only right-in/right-out access from and to the southbound lanes of Van Buren Boulevard. The main parking area is directly accessed by both the S. Project Driveway and the driveway at Audrey Avenue; the N. Project Driveway is primarily used by trucks for unloading purposes and patrons using the existing Tire & Lube Express, but can also be used to access the main parking area. Presently, due to the parking area’s current configuration, vehicles entering the site using the central driveway at Audrey Avenue can queue, as a result of pedestrian and vehicular movement conflicts, and cause traffic-related hazards.

The current store includes a depressed (i.e., below grade) loading dock with two loading bays located on the north side of the existing structure. With regard to exposure, an existing 10-foot tall masonry block wall that extends the length of the loading area currently blocks the loading dock from line-of-sight to the north.
Figure 1-2. Project Location

Sources: County of Riverside GIS, 2011; Eagle Aerial, April 2010.
The existing structure and associated surface parking lot predominately occupy the Project site. Currently, the on-site landscaping is common for a large commercial shopping store, and includes parking lot area bushes and shade trees in small, concrete-curbed islands. Along the south edge of the Project site, there is a grassy open space area. On the Project site’s eastern side, running parallel to Van Buren Boulevard, is a landscaped area that is approximately 30 feet wide (varies marginally in width), which includes grass and trees that are generally larger than those located within the actual parking areas.

The existing store hours of operation are from 6:00 a.m. to 12:00 midnight every day of the week. During the holiday season, the store operates 24 hours per day every day of the week.1

1.2.4 Land Use Designation and Zoning
The *City of Riverside General Plan 2025* (GP 2025) designates the Project site “Commercial.” Figure 1-3 – Land Use Map shows the existing GP 2025 designation of the Project site and surrounding land uses. The City’s Zoning Map specifies the Project site “CR-S-2-X” (Commercial Retail – Two-Story Building and Building Setback Overlay Zones). Figure 1-4 – Zoning Map shows the existing zoning for the Project site and surrounding land uses. The existing land use is consistent with both the GP 2025 designation and the zoning ordinance.

1.2.5 Surrounding Land Uses
Adjacent to the north side of the Project site is the Plymouth Manor apartment complex, a multi-family residential use. Adjacent to the east side of the Project site is Van Buren Boulevard; to the east and south of the Project site, the existing conditions include commercial and single-family residential uses, and underutilized, graded, vacant parcels. The City of Riverside Zoning Map shows the majority of these nearby vacant parcels are currently zoned for low- to medium-density single-family residential uses, which is likely indicative of the previous land use at that site. This indication is evidenced by Figure LU-10 – Land Use Policy Map of the GP 2025, which shows these currently vacant parcels designated for commercial, medium-high and high-density residential, which is tempered to better utilize Van Buren Boulevard as a high-volume arterial. The GP 2025 designation reflects the preferred land use for the site. Further, it should be noted that two of these vacant lots near the Project site have been approved for future development. Specifically at the southeast corner of Colorado Avenue and Van Buren Boulevard, a Fresh & Easy Market has been approved, and near the southwest corner of Wells Avenue and Van Buren Boulevard a multi-family residential complex has been approved (see Section 5.8 Transportation/Traffic in this DEIR for additional discussion of cumulative development projects). Adjacent to the west side of the Project site are single-family residential uses. Figure 1-2 – Location Map, previously referenced, shows an aerial photograph of the surrounding land uses.

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1 The “holiday season” in the retail sense varies year to year. The holiday season, in which the store is open 24 hours a day, generally begins the day after Thanksgiving and lasts until Christmas Eve.
Figure 1-3. Land Use Map

Walmart Expansion DEIR

Source: Riverside Co. General Plan, Oct. 2003, as amended through Nov., 2010
Figure 1-4. Zoning Map

Walmart Expansion DEIR

Sources: County of Riverside GIS, 2011

G:\2010\10-0157\GIS\ZoningNew.mxd
1.3 Project Description

The proposed Project represents an expansion of the existing Walmart store. The existing Walmart building encompasses approximately 125,827 SF. The Project involves a total expansion of 22,272 SF on the east side of the building where the Tire & Lube Express and exterior Garden Center are currently located, resulting in an approximately 153,399-SF store, including approximately 28,036 SF of a grocery sales area and new entry vestibules. The Project involves the demolition of the existing Garden Center and Tire & Lube Express that is currently located on the east side of the existing Walmart building (Figures 1.5a and 1.5b – Site Plan), adjacent to Van Buren Boulevard and the replacement of these areas by the expanded store. The existing Garden Center will be relocated to the southwest corner of the existing building, while the Tire & Lube Express will be eliminated in its entirety. The Project’s proposed site plan is presented on Figure 1.5a and 1.5b – Site Plan.

Other improvements that will be made to the existing store as part of the Project, include revised building facades, one additional store entry vestibule, updated signage, parking lot upgrades, and improved landscaping that will bring the number of parking lot shade trees in compliance with the City’s Zoning Code. The parking lot upgrades consist of signalizing the entrance/exit of S. Project Driveway creating access from northbound lanes of Van Buren Boulevard by removing a portion of the existing median, reconfiguration and restriping of the parking area; straightening of the main drive aisle southerly of the building, extended drive aisles to better accommodate on-site traffic flow, and expanding the parking lot area on the southerly portion of the site. Further, approximately 23,000 SF of new parking area is proposed at the southern portion of the site to provide the Project with adequate parking.

Table 1-A – Existing Site and Proposed Expansion Areas, on page 1-12, details proposed improvements to the site in terms of square footage of area affected. The expanded Walmart store will operate 24 hours a day, which represents an operational increase of 6 hours compared to existing operating hours, seven days a week except for certain designated holidays.
Figure 1-5a. Site Plan

Walmart Expansion DEIR

Source: Nasland Engineering, Sept., 2010

C-150E-QL-NO
EXISTING WALMART ±31,127 S.F.
PROPOSED WALMART ±153,399 S.F.
WALMART PARCEL ±13.73 ACRES

N. Project Driveway
S. Project Driveway

G:\2010\0157\GIS\EIR_Desc_SitePlan.mxd

Not to Scale
Figure 1-5b. Site Plan

C-150E-GL-NO
EXISTING WALMART ±131,127 S.F.
PROPOSED WALMART ±153,399 S.F.

WALMART PARCEL ±13.73 ACRES

PORTION OF EXISTING BUILDING AREA TO REMOVED AND REPLACED WITH THE PROPOSED GARDEN CENTER

PROPOSED TRUCK DOCK
EXISTING T.I.E TO BE REMOVED

PROPOSED EXPANSION AREA

GARDEN CENTER

PROPOSED EXPANSION AREA

LIMITS OF EXISTING BUILDING EXTERIOR WALL TO BE REMOVED

Source: Nasland Engineering, Sept., 2010

Not to Scale
Table 1-A – Existing Site and Proposed Expansion Area

<table>
<thead>
<tr>
<th>Description</th>
<th>Existing Area</th>
<th>Proposed Area</th>
<th>Net Square-Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interior Area – Grocery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Sales Area</td>
<td>359</td>
<td>28,036</td>
<td>27,677</td>
</tr>
<tr>
<td>Food Sales Support Area</td>
<td>371</td>
<td>8,330</td>
<td>7,959</td>
</tr>
<tr>
<td>Stockroom/Receiving Area</td>
<td>9,265</td>
<td>15,168</td>
<td>5,903</td>
</tr>
<tr>
<td>Ancillary Area</td>
<td>9,675</td>
<td>13,043</td>
<td>3,368</td>
</tr>
<tr>
<td><strong>Sub-Total – Grocery</strong></td>
<td></td>
<td></td>
<td>44,907</td>
</tr>
<tr>
<td><strong>Interior Area – Non-Grocery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Merchandise Area</td>
<td>99,301</td>
<td>84,564</td>
<td>(14,737)</td>
</tr>
<tr>
<td>Restaurant Tenant Area</td>
<td>1,686</td>
<td>2,165</td>
<td>479</td>
</tr>
<tr>
<td>Tire &amp; Lube Express</td>
<td>5,170</td>
<td>0</td>
<td>(5,170)</td>
</tr>
<tr>
<td>Other(^b)</td>
<td>0</td>
<td>2,093</td>
<td>2,093</td>
</tr>
<tr>
<td><strong>Sub-total – Non-Grocery</strong></td>
<td></td>
<td></td>
<td>(17,335)</td>
</tr>
<tr>
<td><strong>Total – Interior</strong></td>
<td>125,827</td>
<td>153,399</td>
<td>27,572</td>
</tr>
<tr>
<td><strong>Exterior Area – Garden Center</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total – Exterior</strong></td>
<td>5,300</td>
<td>0</td>
<td>(5,300)</td>
</tr>
<tr>
<td><strong>Total Expansion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Grand Totals**

- 131,127\(^d\)
- 153,399
- 22,272\(^c\)

**Notes:**

- \(^b\) Approximately 2,093 SF of the existing outdoor garden center will be allocated among the store interior space; specific uses are unknown.
- \(^c\) Square-footage analyzed in DEIR.
- \(^d\) Includes the 5,300-SF exterior Garden Center with Walmart building square footage.

1.4 **Project Objectives**

The Project objectives are as follows:

- Positively contribute to the local economy.
- Create new job opportunities for local residents.
- Maximize affordable grocery shopping options for residents of the City and the immediate surrounding area.
- Provide a retail establishment that serves local residents and visitors with essential goods and services, in a safe and secure, 24-hour shopping environment.
- Provide regional commercial retail activities that would complement existing local retail activities and enhance commercial retail opportunities available in the City of Riverside.
- Promote economic growth and development that is consistent with the policies of the *City of Riverside General Plan 2025*.
- Develop a project consistent with the City of Riverside Municipal Code.
• Generate tax revenues to accrue to the various agencies within the Project area.
• Provide payments or physical improvements to mitigate for Project-related impacts on public services and infrastructure.
• Expand and develop retail uses near regional roadway and freeway facilities, and near other commercial uses to minimize travel lengths and utilize existing infrastructure to the extent possible.
• Ensure that commercial development has sufficient on-site parking to minimize impacts to the surrounding area and ensure that adequate parking is provided for customers and employees.
• Implement parking lot layout modifications to reduce nuisance and safety impacts related to vehicular traffic.
• Implement a high-quality architectural design that complements the existing design characteristics of the surrounding commercial uses and improves the aesthetics of the existing store.

1.5 Discretionary Actions and Approvals
The following public officials and agencies will use this DEIR when considering the following actions, as well as any other discretionary actions necessary or desirable to implement the Project identified through consultation with the appropriate public agencies:

• City of Riverside Planning Commission
  o Recommendation to the City Council for Certification of the Environmental Impact Report for the Walmart Expansion Project, Case Number P09-0601; and
  o Approval of Design Review Number P09-0600

• City Council of the City of Riverside
  o Certification of the Environmental Impact Report, Case Number P09-0601
  o Approval of the proposed Project

• City of Riverside
  o Issuance of applicable permits
1.6 Areas of Controversy and Issues to be Resolved

By the close of the 30-day public review period, four responses to the IS/NOP were received. Two additional comment letters were received after the public review period and will also be addressed in the DEIR. Comments in response to the IS/NOP were received from the following:

- California Department of Toxic Substances Control (2 comment letters)
- Riverside County Airport Land Use Commission
- Riverside Transit Agency
- Soboba Band Luiseño Indians
- South Coast Air Quality Management District

State CEQA Guidelines Section 15123(b)(3) requires that an EIR identify issues to be resolved; this includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved for the proposed Project include decisions by the City as to whether:

- the Draft EIR adequately describes the potential environmental impacts of the proposed Project;
- the recommended mitigation measures should be adopted or modified;
- additional mitigation measures need to be applied;
- the Project should or should not be approved as proposed; or
- the Project should be modified based on the alternatives considered in the DEIR.

1.7 Environmental Setting

As mentioned, the Project site is located in the City’s Arlanza neighborhood. The Project site is generally bounded by Van Buren Boulevard on the east; multi-family residential uses, commercial uses, and Philbin Avenue on the north; single-family residential uses and Harold Street on the west; and multi-family residential uses, commercial uses, and Wells Avenue on the south. The immediate area is relatively flat, and while there are a number of vacant, graded parcels in the area, the area is largely built-out with urbanized development. The Arlanza neighborhood experienced its peak development in the 1950s and 1970s, and portions beyond the Project area retain a semi-rural character.

1.7.1 Aesthetics

1.7.1.1 Project Site

The Project site consists of approximately 13.73 acres and is currently developed with an existing Walmart retail structure, which was constructed in 1993 and first occupied in 1994. The Project site also includes Walmart’s 738-stall surface parking lot as well as landscaped buffers generally at the property lines. The Walmart store encompasses a 125,827-SF structure, which includes a Tire & Lube Express and a 5,300-SF exterior Garden Center. Both the Tire & Lube Express and Garden Center are located on the eastern portion of the existing structure, adjacent to Van Buren Boulevard. The Walmart store’s main entrance is located on the western end of the structure’s south elevation. There is one depressed
loading dock on the northeastern portion of the Project site, views of which are blocked from the off-site uses to the north by a 10-foot tall masonry wall. Further, off site and immediately to the southeast of the Project site, is a fast-food restaurant (McDonald’s) with a drive-through lane. However, this off-site use is only accessible to vehicles via the Project site’s access points and surface parking lot.

The terrain of the Project site and immediate area is relatively flat. On-site vegetation includes landscaped buffers consisting of manicured grass and ornamental non-native trees located around the property boundary, and shade trees located in small, concrete-curbed islands throughout the surface parking lot. It should be noted, however, that the existing amount of shade trees throughout the surface parking lot currently does not comply with the City’s Zoning Code, which requires a ratio of one shade tree per four parking spaces (Zoning Section 19.580.090). The Project will include upgraded parking lot landscaping in order to bring the parking lot into compliance with the City’s landscaping requirements for shade trees. Additionally, the trees generally located in the landscaped buffers are larger than the shade trees throughout the surface parking lot.

While the existing Walmart store is located along Van Buren Boulevard, which is a designated Scenic and Special Boulevard and Parkway in GP 2025 (GP 2025, Figure CCM-4 Master Plan of Roadways), the existing Walmart main entrance is oriented southward toward its parking lot and in the direction of Wells Avenue.

1.7.1.2 Surrounding Area
The Project site is located in an area that is urbanized and built-out. In a regional context, the City is also characterized as urban and built-out. Similarly, the immediately surrounding cities of Corona, Norco, Jurupa Valley, and Moreno Valley are also characterized by urban development. In a local context, the surrounding area of the Project site is largely characterized by single- and multi-family residential uses, public parks, and commercial uses generally concentrated along Van Buren Boulevard. Other uses in the area are general industrial uses and business manufacturing uses, which are generally concentrated along Arlington Avenue. Additionally, the Riverside Municipal Airport is located approximately one-half mile to the northeast. The height of structures in the Project area is characterized by low-rise development, meaning that buildings generally do not surpass the height of a two-story structure, with the exception of the Riverside Municipal Airport traffic control tower.

1.7.1.3 Visual Character of Project site and Surrounding Locale
The majority of the 13.73-acre Project site consists of the associated surface parking lot, while much of the remainder is occupied by the existing, 34-foot-tall Walmart store. The existing façade and color palette are common for the Walmart stores constructed between 1992 and 2008. The current design of the building’s southern elevation, where the main entrance is located, lacks proportion with the overall length of the structure. The eastern elevation, visible from Van Buren Boulevard and Audrey Avenue, does not include any features interacting with Van Buren Boulevard or otherwise reflecting the street’s Scenic and Special Boulevard and Parkway designation. For the most part, with the exception of the main entrance, design articulation is minimal, thus creating a heightened sense of mass from street...
level. Overall, the older Walmart façade style and color palette is indicative of its approximately 20-year-old age and past design trends and priorities.

The surrounding land uses are generally characterized as single- and multi-family residential with commercial uses generally concentrated along Van Buren Boulevard. General industrial and business manufacturing uses are located further away from the Project site, generally concentrated along Arlington Avenue. Much of the single-family residential development was constructed during the 1950s and 1970s, and there are also scattered pockets of newer single-family residences. The multi-family residential uses appear to have been constructed in the 1970s and 1980s. Generally, the area’s structures are comprised of older development that is representative of the area’s development peaks from the 1950s to 1970s. However, there are pockets of newer commercial development, redevelopment, and façade redesigns as there has been an active effort on the part of the City to revitalize and redevelop the area. Further, there are a number of underutilized and graded vacant lots in the Project site vicinity, consisting of parcels which are sized for urbanized uses and medium-density development. Overall, the age and existing visual quality of the area is exhibited in the visual character of the surrounding land uses.

1.7.2 Air Quality
1.7.2.1 Physical Setting
The proposed Project is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the SCAQMD. The Basin consists of Orange County, coastal and mountain portions of Los Angeles County, as well as Riverside and San Bernardino Counties. Regional and local air quality within the Basin is affected by topography, atmospheric inversions, and dominant onshore flows. Topographic features such as the San Gabriel, San Bernardino, and San Jacinto Mountains form natural horizontal barriers to the dispersion of air contaminants. The presence of atmospheric inversions limits the vertical dispersion of air pollutants. With an inversion, the temperature initially follows a normal pattern of decreasing temperature with increasing altitude; however, at some elevations, the trend reverses and temperature begins to increase as altitude increases. This transition to increasing temperature establishes the effective mixing height of the atmosphere and acts as a barrier to vertical dispersion of pollutants.

Dominant onshore flow provides the driving mechanism for both air pollution transport and pollutant dispersion. Air pollution generated in coastal areas is transported east to inland receptors by the onshore flow during the daytime until a natural barrier (the mountains) is confronted, limiting the horizontal dispersion of pollutants. The result is a gradual degradation of air quality from coastal areas to inland areas, which is most evident with the photochemical pollutants such as ozone formed under reactions with sunlight.
1.7.2.2 Climate
Terrain and geographical location determine climate in the Basin. The Project site lies within the terrain south of the San Gabriel and San Bernardino Mountains and north of the Santa Ana Mountains. The climate in the Basin is typical of southern California’s Mediterranean climate, which is characterized by dry, warm summers and mild winters. Winters typically have infrequent rainfall, light winds, and frequent early morning fog and clouds that turn to hazy afternoon sunshine.

The following factors govern microclimate differences among inland locations within the Basin: (1) distance of the mean air trajectory from the site to the ocean; (2) site elevation; (3) existence of any intervening terrain that may affect airflow or moisture content; and (4) proximity to canyons or mountain passes. As a general rule, locations farthest inland from the ocean have the hottest summer afternoons, the lowest rainfall, and the least amount of fog and clouds. Foothill communities in the Basin have greater levels of precipitation, cooler summer afternoons, and may be exposed to wind funneling through nearby canyons during Santa Ana winds. Terrain will generally steer local wind patterns.

The Project site is located in the City south of the Santa Ana River, north of Lake Mathews, and southwest of Mount Rubidoux, within the eastern portion of the Basin.

1.7.2.3 Precipitation and Temperature
Annual average temperatures in the Basin are typically in the low to mid-60s degrees Fahrenheit. Temperatures above 100 degrees are recorded for all portions of the Basin during the summer months.

The rainy season in the Basin is November to April. Summer rainfall can occur as widely scattered thunderstorms near the coast and in the mountainous regions in the eastern Basin. Rainfall averages vary over the Basin. The City averages 9 inches of rainfall; the city of Corona averages 12.7 inches, while the city of Los Angeles averages 14 inches. Rainy days vary from 5 to 10 percent of all days in the Basin, with the most frequent occurrences of rainfall near the coast.

1.7.2.4 Winds
The interaction of land (offshore) and sea (onshore) breezes control local wind patterns in the area. Daytime winds typically flow from the coast to the inland areas, while the pattern typically reverses in the evening, flowing from the inland areas to the ocean. Air stagnation may occur in the early evening and early morning during periods of transition between day and nighttime flows.

Approximately 5 to 10 times a year, the site vicinity experiences strong, hot, dry desert winds known as the Santa Ana winds. These winds, associated with atmospheric high pressure, originate in the upper deserts and are channeled through the passes of the San Bernardino Mountains and into the inland valleys. Santa Ana winds can last for a period of hours or days, and gusts of over 60 miles per hour have been recorded.

High winds, such as the Santa Ana winds, affect dust generation characteristics and create the potential for off-site air quality impacts, especially with respect to airborne nuisance and particulate emissions.
Local winds in the Project area are also an important meteorological parameter because they control the initial rate of dilution of locally generated air pollutant emissions.

1.7.2.5 Categories of Emission Sources
Air pollutant emissions sources are typically grouped into two categories: stationary and mobile sources. Stationary sources are divided into two major subcategories: point and area sources. Point sources consist of a single emission source with an identified location at a facility, and area sources are small emission sources that are widely distributed, but are cumulatively substantial because there may be a large number of sources. Mobile sources are motorized vehicles which are classified as either on-road or off-road.

1.7.2.6 Air Pollution Constituents
Air pollutants are classified as either primary or secondary, depending on how they are formed. Primary pollutants are generated daily and are emitted directly from a source into the atmosphere, examples of which include carbon monoxide (CO), nitrogen dioxide (NO₂), and nitric oxide (NO), sulfur dioxide (SO₂), particulates (PM-10 and PM-2.5) and various hydrocarbons (HC) or volatile organic compounds (VOC), which are also referred to as reactive organic gases (ROG). Secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. Secondary pollutants such as ozone represent major air quality problems in the Basin. The State of California has adopted the same six criteria pollutants as the Federal Clean Air Act of 1970, but has established different allowable levels.

1.7.2.7 Toxic Air Contaminants
Toxic air contaminants (TACs) are chemicals generally referred to as “non-criteria” air pollutants which are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. There are hundreds of air toxics, and exposure to these pollutants can cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects. Effects on human health may be both chronic (i.e., of long duration) or acute (i.e., severe but of short duration). Acute health effects are attributable to sudden exposure to high quantities of air toxics. These effects can include nausea, skin irritation, respiratory illness, and, in some cases, death. Chronic health effects usually result from low-dose, long-term exposure from routine releases of air toxics. The effect of major concern for this type of exposure is cancer, which typically requires a latency period of 10-30 years after exposure to develop.

1.7.2.8 Monitoring Air Quality
The Project site is located within SCAQMD Source Receptor Area (SRA) 23. The baseline air quality conditions in the Project area include occasional events of very unhealthful air. However, the frequency of smog alerts has dropped significantly in the last decade. Atmospheric concentrations of ozone and particulate matter are the two most significant air quality concerns in the Project area. It is encouraging to note that ozone levels have decreased in the last few years with approximately one-fifth or less days each year experiencing a violation of the State hourly ozone standard since 2000. Locally, no second
stage alert (0.35 ppm²/hour) has been called by SCAQMD in the last twenty years. In fact, the last second stage alert was in 1988 in Upland.

1.7.3 Biological Resources
The Project is located in an urbanized area. More specifically, the site itself is substantially disturbed from prior development of the existing Walmart store. Currently, the Project site is nearly entirely covered with structures, pavement, or small, frequently maintained (i.e., mowed, weeded) landscaped areas. Located throughout the existing Walmart’s parking lot area are approximately 100 non-native, ornamental trees.

The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey Area as shown on the Figure 5.4-8 – MSHCP Burrowing Owl Survey Area of the City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR). However, the existing Project site does not contain suitable burrowing owl habitat since nearly the entire soil surface, required for the burrowing owls to burrow, is covered by pavement or structures and is thus inaccessible, or is frequently disturbed by routine maintenance activities (mainly mowing) of the landscaped areas. Further, the Project site is not within an MSHCP Criteria Cell. Criteria Cells are a division of Subunits, which are a division of Criteria Areas, which comprise an Area Plan. Criteria Cells are also divided into Cell Groups. Each of the cells has designated “criteria” for the purpose of targeting additional conservation lands for acquisition, and all projects within a Criteria Area must go through the Joint Project Review process.

1.7.4 Greenhouse Gas Emissions
Some gases in the atmosphere affect Earth’s heat balance by absorbing infrared radiation. This layer of gases in the atmosphere functions much the same as glass in a greenhouse (i.e., both prevent the escape of heat). This is why global warming is also known as the “greenhouse effect.” Increased emissions of these gases, due to combustion of fossil fuels and other activities, have increased the greenhouse effect, leading to global warming and other climate changes. Gases responsible for global climate change in the Basin and their relative contribution to the overall warming effect are carbon dioxide (55 percent), chlorofluorocarbons (CFCs) (24 percent), methane (15 percent), and nitrous oxide (6 percent). It is widely accepted that continued increases in greenhouse gases (GHG) will contribute to global climate change, although there is uncertainty concerning the magnitude and timing of future emissions and the resultant warming trend. According to the California Energy Commission (CEC), human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors contribute to these GHG.

“Stratospheric ozone depletion” refers to the slow destruction of naturally occurring ozone, which lies in the upper atmosphere (called the stratosphere) and which protects Earth from the damaging effects of solar ultraviolet radiation. Certain compounds, including CFCs, halons, carbon tetrachloride, methyl chloroform, and other halogenated compounds, accumulate in the lower atmosphere and then

2 ppm = parts per million
gradually migrate into the stratosphere. In the stratosphere, these compounds participate in complex chemical reactions to destroy the upper ozone layer. Destruction of the ozone layer increases the penetration of ultraviolet radiation to the Earth’s surface, a known risk factor that can increase the incidence of skin cancers and cataracts, contribute to crop and fish damage, and further degrade air quality.

1.7.4.1 Global Warming Potentials
Individual GHGs have varying global warming potential and atmospheric lifetimes. The Intergovernmental Panel on Climate Change (IPCC) developed the Global Warming Potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of individual GHGs is determined through a comparison with the GWP of CO₂. CO₂ has a GWP of one; CH₄ has a GWP of 21, meaning that on a molecule by molecule basis, CH₄ has 21 times the global warming potential of CO₂. CO₂-equivalents (CO₂E) are the emissions of a GHG multiplied by the GWP.

1.7.4.2 GHG Effects
As emissions of GHGs increase, temperatures in California are projected to rise significantly over the twenty-first century. The modeled magnitudes of the warming vary because of uncertainties in future emissions and in the climate sensitivity. According to the California Climate Change Center, there are three projected warming scenarios referred to as the low, medium, and high range. These expected increases from 2000 to 2100 vary from approximately 1.7°C–3.0°C (3.0°F–5.4°F) in the lower range of projected warming, 3.1°C–4.3°C (5.5°F–7.8°F) in the medium range, and 4.4°C–5.8°C (8.0°F–10.4°F) in the higher range. To comprehend the magnitude of these projected temperature changes, over the next century the lower range of projected temperature rise is slightly larger than the difference in annual mean temperature between Monterey and Salinas which is 2.5°F, and the upper range of projected warming is greater than the temperature difference between San Francisco and San Jose which is 7.4°F. Further, increased global average temperature will cause increases to ocean temperatures and the Pacific Ocean strongly influences the climate within California, as well as increase fire hazards through the disturbance of the State’s ecosystems.

Climate change will affect the health of Californians by increasing the frequency, duration, and intensity of ambient conditions conducive to air pollution formation, oppressive heat, and wildfires. Not only are average temperatures expected to increase, but the projected increase in extreme temperatures is also expected to increase which can cause the most serious health impacts. The modeled warming scenarios indicate that the number of extremely hot and extremely cold days will increase by 2100. For Riverside/San Bernardino metropolitan areas, the number of extremely hot days will increase approximately 40 to 80 days per year under the lower and higher warming scenarios, respectively.

1.7.4.3 GHG Inventory
Unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, global climate change is a global problem and GHGs are global pollutants. Impacts of GHG emissions are a function of their total atmospheric concentration and most GHGs are globally well mixed atmospheric constituents.
This means that the location of a particular GHG emission, in contrast to the situation for criteria pollutants, does not change its environmental impact.

Globally, for the years 2000 through 2005, the annual average emissions of fossil fuel-related carbon dioxide was 26.4 gigatons of CO\textsubscript{2} (one gigaton equals one billion MT) per year. It should also be noted that the annual total U.S. emissions of GHG dropped 1.5 percent in 2006 from 7,181 million MT to 7,075 million MT due to warmer weather and decreased energy demand, according to the Energy Information Administration. During the same timeframe, the U.S. economic output increased 2.9 percent. This decline results in a GHG intensity reduction of 4.2 percent as a measure of gross domestic product.

Worldwide, California is the 12th to 16th largest emitter of CO\textsubscript{2}, and is responsible for approximately two percent of the world’s CO\textsubscript{2} emissions. In 2004, the most recent year for which statewide data is available, the CEC reported that California produced 492 million gross metric tonnes (one metric tonne equals 2,205 pounds) of carbon dioxide-equivalent. In January 2007, Assembly Bill 1803 transferred responsibility for developing and maintaining the State’s GHG inventory from CEC to CARB. In November 2007, the CARB released its staff report establishing a statewide 1990 GHG emission level and a 2020 emission limit.

### 1.7.5 Hazards and Hazardous Materials

#### 1.7.5.1 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment was conducted for the Project site prepared by Alaska Petroleum Environmental Engineering, Inc., titled *Phase I Environmental Site Assessment Wal-Mart Store #2028, 5200 Van Buren Boulevard, Riverside, CA* (Phase I). The Phase I was conducted to identify whether the Project site is being, or was used, for purposes that have resulted in potential adverse environmental impacts, or has been adversely impacted from vicinity usage. The Phase I also analyzed issues beyond the traditional scope of an environmental site assessment. The intent of analyzing these non-scope considerations (also referred to as business environmental risks) is to consider whether there is a risk of exposure and whether such risks are likely to have an adverse human health impact and create a risk of regulatory or third-party liability, and/or what impact or relevance, if any, the risks may have on the intended use of the Project site.
1.7.5.2 Existing Conditions
In assessing the physical setting of the Project site, the Phase I considered factors such as topography, geology, groundwater, oil and gas activity, landfills, and ASTM International non-scope considerations and business environmental risks. There were no data gaps that affected the ability to identify recognized environmental conditions or otherwise significantly or materially affect the findings of the Phase I. The Phase I concluded that no recognized environmental conditions exist on the Project site; however, certain ASTM non-scope considerations/business environmental risks were identified.

1.7.5.3 Historic Uses and Ownership of the Project Site
Historic uses of the Project site were researched to determine if any past releases of hazardous materials have taken place that may affect the existing conditions. Data gaps in the Project site development history were identified. According to a 1993 City Building Department record, a 3,000-SF building, purportedly 60 years old, was demolished on the Project site. According to City Building Department staff, the only records retained by the City are those reflected on the City’s website. Additionally, the County of Riverside Building Department provided no additional information. Pursuant to County of Riverside’s Building Department staff, the Project site parcel numbers and corresponding addresses have always been under the City’s jurisdiction, and as such, the County of Riverside’s Building Department does not have any records. However; it is important to note that the data gap regarding the purportedly 60-year-old demolished structure did not impact the ability to identify recognized environmental conditions concerning the Project site, or any other conditions that may otherwise significantly or materially affect the Phase I findings.

An evaluation of title documents was conducted as part of the Phase I. There are currently no apparent environmental liens or activity or use limitations affecting the Project site. Assessor’s Parcel Number 151-380-048 was primarily owned by individuals from 1950 to 1982, where after, the parcel was grant deeded to the City, and then to its current owner in 1992. Assessor’s Parcel Number 151-290-020 in its existing condition was the result of assimilating older multiple parcels 151-290-008, -010, and -011. Former parcel 151-290-008 was held by individuals until 1992, when its current owner acquired the property. Former parcel 151-290-010 was commercially-held until 1992, when its current owner acquired the property. The prior commercial uses included realty, investment, and land companies, and Southern California Edison. Old parcel 151-290-011 was held by individuals until 1992, when its current owner acquired the property.

Historical topographic maps of the Project site area from 1901 to 1980 indicate that the Project site elevation is approximately 740 feet above mean sea level. No evidence of wells or water tanks is depicted on any of the historical maps. However, unknown structures either on site or in the immediate vicinity adjacent to Van Buren Boulevard appear in the 1947 through 1967 maps. Further, an attempt to review the Sanborn Fire Insurance Maps was made, however, the Project site is unmapped property.

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3 ASTM International, formerly known as the American Society for Testing and Materials, is a globally recognized leader in the development and delivery of international voluntary consensus standards.
1.7.5.4 **On Site Presence of Potentially Hazardous Materials**

To ascertain the existing Project site conditions relative to the presence of recognized environmental conditions, a reconnaissance of the Project site was performed as part of the Phase I. Recognized environmental conditions were not identified. Hazardous materials/wastes were identified in:

- Tire & Lube Express facility with used automobile batteries, tires, virgin and waste motor oil, virgin and waste antifreeze, grease, and overpack poly drums (85-gallon capacity) for hazardous material/waste; and
- Walmart store with leaking or spilled retail products that contain hazardous materials (northern interior storage area);

however, no apparent recognized environmental conditions within either of the above areas were noted.

Potential universal wastes were identified as present on the Project site. A “universal waste” is defined as common household or business waste items that require special handling in disposal. Generally, universal wastes may not be disposed of as municipal trash; rather they must be recycled or disposed in an approved landfill. When decommissioned or discarded, certain items located on the Project site would be considered universal wastes (e.g., several beverage chillers located within the northern exterior refrigeration unit enclosure).

Hazardous building materials were not identified as being present on the Project site; however, the following items, when decommissioned and/or disposed of, are considered a hazardous waste product:

- Fluorescent lights and/or high-intensity discharge (HID) lights are used to illuminate the Project site’s interior and parking lot, respectively. Under current California law, these bulbs are regulated as a universal waste, and must be properly disposed of and/or recycled when removed. As of February 8, 2006, all universal wastes must be shipped to another handler, a universal waste transfer station, a recycling facility, or a disposal facility;
- The Project site contains heating, ventilating, and air conditioning (HVAC) and refrigeration units, etc. Pursuant to requirements in the Federal Clean Air Act, companies and individuals who service or dispose of equipment (e.g., air conditioners, appliances, motor vehicles) containing ozone-depleting refrigerants (e.g., Freon) must be properly trained and equipped to prevent release of this material to the atmosphere; and
- Lead-acid batteries, waste oil, and antifreeze.

Improper storage of hazardous materials was identified:

- Propane bottles in the northern exterior, refrigeration unit enclosure;
- Five-gallon, plastic, diesel fuel can that contains about one gallon of fuel located within the same enclosure as identified above.

Subsequent to an Assistant Manager of the Walmart store being made aware of the two items above, as well as, the beverage chillers; these items were properly stored or removed from the Project site.
1.7.5.5 Results of Database Searches in the Vicinity of the Project Site
Surrounding land uses include residential and commercial uses. Located off-site immediately to the southeast of the Project site is a 24-hour fast-food restaurant (McDonald’s) with a drive-through lane. This off-site use is only accessible from the Project site. Adjacent to the north of the Project site are multi-family residential and commercial uses; to the east is Van Buren Boulevard and commercial and single-family residential uses; to the south are commercial and multi-family residential uses as well as a large-lot, single-family residence identified for a retail use of firewood sales; and to the west are single-family residential uses. Additionally, dotted throughout the Project site vicinity are vacant, graded lots on parcel sizes typical of an urban/developed area. Industrial and business park uses are also located in the area, generally concentrated along Arlington Avenue.

1.7.5.6 Airport Compatibility Zones
The Project site is located approximately one mile from the Riverside Municipal Airport (RMA) and is located within the land use compatibility plan area of RMA. The majority of the 13.73 acre Project site is located within Compatibility Zone D. Specifically, approximately 12.49 acres, or 543,919 SF, of the Project site is located in Zone D, including the existing Walmart store and proposed expansion area. The southern portion of the Project site is located in Compatibility Zone E, as designated by the Riverside County Airport Land Use Compatibility Plan (RCALUCP). The portion of the Project site within Zone E includes the southern portion of the parking area. The primary focus of RCALUCP is on broadly defined noise and safety impacts, as well as to make compatibility determinations for compliance of all proposed development around an airport.

1.7.6 Hydrology and Water Quality
1.7.6.1 Surface Water Resources
The Project site is located within the larger Santa Ana River Watershed, specifically, within the Santa Ana Riverside, Reach 3 Watershed, and is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). The Project site is located approximately 1.9 miles south of the Santa Ana River, which is the main drainage feature in the Santa Ana River watershed. The Santa Ana River flows from the San Bernardino Mountains to the Pacific Ocean for over 100 miles. The Santa Ana River is the “receiving water” for over 2,700 square miles covering portions of San Bernardino, Riverside, and Orange Counties.

The main stem of the Santa Ana River is divided into six reaches, each of which is generally a hydrologic and water quality unit. Reach 3 of the Santa Ana River, which is the receiving water for drainage leaving the Project site, includes the river from Mission Bridge to Prado Dam. Reach 3 is listed as an impaired water body for pathogens on the 2006 Clean Water Act (CWA) Section 303(d) List of Water Quality Limited Segments Being Addressed by the United States Environmental Protection Agency (USEPA) Approved Total Maximum Daily Loads (TMDLs).

Surface water quality may be impacted by both point source and non-point source (NPS) discharges of pollutants. Point source discharges are regulated through National Pollutant Discharge Elimination Systems (NPDES) permitting. NPS pollution is considered to be the leading cause of water quality
impairments in the State, as well as the entire nation. Potential pollutants generated by the existing commercial use at the Project site include: trash and debris, oil and grease, sediment/turbidity, nutrients, oxygen-demanding substances, pesticides, organic compounds (specifically petroleum hydrocarbons), bacteria and viruses, and metals.

1.7.6.2 Groundwater Resources
The City established its own water utility, the Riverside Public Utilities Department (RPU), in 1913. RPU has water supply wells located in the Bunker Hill, Rialto-Colton, Riverside North, Riverside South, and Arlington groundwater basins. Water for domestic use is extracted via wells owned by RPU and the Gage Canal Company from the Bunker Hill Basin, Rialto-Colton Basin, and Riverside Basin, according to RPU’s 2010 Water Quality Report. In 2010, RPU had extracted a total of 84,731 acre-feet of groundwater in these basins. RPU met all of its water supply needs in 2009 and 2010 from groundwater sources located in the San Bernardino, Bunker Hill, and Riverside Basins. Domestic water delivered by RPU in 2009 and 2010 met or surpassed all State and federal drinking water quality standards.

1.7.6.3 Storm Drain Facilities and Existing Storm Flows
The Project is located within the Riverside County Flood Control Master Drainage Plan (MDP) for the Monroe Area and as the Project site is already improved, there are no blue-line drainage features on the Project site.

On the eastern side of the Project site, running parallel to Van Buren Boulevard, is a landscaped area that is approximately 30 feet wide (varies marginally in width) which includes grass and trees that are generally larger than those located within the actual parking areas.

The Project site generally drains south-eastward to north-westward into two private drain systems. One system consists of a private on-site 24-inch diameter reinforced concrete pipe (RCP) storm drain on the east side of the Project site that discharges flows to a public 42-inch diameter RCP storm drain in Van Buren Boulevard. The second system consists of a private on-site 18-inch diameter RCP storm drain located in the parking lot south of the Walmart store that discharges flows to a public 18-inch diameter RCP storm drain in Gramercy Place. Roof runoff is conveyed away from the existing Walmart store via roof drains which conveys runoff to the private storm drain system for conveyance to either the 24-inch diameter RCP storm drain in Van Buren Boulevard or the 18-inch diameter RCP storm drain located in Gramercy Place.

Storm flows from the existing uses at the Project site are 14.79, 23.01, and 33.97 cubic feet per second (CFS) for the 2 year, 10 year, and 100 year events, respectively.
1.7.7 Noise

1.7.7.1 Characteristics of Sound
Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound in subjective terms such as “noisy” or “loud.” To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect our ability to hear. The analysis of any project’s noise impact defines the noise environment of the project area in terms of sound intensity and its effect on adjacent land uses and receivers.

1.7.7.2 Quantification of Sound
Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which defines the level of sound in decibels (dB). Because human hearing is not equally sensitive to sound at all frequencies, the A-weighting system is used to adjust quantified or measured sound levels to approximate this frequency-dependent response; A-weighted sound is expressed as dBA. Noise consists of pitch, loudness, and duration; therefore, it is difficult to describe noise with a single unit of measure. Federal and State agencies have established noise and land use compatibility guidelines that use averaging methods to noise measurement. Further, noise is particularly problematic when noise-sensitive land uses are affected.

1.7.7.3 Existing Site and Surrounding Conditions
The store’s loading dock and two loading bays are located on the north side of the store building; approximately 100 feet south of the Project site’s northern property line. An existing 10-foot high masonry block wall exists at the perimeter of the loading dock. Existing masonry block walls border the Project site on the west and north sides; these walls vary in height but are a minimum of six feet above ground. The Project site is bounded by multi-family residences to the north, commercial and single-family residences to the east, commercial and multi-family residences to the south, and single-family residences to the west.

1.7.7.4 Existing Noise Levels
The predominant noise characterizing the Project site and the surrounding area is vehicular noise from area streets including: Arlington Avenue, Audrey Avenue, California Avenue, Colorado Avenue/Wells Avenue, Cypress Avenue/Jackson Street, Magnolia Avenue, Philbin Avenue, and Van Buren Boulevard. The primary roadway contributing to the Project area’s ambient noise environment is Van Buren Boulevard and the ambient noise level at the Project site estimated by average daily traffic volume to be 72.7 dBA, and measured at 73.8 dBA. Further, existing noise at the western boundary of the Project site, near the existing store vestibule and at the northern property line near the existing loading dock was monitored.

The existing Walmart includes one depressed loading dock with two loading bays at the northern end of the store building. Materials transported to the store are offloaded onto this dock from trucks and truck trailers. The dock is depressed so that truck and trailer floors align with the loading dock. The loading
dock is south of a 10-foot high masonry wall at the northern perimeter of the loading area. This masonry wall and existing mature trees shield the activity at the loading dock and break the line-of-sight to nearby sensitive receivers. By breaking the line of sight, the masonry wall interrupts the direct path of the noise from the loading dock in addition to reducing some of the acoustical energy that would be transmitted through the wall. Currently, loading occurs at the dock at any given time during the day and night, depending on the specific vendor’s schedule. However, Walmart’s own general merchandise delivery trucks usually arrive daily with unloading taking place at approximately 4 p.m. Loading dock activity was also measured.

1.7.8 Transportation/Traffic

1.7.8.1 Existing Roadway System

The existing street system in the Project area consists of roadways designated as special boulevards, Arterial Streets, Collector Streets, and Local Streets. Arterial Streets provide sub-regional and local access circulation opportunities, and the Collector Streets provide connecting access from Arterial Streets with Local Streets. The Project area street system generally provides two- to four-lanes of travel, and on-street parking is both discouraged and prohibited in most of the area. No freeways or interstates are in close proximity of the Project site. The following roadways, omitting local streets, are affected by the existing land use: Van Buren Boulevard, Arlington Avenue, Cypress Avenue/Jackson Street, Philbin Avenue, Wells Avenue/Colorado Avenue, California Avenue, and Magnolia Avenue.

1.7.8.2 Study Area Intersections

The Study Area evaluated in the Traffic Impact Analysis (TIA) includes any intersection within a five-mile radius of the Project site consisting of: a Collector Street or a street with a higher classification with another Collector Street or a street with a higher classification, at which the proposed Project will add 50 or more peak-hour trips. In consultation with City staff and the approved TIA Scoping Agreement, the following nine intersections were selected for the analysis:

1. Van Buren Boulevard at Arlington Avenue
2. Van Buren Boulevard at Cypress Avenue/Jackson Street
3. Van Buren Boulevard at Philbin Avenue
4. Van Buren Boulevard at N. Project Driveway
5. Van Buren Boulevard at Audrey Avenue
6. Van Buren Boulevard at S. Project Driveway
7. Van Buren Boulevard at Wells Avenue/Colorado Avenue
8. Van Buren Boulevard at California Avenue
9. Van Buren Boulevard at Magnolia Avenue

1.7.8.3 Existing Traffic Volumes and Operating Conditions

The TIA and the City uses the level of service (LOS) system of categorization to quantify traffic operations and describe how well an intersection or roadway is functioning. LOS measures several
factors including operating speeds, freedom to maneuver, traffic interruptions, and average vehicle delay at intersections. The LOS approach uses a ranking system similar to the educational system with level “A” being best and level “F” being worst.

The City strives to maintain at least a fair operation (LOS D) of its intersections or better on Arterial streets wherever possible, as this level is typically associated with design practice for peak periods and there are no long-standing traffic queues. However, at some key locations, such as City arterial roadways which are used as a freeway bypass by regional through traffic and at heavily traveled freeway interchanges, LOS E may be acceptable as determined on a case-by-case basis. Locations that may warrant the LOS E standard include portions of Arlington Avenue/Alessandro Boulevard, Van Buren Boulevard throughout the City, portions of La Sierra Avenue and selected freeway interchanges. For Local and Collector streets in residential areas, the City strives to maintain at least a good operation (LOS C) of its intersections. All of the Study Area intersections are currently operating at an acceptable LOS during peak hours.

1.7.8.4  Trip Generation
Trip generation represents the amount of traffic that is attracted and produced by a given land use. The Institute of Transportation Engineers (ITE) has developed trip generation factors for a number of uses; however, in certain instances it is more appropriate and accurate to develop a project-specific trip generation factors. For example, if the trip generation factors for Land Use Code 815 (Free Standing Discount Store) as published in ITE’s 8th Edition Trip Generation Manual are applied to the square footage of the existing Walmart store and Garden Center, the results indicate there are 139 AM peak hour trips, 656 PM peak hour trips, and 7,506 daily trips attributable to the existing Walmart. However, in utilizing the empirical AM and PM peak hour trip data collected for the existing Walmart, higher trip generation rates than those forecasted in ITE’s 8th Edition Trip Generation Manual are indicated for the existing Walmart store and Garden. Therefore, a Project site-specific trip generation rate has been created for the existing Walmart that more accurately captures the unique characteristics of its location, proximity to residential uses, proximity to other shopping alternatives, etc. The Project site-specific trip generation rate produces a more conservative estimate of the anticipated increase in vehicle trips due to the proposed store expansion. Based on the data, the existing Walmart generates approximately 9,757 trips-ends per day (131.127 TSF multiplied by 74.41 trip ends per day per TSF) with 257 and 881 trips in the AM and PM peak hours, respectively.

1.7.8.5  Public Transit System
Bus transit in the vicinity of the Project site is provided by the Riverside Transit Agency (RTA), which operates five routes in the Study Area. The RTA routes serving the Project site in order of proximity to the Project site are as follows: Routes 21, 15, 13, 12, and 1. Of these routes, Route 21 provides direct

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4 Based on an AM peak hour trip rate of 1.06 trips/SF, PM peak hour trip rate of 5.00 trips/SF, and daily trip rate of 57.24 trips/SF multiplied by 131,127 square feet (the size of the existing Walmart store and the exterior Garden Center).

5 TSF = thousand square feet
access to the Project site with a bus stop on the west side of Van Buren Boulevard along the Project site’s frontage.

1.7.9 Urban Decay

1.7.9.1 Existing Walmart

The existing, freestanding Walmart store located at 5200 Van Buren Boulevard has an interior building area of approximately 125,827-SF and a total area of 131,127-SF, which includes the 5,300-SF exterior Garden Center. The majority of the interior space of the existing Walmart (99,301 SF) store is used for general merchandise sales; the remainder of the interior area (26,526 SF) is used for food sales, food sales support, stockroom/receiving, restaurant tenant, and ancillary uses.

1.7.9.2 Trade Area

The Trade Area is the geographical area that would be serviced by the expanded Walmart store. A freestanding supermarket would typically have a primary trade area of three miles or less. However, because the Project proposes a grocery expansion as a component of an existing Walmart store and not a freestanding supermarket, this analysis uses the Trade Area for the Walmart store. The Trade Area of the existing Walmart store is likely to be significantly larger than the trade area of a single, freestanding grocery store, in part because of the wide variety of merchandise offered by Walmart.

There are currently 17 supermarkets in the Trade Area. With three exceptions, all of the stores meet the standard size definition of a supermarket in terms of total size (i.e., larger than 20,000 SF of gross leasable area). Although these stores are not technically supermarkets (due both to their smaller size and more limited merchandise mix), it is recognized that to some degree they compete with supermarkets and are therefore part of the competitive environment of the Trade Area. Thus, in order to remain analytically conservative, they have been included as part of the supermarket impact analysis.

An inventory of existing retail space in the Trade Area was prepared in order to provide a quantitative and qualitative measure of the existing baseline conditions in the Trade Area. The retail inventory of the Trade Area is comprised predominantly of freestanding street-front retailers and small unanchored strip centers along major traffic corridors with additional larger centers anchored primarily by drug stores and/or grocery stores. There is one regional mall, the Galleria Mall at Tyler, and a relatively small number of power centers.

Household and income characteristics are the primary determinants of the potential dollars available for purchases of goods and services in the Trade Area. The analysis assumes that Trade Area residents will, on average, spend 42.6 percent of their income on retail purchases. The projected retail demand from Trade Area residents may be assigned to various categories based on retail expenditure patterns.

6 Based on data from the National Consumer Expenditure Survey and the California State Board of Equalization, this factor has been adjusted to account for the fact that the share of income spent on retail goods varies based on household income levels in a trade area. The factor of 42.2 percent has been derived based on data from the most recent Consumer Expenditure Survey (2007) and the most recent full year of taxable sales data from the State Board of Equalization (2007).
observed in California counties with similar income characteristics as the Trade Area. The objective in assigning retail demand is to determine the demand for grocery sales in the Trade Area.

Based on available sales tax data, the Retail Market Impact Analysis estimates approximately 84 percent of the overall sales in the Food/Liquor category are captured by the 17 existing supermarkets in the Trade Area. The remaining 16 percent of sales in the Food/Liquor category are captured by small convenience and specialty markets. This means of the $305,502 thousand Retail Demand for Food/Liquor, approximately $256,622 thousand is expended at the 17 existing supermarkets (84 percent of the $305,502,000 Food/Liquor Demand).

The 17 supermarkets in the Trade Area have a combined floor area of approximately 548,966 SF. There is currently sufficient demand to support average supermarket sales volumes in the Trade Area of $467/SF at all 17 supermarkets. Further, the existing demand of $467/SF is very close to the industry median for supermarkets in the western United States, which is approximately $475/SF. This comparison suggests that the Trade Area’s existing supermarkets are performing approximately in line with the regional median sales per SF estimate.

1.7.10 Energy Conservation
Non-renewable energy resources include fossil fuels. Fossil fuels, which consist of oil, coal, and natural gas and associated byproducts, provide the energy required for the vast majority of motorized vehicles and generation of electricity at power plants. Thus, the discussion of energy conservation most relevant to the Project is focused on Project-generated electricity demand, natural gas demand, and fuel consumption.

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7 For this calculation, the Retail Market Impact Analysis utilized the assumption that supermarket sales account for 84 percent of sales in the overall food category. This factor has been derived by The Natelson Dale Group, Inc., based on numerous analyses of supermarket supply and demand in comparable communities throughout California, and based on data reviewed from the State Board of Equalization for the City and comparable trade areas, Claritas, and selected supermarket chains.

8 According to the 2008 edition of the Urban Land Institute’s Dollars & Cents of Shopping Centers, based on a weighted average from the sample of supermarkets in neighborhood and community shopping centers, the median sales volume for supermarkets in the western United States in 2006 was approximately $475.
1.7.10.1 Electricity
The City operates its own electrical utility, known as RPU, which provides service to most of the City, including the Project site. RPU operates 90 miles of transmission lines and over 1,000 miles of distribution lines, and as of 2006, the largest proportion of the local electrical supply was generated from the burning of coal (68 percent), followed by nuclear power (13 percent), natural gas combustion (3 percent), and hydroelectric power (3 percent). The City and RPU are dedicated to conserving energy generated by fossil fuels and increasing its renewable energy generation. As of 2010, 20 percent of RPU’s supply is generated from renewable energy sources, and RPU anticipates increasing renewable resources to 25 percent of its supply by 2015 and to 33 percent by 2020. In turn, RPU will continue to phase out its reliance on coal-fired plants for electricity supply. Achieving 33 percent by 2020 will put RPU in compliance with a renewable energy goal set by then-Governor Arnold Schwarzenegger in 2009 with Executive Order S-21-09.

According to the latest available data from the California Energy Commission (CEC), RPU produced approximately 2.1 billion kilowatt-hours (kWh) in 2009, of which approximately 1.1 billion kWh were consumed by commercial buildings and 14 million kWh were consumed by mining and construction, the sectors relevant to the existing Walmart store and proposed expansion.

1.7.10.2 Natural Gas
The Southern California Gas Company (SCG) provides natural gas service to the City, including the Project site. SCG is the principal distributor of natural gas in Southern California, providing retail and wholesale customers with transportation, exchange and storage services, and also procurement services to most retail core customers. SCG is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery and electric generation customers in Southern California.

SCG projects gas demand for all its market sectors to contract at an annual average rate of approximately 0.212 percent from 2010 to 2030, and that demand will be virtually flat for the next 21 years due to modest economic growth, CPUC-mandated demand-side management goals and renewable electricity goals, decline in commercial and industrial demand, continued increased use of non-utility pipeline systems by enhanced oil recovery customers, and savings linked to advanced metering modules. The core commercial market demand in SCG’s service area is expected to remain flat with an average annual growth rate from 2010 to 2030 at 0.1 percent, and the noncore commercial market is expected to show substantial decreases by 2030 of approximately 50 percent.

SCG also implements energy efficiency programs. SCG’s conservation and energy efficiency activities are intended to encourage customers to install energy efficient equipment and weatherization measures, and adopt energy saving practices that result in reduced gas usage while still maintaining a comparable level of service.

According to the latest CEC data, SCG produced approximately 5.2 billion therms in 2009, of which approximately 131 million therms were consumed by commercial buildings and 262 million therms were
consumed by mining and construction, the sectors relevant to the existing Walmart store and the proposed expansion.

1.7.10.3 Transportation Fuel
Oil supplies more than 99 percent of the country’s transportation fuels. In 2007, an estimated 20 billion gallons of gasoline and diesel fuel was consumed in California, where there are nearly 26 million registered vehicles operating. CEC estimates between 2007 and 2030, total annual gasoline consumption in California will fall 13.3 percent in the low-demand case to 13.57 billion gallons, largely as a result of high fuel prices, efficiency gains, and competing fuel technologies; and in the high-demand case the recovering economy and lower relative prices will lead a gasoline demand peak in 2014 of 16.40 billion gallons before consumption falls to a 2030 level of 14.32 billion gallons, 8.5 percent below 2007 levels. Further, regarding trends in transportation, alternative fueled vehicles have increased as has ridership of public transportation.

The existing Walmart store generates approximately 9,757 trips-ends per day. In addition, the Project site is currently served by a transit bus stop operated by RTA.

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1.8 Environmental Analysis

The following table, **Table 1-B – DEIR Impact Summary Matrix/Mitigation Monitoring Program**, provides a summary of impacts related to the proposed Project. The table identifies significant environmental impacts resulting from the Project along with applicable mitigation, pursuant to State *CEQA Guidelines* Section 15123(b)(1).

<table>
<thead>
<tr>
<th>Impact Category</th>
<th>Impact</th>
<th>Mitigation Measure</th>
<th>Implementation Timing</th>
<th>Responsible Party</th>
<th>Impact After Mitigation</th>
</tr>
</thead>
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<tr>
<td>Aesthetics</td>
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<td>Mitigation not required</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Air Quality</td>
<td>Mitigation not required</td>
<td>Mitigation not required</td>
<td>Not applicable</td>
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<tr>
<td>Biological Resources</td>
<td>Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.</td>
<td>MM BIO 1: Potential impacts to nesting habitat (i.e., site grading or removal of trees) shall be limited to the times when birds are less likely to be nesting (i.e., the non-breeding season, approximately September to February). The period from approximately February 1 to August 31 covers the breeding season for most birds that may occur in the Project area. If construction work cannot be done in the non-breeding season, a qualified biologist shall check potential nesting sites no more than three (3) days prior to any tree removal activities. If nesting birds are present, the area shall be avoided until young have fledged (as determined by a qualified biologist). Avoidance will involve prescribed 500-foot buffer zone for birds of prey and.</td>
<td>During grading</td>
<td>Contractor and City of Riverside</td>
<td>Less Than Significant</td>
</tr>
<tr>
<td>Impact Category</td>
<td>Impact</td>
<td>Mitigation Measure</td>
<td>Implementation Timing</td>
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<td>Greenhouse Gas Emissions</td>
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<td>Hydrology and Water Quality</td>
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<td>Mitigation not required</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Mitigation not required</td>
</tr>
</tbody>
</table>
| Noise                         | 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. | **MM NOI 1**: To prevent construction-related noise from disturbing sensitive receivers within proximity to the Project site during evening hours:  
  a) on-site Project construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays. No on-site Project construction shall be allowed at any hour on Sundays or federal holidays; and  
  b) stationary construction equipment shall be located on the Project site and large construction equipment shall be staged on site to provide the maximum distance between the equipment and the sensitive receivers adjacent to the Project site. | During construction | Contractor | Less Than Significant |
<table>
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<tr>
<th>Impact Category</th>
<th>Impact</th>
<th>Mitigation Measure</th>
<th>Implementation Timing</th>
<th>Responsible Party</th>
<th>Impact After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>MM NOI 2:</strong> To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer’s specifications to the satisfaction of the City of Riverside. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Maintenance records shall be submitted monthly to the City of Riverside. Compliance with this measure shall be subject to periodic inspections by the City of Riverside.</td>
<td>During construction</td>
<td>Contractor and City of Riverside Building and Safety Division</td>
<td>Less Than Significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>MM NOI 3:</strong> To inform potential sensitive receivers of the pending Project construction, the Applicant shall give written notification to all landowners, tenants, business operators, and residents immediately adjacent to the Project site 30 days prior to the start of construction. The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.</td>
<td>During construction</td>
<td>Applicant and Contractor</td>
<td>Less Than Significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>MM NOI 4:</strong> To reduce noise impacts associated with temporary diesel- or gasoline-powered generators, electricity from power poles shall be used when technically feasible instead of temporary</td>
<td>During construction</td>
<td>Contractor and City of Riverside Public Utilities</td>
<td>Less Than Significant</td>
</tr>
<tr>
<td>Impact Category</td>
<td>Impact</td>
<td>Mitigation Measure</td>
<td>Implementation Timing</td>
<td>Responsible Party</td>
<td>Impact After Mitigation</td>
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<td>Transport/Traffic</td>
<td>Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections), or conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand</td>
<td><strong>MM TRANS 1:</strong> If Project construction will require any lane closures, a Construction Traffic Management Plan shall be prepared by the Project Applicant and submitted to the City for approval in conjunction with detailed construction plans for the Project. The plan may include signage, flagmen, cones, or other acceptable measures to safely guide motorists, cyclists, and pedestrians if a lane closure is necessary. Such measures shall be designed to allow safe access of the Project site and safe passage along Van Buren Boulevard.</td>
<td>Pre-construction</td>
<td>Applicant, Contractor, and City of Riverside</td>
<td>Less Than Significant</td>
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<tr>
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<td><strong>MM NOI 5:</strong> To minimize noise from idling engines, all vehicles and construction equipment shall be prohibited from idling in excess of three (3) minutes when not in use.</td>
<td>During construction</td>
<td>Contractor</td>
<td>Less Than Significant</td>
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<td></td>
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<td><strong>MM NOI 6:</strong> No more than two (2) truck deliveries shall take place simultaneously, at any given time, between the hours of 12:00 midnight and 6:00 a.m.</td>
<td>During operation</td>
<td>Walmart store management</td>
<td>Less Than Significant</td>
</tr>
<tr>
<td>Impact Category</td>
<td>Impact</td>
<td>Mitigation Measure</td>
<td>Implementation Timing</td>
<td>Responsible Party</td>
<td>Impact After Mitigation</td>
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<td><strong>MM TRANS 2</strong>: On-site signing and striping shall be implemented in conjunction with detailed construction plans for the Project.</td>
<td>Pre-construction</td>
<td>Applicant, Contractor, and City of Riverside</td>
<td>Less Than Significant</td>
</tr>
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<td><strong>MM TRANS 3</strong>: Prior to the issuance of any building permit for the proposed Project, the Project Applicant shall demonstrate to the satisfaction of the City Public Works Department that the intersection sight distance at each Project access point complies with the standards set forth in section 405.1 of the Caltrans Highway Design Manual.</td>
<td>Pre-construction</td>
<td>Applicant, Contractor, Caltrans, and City of Riverside</td>
<td>Less Than Significant</td>
</tr>
<tr>
<td>Urban Decay</td>
<td>Mitigation not required</td>
<td>Mitigation not required</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Energy Conservation</td>
<td>Mitigation not required</td>
<td>Mitigation not required</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
1.9 Summary of Project Alternatives

State CEQA Guidelines Section 15126.6 identifies the parameters within which consideration and discussion of alternatives to a proposed project should occur. As stated in this section of the guidelines, alternatives must focus on those that are reasonably feasible and which attain most of the basic objectives of a project. Each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed project. The rationale for selecting the alternatives to be evaluated and a discussion of the “no project” alternative are also required, pursuant to Section 15126.6.

Since there are no potentially significant impacts associated with the Project, the only alternative that must be considered is the “no project” alternative. Nonetheless, this Draft EIR evaluates 1) a No Project Alternative and 2) Closure and Alternate Site Location Alternative, and 3) Smaller Expansion and On-Site Relocation of Tire & Lube Express.

Table 1-C – Comparison of Alternatives Matrix, gives a summary of all Project alternatives considered in detail in the DEIR and identifies the areas of potential environmental effects per CEQA and ranks each alternative as better, the same or worse than the proposed Project with respect to each area.

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Proposed Project</th>
<th>Alternative 1 No Project</th>
<th>Alternative 2 Closure and Alternate Site Location</th>
<th>Alternative 3 Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetics</td>
<td>The Project will not substantially degrade the existing visual character or quality of the site or its surroundings. Less than significant impacts without mitigation.</td>
<td><strong>Worse</strong> – Beneficial visual qualities and character of the Project would not be realized. Impacts would be less than significant.</td>
<td><strong>Worse</strong> – The Alternate Site would be substantially improved from its existing condition with construction of a new Walmart and improved landscaping. However, the existing Project site would be vacated, leaving a structure anticipated to be difficult to occupy or redevelop.</td>
<td><strong>Same</strong> – Beneficial visual qualities and character of the Project would be realized. If the stand-alone Tire &amp; Lube Express is located so as to be visible from Van Buren Boulevard, that structure would also be designed to complement the Scenic and Special Boulevard</td>
</tr>
<tr>
<td>Environmental Issue</td>
<td>Proposed Project</td>
<td>Alternative 1 No Project</td>
<td>Alternative 2 Closure and Alternate Site Location</td>
<td>Alternative 3 Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</td>
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<tr>
<td>Air Quality</td>
<td>The Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation; will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); will not expose sensitive receptors to substantial pollutant concentrations; or will not create objectionable</td>
<td><strong>Better</strong> – Impacts on air quality from construction and operation of the Project would not be realized. Impacts would be less than significant.</td>
<td><strong>Worse</strong> – Air quality impacts at the existing site would substantially decrease, if not cease entirely. However, the new construction of a new Walmart from the ground up would involve more intensive construction and equipment than the proposed Project, and would likely require mitigation measures to keep potential impacts to air quality at a less than significant level. Impacts would be less than significant impacts with mitigation incorporated.</td>
<td><strong>Better</strong> – Construction of a smaller store expansion and stand-alone Tire &amp; Lube Express is expected to generate fewer emissions due to less construction and fewer vehicular trips. Impacts would be less than significant.</td>
</tr>
<tr>
<td>Environmental Issue</td>
<td>Proposed Project</td>
<td>Alternative 1</td>
<td>Alternative 2</td>
<td>Alternative 3</td>
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<td></td>
<td>odors affecting substantial number of people.</td>
<td>No Project</td>
<td>Closure and Alternate Site Location</td>
<td>Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</td>
</tr>
<tr>
<td></td>
<td>Less than significant impacts without mitigation.</td>
<td></td>
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<tr>
<td>Biological Resources</td>
<td>The Project may have a substantial adverse effect, either directly or through</td>
<td>Better – Potential impacts from construction on nesting species in existing on-site trees would not be realized.</td>
<td>Same – While the potential interruption of nesting species in existing on-site trees would not be realized, a potential interruption of nesting species in existing trees at the Alternate Site would result in a potentially significant impact requiring the same mitigation as the Project.</td>
<td>Same – As a new Tire &amp; Lube Express would be constructed on the Project site, the potential to interrupt nesting species in existing on-site trees remains and requires the same mitigation as the Project.</td>
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<td>habitat modifications, on any species identified as a candidate, sensitive, or</td>
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<td>special status species in local or regional plans, policies, or regulations, or</td>
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<td>by the California Department of Fish and Game or U.S. Fish and Wildlife Service.</td>
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<td></td>
<td>Implementation of mitigation measure MM BIO 1 will reduce the potentially</td>
<td>Better – GHG emissions would remain at existing levels in the short-term. Because the Project’s design considerations and energy efficient measures (including the encouragement of</td>
<td>Worse – While GHG emissions at the existing Project site would substantially decrease, if not cease entirely, GHG emissions from the more intensive construction required for this</td>
<td>Better – The store would use less energy than the proposed Project, and there would be fewer vehicular trips due to the smaller expansion. Thus, there would be a smaller quantity of</td>
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<td>significant impacts to less than significant.</td>
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<tr>
<td>Greenhouse Gas (GHG)</td>
<td>The Project will not generate GHG emissions, either directly or indirectly, that</td>
<td>Better – GHG emissions would remain at existing levels in the short-term. Because the Project’s design considerations and energy efficient measures (including the encouragement of</td>
<td>Worse – While GHG emissions at the existing Project site would substantially decrease, if not cease entirely, GHG emissions from the more intensive construction required for this</td>
<td>Better – The store would use less energy than the proposed Project, and there would be fewer vehicular trips due to the smaller expansion. Thus, there would be a smaller quantity of</td>
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<tr>
<td>Emissions</td>
<td>may have a significant impact on the environment; or</td>
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<td></td>
<td>will not conflict with an</td>
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</table>
### Environmental Issue

<table>
<thead>
<tr>
<th>Proposed Project</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Issue</strong></td>
<td><strong>Proposed Project</strong></td>
<td><strong>Alternative 1</strong></td>
<td><strong>Alternative 2</strong></td>
</tr>
<tr>
<td><strong>Applicable Plan, Policy, or Regulation</strong></td>
<td>applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts will be less than significant.</td>
<td>and accommodation for alternative transportation) would not be realized, energy would be used less efficiently; however less energy would be used, thus, impacts to GHG emissions would be better than the proposed Project. Impacts would be less than significant.</td>
<td>alternative would ultimately produce a greater quantity of GHG emissions than the Project. GHG impacts would be less than significant.</td>
</tr>
<tr>
<td><strong>Hazards and Hazardous Materials</strong></td>
<td>The Project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or will not, 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 use airport, would the project result in a safety hazard for people residing or working in the project area.</td>
<td><strong>Worse</strong> – The existing condition regarding hazards and hazardous materials would continue on site. The potential environmental benefits of the Project’s proposal to remove the Tire &amp; Lube Express and its associated components (including the removal of the USTs) and any subsequent remediation, would not be realized, which may contribute the greater long-term impacts than the proposed Project. Impacts would be less than significant.</td>
<td><strong>Worse</strong> – The hazardous materials identified in the Phase I ESA would remain on site due to the store closure and would not be remediated or removed. Construction at the alternate site would not require review for consistency with the Riverside County Airport Land Use Compatibility Plan. Impacts would be less than significant.</td>
</tr>
</tbody>
</table>
## Environmental Issue

### Proposed Project

- **Impacts will be less than significant.**

### Alternative 1

- **No Project**
  - **Worse** – The existing condition regarding hydrology and water quality would continue on site; however, the Project’s proposal to install water conservation measures, and a series of porous landscape detention sedimentation/filtration facilities to treat for pollutants and slow down storm flows prior to discharging into existing public storm drains would not be realized, which may contribute to greater long-term impacts than the proposed Project. Impacts would be less than significant.

### Alternative 2

- **Closure and Alternate Site Location**
  - **Same** – Existing hydrologic and water quality conditions at the Project site would remain unchanged, however the existing structures would be vacant. Construction of a new Walmart at the Alternate Site would require preparation and implementation of a project specific WQMP, a SWPPP, and compliance with NPDES permit requirements. Adherence to these regulatory requirements would reduce potential impacts to less than significant.

### Alternative 3

- **Smaller Expansion and On-Site Relocation of the Tire & Lube Express**
  - **Worse** – Construction of a new 5,170-SF Tire & Lube Express would require compliance with NPDES permit requirements. However, because less than 50 percent of the Project site would be altered under this alternative, the project specific WQMP is only required to identify BMPs to treat runoff from the stand-alone Tire & Lube Express and not the entire Project site. Impacts would be less than significant.

### Noise

- **The Project may expose 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**
  - **Better** – While marginal short-term noise impacts from construction would not be realized, the operational noise would generally be the same as the proposed Project. However, **Worse** – Noise from Project construction at the Project site would not be realized, and the store closure and vacation would decrease operation noise generated by the existing **Similar** – If the Tire & Lube Express is located north of the existing store adjacent to the Plymouth Manor Apartment, noise impacts may be worse than the Project, in part due to...
<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Proposed Project</th>
<th>Alternative 1 — No Project</th>
<th>Alternative 2 — Closure and Alternate Site Location</th>
<th>Alternative 3 — Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</th>
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<tr>
<td>agencies;</td>
<td></td>
<td>the precautionary mitigation measures under the Project assuring impacts are less than significant will not be incorporated. Impacts would be less than significant.</td>
<td>Walmart and Project mitigation measures would not be incorporated or necessary. Construction-related noise impacts at the Alternate Site may be worse than the proposed Project due to the greater amount of time and equipment required for site preparation and construction of a new store and mitigation may be required. Impacts would be less than significant with mitigation incorporated.</td>
<td>the installation of new USTs, and mitigation may be required for both construction and operation due to the proximity of sensitive receptors. If the Tire &amp; Lube Express is located in a portion of the existing parking lot adjacent to Van Buren Boulevard between the Audrey Avenue ingress/egress and S. Project Driveway, construction-related noise impact would be less than the Project’s to adjacent sensitive receptors, but may also require mitigation due to heavier equipment requires for excavation. Both the alternative and Project would require similar mitigation for both construction and operation. Impacts would be less than significant with mitigation incorporated.</td>
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<td>will not substantially permanently increase in ambient noise levels in the project vicinity above levels existing without the project. Implementation of mitigation measures MM NOI 1 through MM NOI 6 will reduce the potentially significant impacts to less than significant.</td>
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<tr>
<td>Transportation / Traffic</td>
<td>The Project will cause an increase in traffic which is substantial in relation to the existing traffic load and capacity</td>
<td>Worse – While there would be no increase to traffic over the existing conditions, parking lot improvements to address</td>
<td>Worse – Existing Project site trip traffic would substantially decrease, if not cease. Construction of a new store</td>
<td>Better – The smaller expansion and construction of a stand-alone Tire &amp; Lube Express would generate approximately 385</td>
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### Environmental Issue

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<tr>
<th>Proposed Project</th>
<th>Alternative 1 — No Project</th>
<th>Alternative 2 — Closure and Alternate Site Location</th>
<th>Alternative 3 — Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</th>
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<tbody>
<tr>
<td>of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections), or 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. Implementation of mitigation measures MM TRANS 1 through MM TRANS 8 will reduce the potentially significant impacts to less than significant.</td>
<td>circulation and congestion on- and off-site, or design considerations to encourage alternative transportation would not be realized. Impacts would be less than significant.</td>
<td>would generate approximately 11,414 new ADTs which would use Magnolia Avenue and Tyler street to access the Alternate Site. Given the number of new ADTs that would be generated by this alternative and that these trips would take place on roadways expected to operated a LOS F at GP 2025 Buildout without traffic from this alternative, traffic impacts from the Closure and Alternate Site Alternative are worse than the proposed Project. If feasible mitigation exists, impacts would be less than significant with mitigation incorporated; otherwise, traffic impacts would be significant and unavoidable.</td>
<td>ADTs. However, impacts would still require mitigation measures, although tempered to the trip generation rate and projected impacts on study area roadways and intersections of this alternative. Impacts would be less than significant with mitigation incorporated.</td>
</tr>
<tr>
<td>Urban Decay</td>
<td>The Project will not result in a diversion of sales from existing retail facilities severe enough to result in business closings; and business closures significant enough in scale (i.e., in terms of</td>
<td>Same — The existing Walmart has been in operation for approximately 20 years and is well-established in its Trade Area. Continued operation would not contribute toward</td>
<td>Worse — Impacts regarding the diversion of sales under this alternative would be the same as the proposed Project. However, the vacation of the existing Walmart store would</td>
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<td></td>
<td>Better — The small store expansion and construction of a stand-alone Tire &amp; Lube Express is not reasonably expected to result in a diversion of sales from existing area retailers. Due</td>
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</table>

The existing Walmart has been in operation for approximately 20 years and is well-established in its Trade Area. Continued operation would not contribute toward

Worse — Impacts regarding the diversion of sales under this alternative would be the same as the proposed Project. However, the vacation of the existing Walmart store would

Better — The small store expansion and construction of a stand-alone Tire & Lube Express is not reasonably expected to result in a diversion of sales from existing area retailers. Due
<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Proposed Project</th>
<th>Alternative 1 (No Project)</th>
<th>Alternative 2 (Closure and Alternate Site Location)</th>
<th>Alternative 3 (Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express)</th>
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</thead>
<tbody>
<tr>
<td>Urban Decay</td>
<td>the total square footage affected and/or the loss of key “anchor” tenants) and duration to affect the viability of existing shopping centers or districts. Less than significant impacts without mitigation.</td>
<td>urban decay. Impacts would be less than significant.</td>
<td>result in a large vacant building. Although the Riverside Municipal Code gives the City the authority to abate any public nuisance, even a well maintained vacant property could result in the perception of physical decline in an area if the vacancy remains for an extend period of time. Impacts would be less than significant.</td>
<td>to the substantially smaller general merchandise area under this alternative, shoppers may need to patronize other retailers; thus impacts relative to urban decay are better than the proposed Project. Impacts would be less than significant.</td>
</tr>
<tr>
<td>Energy Conservation</td>
<td>The Project will not result in the wasteful, inefficient, or unnecessary consumption of energy; substantially increase demand on available energy resources that are not renewable; or fail to comply with existing established energy standards. The Project incorporates sustainability features that will result in more efficient energy usage. Impacts will be less than significant</td>
<td>Better – The existing condition regarding energy use would continue on site; however, the Project’s proposal to install energy efficient and conservation measures, including promoting alternative, low-emission transportation would not be realized. Although energy would be used less efficiently under this alternative, less energy would be consumes; thus, impacts would be less than the proposed Project.</td>
<td>Worse – The vacation of the existing site and construction of a new Walmart at the alternative site would result in a zero-sum impact compared to the Project because the store constructed under this alternative would incorporate the same sustainability features as the proposed Project. There may be a negligible demand for electricity and fuel consumption at the vacated store for security reasons. Construction of a new Walmart is anticipated to use</td>
<td>Better – The smaller expansion and construction of the stand-alone Tire &amp; Lube Express would implement the store-wide sustainability features proposed by the Project; thus, this alternative would use energy more efficiently than the existing Walmart store and less energy than the proposed Project. Impacts would be less than significant.</td>
</tr>
<tr>
<td>Environmental Issue</td>
<td>Proposed Project</td>
<td>Alternative 1 No Project</td>
<td>Alternative 2 Closure and Alternate Site Location</td>
<td>Alternative 3 Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</td>
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<td>Impacts would be less than significant.</td>
<td>more energy than the proposed Project. Impacts would be less than significant.</td>
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</tr>
<tr>
<td>Environmentally Superior to Proposed Project?</td>
<td>Not applicable</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Meets Project Objectives?</td>
<td>All (Meets 13 out of 13)</td>
<td>No; this alternative only meets 1 of the 13 Project Objectives.</td>
<td>Most; this alternative meets 10 of the 13 Project Objectives.</td>
<td>Some; this alternative meets 6 of the 13 Project Objectives.</td>
</tr>
</tbody>
</table>
1.10 Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines, requires the identification of the environmentally superior alternative. Of the alternatives evaluated above, the No Project Alternative is the environmentally superior alternative, because the Walmart would stay in its existing condition with no expansion. However, the beneficial impacts of the proposed Project would not be realized in the areas of aesthetics, GHG emissions, hazards and hazardous materials, hydrology and water quality, transportation/traffic, or energy conservation.

The State CEQA Guidelines also require the identification of another environmentally superior alternative if the No Project Alternative is the environmentally superior alternative. It should be noted that the proposed Project did not result in any significant and unavoidable impacts. Thus, the two remaining alternatives selected for examination in this EIR also have similar impacts to the proposed Project. Nonetheless, an environmentally superior alternative as required by CEQA has been identified.

Of the remaining project alternatives, Alternative 3 - Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative is considered environmentally superior. Alternative 3 would expand the sales area into the 5,170-SF Tire & Lube Express area, reduce the amount of space allocable to general merchandise sales, maintain the Garden Center at its current location, and construct a new 5,170-SF Tire & Lube Express on the Project site. Alternative 3 would result in fewer impacts to air quality, GHG emissions, transportation/traffic, urban decay, and energy conservation and similar impacts to biological resources as compared to the proposed Project. However, this alternative would meet only 5 of the 13 basic Project Objectives.

“CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian.” (CEQA Guidelines, Section 15021(d)). The proposed Project would not create any significant impacts upon the environment; therefore, none of the alternatives need be selected under CEQA.

Further, the proposed Project does not result in any significant and unavoidable impacts in any environmental category, after implementation of mitigation. Therefore, none of the alternatives effectively lessen or avoid significant impacts that would otherwise result from the Project.

1.11 Other CEQA Topics

The State CEQA Guidelines set forth several general content requirements for a DEIR, including certain potential impacts which must be addressed. Those impact areas applicable to this Project include the potential for the Project to cause cumulative impacts (Section 15130); unavoidable adverse impacts (Section 15126(b)); growth inducing impacts (Section 15126(d)); or significant irreversible changes caused by a project (Section 15126.2(c)). Section 15125(d) of the State CEQA Guidelines also requires an EIR to discuss any inconsistencies between the proposed Project and applicable general and regional plans. These topics are summarized below and discussed in Section 6 of the DEIR.
1.11.1 Cumulative Impact Analysis

The DEIR utilizes the “list method” approach in the cumulative analysis, and therefore focuses on whether the impacts of the proposed Project are cumulatively considerable within the context of combined impacts caused by other past, present, or future projects. The cumulative impact scenario considers other projects proposed within the Project area that have the potential to contribute to cumulatively considerable impacts. Based on discussions with City staff, the projects identified in Table 1-D – Cumulative Development Projects are located in the Project area and may have the potential to contribute to cumulative effects.

### Table 1-D – Cumulative Development Projects

<table>
<thead>
<tr>
<th>No. on Figure 6-1</th>
<th>Project</th>
<th>Land Use</th>
<th>Project Size</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California Baptist University</td>
<td>Student Housing Facility</td>
<td>662 Beds</td>
<td>Approved</td>
</tr>
<tr>
<td>2</td>
<td>Magnolia Avenue Baptist Church</td>
<td>Church</td>
<td>62,800 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>3</td>
<td>Fresh &amp; Easy</td>
<td>Supermarket</td>
<td>15,011 SF</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commercial Retail</td>
<td>4,520 SF</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Magnolia Square</td>
<td>Commercial Retail</td>
<td>40,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apartments</td>
<td>315 DU</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cinnamon Creek</td>
<td>Apartments</td>
<td>95 DU</td>
<td>Approved</td>
</tr>
<tr>
<td>6</td>
<td>Telacu Housing</td>
<td>Apartments</td>
<td>75 DU</td>
<td>Approved</td>
</tr>
<tr>
<td>7</td>
<td>Snowberry Creek</td>
<td>Apartments</td>
<td>224 DU</td>
<td>Approved</td>
</tr>
<tr>
<td>8</td>
<td>Leilani Alejandro</td>
<td>Office</td>
<td>3,742 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>9</td>
<td>Bruce Karish</td>
<td>Warehouse</td>
<td>89,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>10</td>
<td>William Fox Group</td>
<td>Warehouse</td>
<td>90,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>11</td>
<td>Walgreens</td>
<td>Drugstore</td>
<td>15,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>12</td>
<td>Maxi-Foods Supermarket</td>
<td>Supermarket</td>
<td>5,385 SF</td>
<td>Approved</td>
</tr>
</tbody>
</table>

The results of the cumulative impacts analysis in Section 6.1 of this DEIR indicates the proposed Project will not contribute to cumulatively significant impacts for any environmental issue area.

1.11.2 Significant Unavoidable Adverse Impacts

As discussed in detail throughout Section 5.0 (Environmental Impact Analysis) of this DEIR, the proposed Project will not result in any Project-specific or cumulatively significant unavoidable adverse impacts related to aesthetics, air quality, biological resources, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation/traffic, urban decay, or energy conservation. Additionally, the Initial Study prepared for the proposed Project (included in Appendix A) determined that no significant impacts will occur to the following issue areas: agricultural and forest resources,
cultural resources, geology and soils, land use and planning, mineral resources, population and housing, public services, recreation, and utilities and service systems.

1.11.3 Growth Inducing Impacts

According to State CEQA Guidelines Section 15126.2 (d), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria:

- A project would remove obstacles to population growth;
- Increases in the population may tax existing community service facilities, causing significant environmental effects; or
- A project would encourage and facilitate other activities that could significantly affect the environment.

As discussed in Section 3.0 (Project Description) of this DEIR, the Project will expand an existing retail structure by 22,272 SF, provide a place for grocery sales, remove an existing tire and car service facility, relocate an existing garden center, and construct a new loading dock with two bays and associated 10-foot masonry sound-blocking wall. The Project site is located in an urbanized area that is predominantly developed with only select parcels available for infill development. As such, the Project will not require the extension of infrastructure or utilities and will not remove obstacles to population growth. Further, the Project itself will not impact population growth through the creation of households.

Implementation of the proposed Project will result in 85 new “permanent” jobs to the City plus temporary construction jobs. As of April 2011, the City had an unemployment rate of 13.6 percent or 21,500 unemployed persons (EDD). Given the nature of the job opportunities and an available labor force, it is expected that any new jobs created by the proposed Project will not result in indirect population growth in the area.

1.11.4 Significant Irreversible Environmental Changes which would be Involved in the Proposed Project Should it be Implemented

As discussed in Section 6.4 of this DEIR, nonrenewable resources such as gravel and steel will be consumed during Project construction. Energy, fossil fuels, oils, and natural gas will be irreversibly committed during construction. These same resources are used for vehicles traveling to and from the Project site and energy used to operate the site. The continued use of these resources associated with Project operations represents a long-term obligation. The energy consumed in construction and operation of the Project may be considered a permanent investment. However, the Project will incorporate sustainable features in its building materials to reduce impacts to nonrenewable resources. Relevant features include the use of recycled building materials in the proposed expansion area, and to capture and recycle as much of the metals, woods, floor and ceiling tiles, concretes, asphalts, and other materials generated as part of the demolition and construction process as possible. Further, the Project will incorporate energy efficiency features in an effort to conserve energy over the life of its operation. Therefore, the long-term effect of the proposed Project will not change the development intensity of the area and the Project will not result in significant irreversible environmental changes.
1.11.5 Consistency with Regional Plans

Section 15125(d) of the State CEQA Guidelines also requires an EIR to “to discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.” The regional plans applicable to the proposed Project are: the GP 2025, RCALUCP, the MSHCP, the TUMF, and the Air Quality Management Plan (AQMP). The following table identifies the location in which each of these plans is discussed in the DEIR.

Table 1-E – Location in the DEIR in which Consistency with Regional Plans is Discussed

<table>
<thead>
<tr>
<th>Plan</th>
<th>Location of Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP 2025</td>
<td>Environmental impact analysis section for each environmental issue under the heading “Related Regulations”</td>
</tr>
<tr>
<td>MSHCP</td>
<td>Section 5.3.4.4 (Biological Resources, Related Regulations, MSHCP and Ordinance No. 6709 – MSHCP Fee Program Ordinance)</td>
</tr>
<tr>
<td>RCALUCP</td>
<td>Section 5.5.4.3 (Hazards and Hazardous Materials, County Regulations, Riverside County Airport Land Use Compatibility Plan)</td>
</tr>
<tr>
<td>TUMF</td>
<td>Section 5.8.4.2 (Transportation/Traffic, Related Regulations, Western Riverside County Transportation Uniform Mitigation Fee)</td>
</tr>
<tr>
<td>AQMP</td>
<td>Section 5.2.4.1 (Air Quality, Related Regulations, Criteria Air Pollutants)</td>
</tr>
</tbody>
</table>

The Project site is not within a specific plan. The Project does not entail the construction of new housing or the need for replacement housing; thus no discussion of any housing plan is required.
Section 2 – Introduction

2.1 Purpose and Scope
The purpose of this Draft Environmental Impact Report (DEIR) is to evaluate and disclose potential environmental impacts resulting from the implementation of the proposed expansion of the Walmart store located at 5200 Van Buren Boulevard, Riverside, California, along with its associated street and utility improvements (hereinafter referred to as the Walmart Expansion Project or the Project), as further described in Section 3 of this DEIR.

2.2 Authorization
This DEIR has been prepared by the City of Riverside (City) as “lead agency” in accordance with the Guidelines for the Implementation of the California Environmental Quality Act (State CEQA Guidelines), (Sections 15000–15387 of the California Code of Regulations), and the City’s CEQA Guidelines. The proposed expansion of the Walmart store considered in this DEIR is a “project,” as defined by Section 15378 of the State CEQA Guidelines, which state that an EIR must be prepared for any project that may have a significant impact on the environment. After completion of the Initial Study and Notice of Preparation (IS/NOP), included in Appendix A of the DEIR, the City determined that the Project may have a significant adverse impact on the environment; therefore, 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 South Coast Air Quality Management District (SCAQMD), or the Regional Water Quality Control Board (RWQCB), which also have some 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 a project. The City is the lead agency for the Project. The City’s address is:

City of Riverside
Community Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, California 92522
Contact: Ms. Patricia Brenes, Senior Planner

There are no responsible agencies for the Project.
2.4 Project Applicant

The Project Applicant is:

Wal-Mart Real Estate Business Trust
2001 Southeast 10th Street
Bentonville, Arkansas 72712
Contact: Mr. John Clarke, Regional Vice President

2.5 Compliance with CEQA

The basic purposes of CEQA are to:

1. inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;

2. identify the ways that environmental damage can be avoided or significantly reduced;

3. prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and

4. disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved. (State CEQA Guidelines, Section 15002).

2.5.1 Environmental Procedures

The EIR process typically consists of three parts—the IS/NOP, DEIR, and Final EIR. Pursuant to Section 15063 of the State CEQA Guidelines, the City prepared an Initial Study for the Project in order to determine if implementation of the Project may have a significant effect on the environment. It should be noted that because the proposed Project will not affect facilities under the jurisdiction of the Department of Transportation and is not deemed to be of statewide, regional, or areawide significance,\(^1\) no public scoping meeting was required per CEQA Section 21083.9; thus no public scoping meeting was held. Based on the information presented within the Initial Study, the City concluded that an EIR should be prepared. An IS/NOP for a DEIR and a description of potential adverse impacts were distributed to

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\(^1\) Section 15206 of the State CEQA Guidelines defines projects of statewide, regional, or area wide significance as a project that meets any of the following criteria: (i) a local general plan, element, or amendment for which an EIR was prepared; (ii) a residential development greater than 500 dwelling units; (iii) a shopping center or business employing more than 1,000 persons or encompassing more than 500,000 SF of floor space; (iv) a commercial office building employing more than 1,000 persons or encompassing more than 250,000 SF of floor space; (v) a hotel/motel of more than 500 rooms; (vi) an industrial manufacturing, processing plant, or industrial park that will house more than 1,000 persons, occupy more than 40 acres, or encompass more than 650,000 SF of floor area; (vii) a project which would result in cancellation of a Williamson Act contract for any parcel equal to or greater than 100 acres; (viii) a project for which an EIR was prepared that is located in and would substantially impact the Lake Tahoe Basin, the Santa Monica Mountains Zone, the California Coastal Zone, be located within one-quarter mile of a wild and scenic river, the Sacramento-San Joaquin Delta, the Suisun Marsh, or the jurisdiction of the San Francisco Bay Conservation and Development Commission; (ix) a project that would substantially affect sensitive wildlife habitats; (x) a project that would interfere with attainment of regional water quality standards; (xi) a project that would provide housing, jobs, or occupancy for 500 or more people within 10 miles of a nuclear power plant.
the State Clearinghouse, responsible agencies, and other interested parties, on or about September 30, 2010. Pursuant to Section 15082 of the State CEQA Guidelines, recipients of the IS/NOP were requested to provide responses within 30 days after their receipt of the IS/NOP. Copies of the IS/NOP and the IS/NOP distribution list are located in Appendix A. Copies of comments regarding the IS/NOP, received by the City, are also included in Appendix A.

An EIR is an informational document intended to inform decision makers and the general public of potentially significant environmental impacts of a project. An EIR also identifies possible ways to minimize these potentially significant impacts (referred to as mitigation) and describes alternatives to a project that may also reduce its significant impacts. Having the authority to take action on the proposed Project, the City Planning Commission and City Council will consider the information in this EIR in their evaluations of the proposal. The findings and conclusions presented in the EIR 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.

As set forth in Section 15021 of the State CEQA Guidelines, as lead agency, the City has the duty to avoid or minimize environmental damage where feasible. Furthermore, Section 15021(d) of the State CEQA Guidelines states that, “CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors, and in particular the goal of providing a decent home and satisfying living environment for every Californian.” Other public agencies (i.e., Responsible and Trustee Agencies) that may use this DEIR in their decision-making or permit processes, will consider the information in this DEIR along with other information that may be presented during the CEQA process. In accordance with CEQA, the public agencies will be required to make findings for each environmental impact of the proposed Project that cannot be mitigated to below a level of significance. If the Lead Agency determines that the benefits of the proposed Project outweigh unmitigated significant environmental effects, the Agency will be required to adopt a statement of overriding considerations stating the reasons supporting their action notwithstanding the proposed project’s significant environmental effects.
2.5.2 Potentially Significant Environmental Effects

CEQA requires consideration and discussion of significant environmental effects. Sections 15126–15126.2 of the State CEQA Guidelines state that, “All phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation [...] an EIR shall identify and focus on the significant environmental effects of the proposed project.” CEQA provides that a DEIR shall focus on all potentially significant effects created by the project onto the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an IS/NOP as insignificant and unlikely to occur need not be discussed further in the DEIR unless information inconsistent with the finding in the IS/NOP is subsequently received. The IS/NOP prepared for the Project concluded the Project will not result in significant impacts to the following issue areas:

- Agriculture & Forest Resources
- Geology/Soils
- Mineral Resources
- Public Services
- Utilities/Service Systems
- Cultural Resources
- Land Use/Planning
- Population/Housing
- Recreation

Section 5 of the DEIR addresses each environmental effect that was determined to be potentially significant during preparation of the Project’s IS/NOP (Appendix A). Each effect is organized into an issue area; those that will be analyzed (and the section of the DEIR in which the analysis is contained) are listed below:

- Aesthetics (Section 5.1)
- Air Quality (Section 5.2)
- Biological Resources (Section 5.3)
- Greenhouse Gas Emissions (Section 5.4)
- Hazards and Hazardous Materials (Section 5.5)
- Hydrology and Water Quality (Section 5.6)
- Noise (Section 5.7)
- Transportation/Traffic (Section 5.8)
- Urban Decay (Section 5.9)
- Energy Conservation (Section 5.10)
2.5.3 Format

This DEIR has been organized in several sections as follows:

**Table of Contents** to assist readers in locating the analysis of different subjects and issues as required by Section 15122 of the State *CEQA Guidelines*. A list of acronyms used in the DEIR is included in the table of contents.

**Section 1 – Executive Summary** covers the summary requirements of CEQA as required by Section 15123 of the State *CEQA Guidelines* and includes: the proposed project location, a brief project description, a matrix containing a summary of environmental impacts and mitigation measures, project objectives, approvals related to the proposed project, areas of controversy, and a brief description of the project alternatives.

**Section 2 – Introduction** describes the scope and purpose of the DEIR, identifies the project applicant and lead agency, provides a brief summary of the CEQA process to date, identifies the lead agency and project applicant, summarizes and identifies the documents incorporated by reference in the DEIR.

**Section 3 – Project Description** contains the information required by Section 15124 of the State *CEQA Guidelines* including: a detailed description of the proposed project, the project objectives, a general description of the project’s environmental setting, the approvals needed to implement the project, and a list of agencies expected to use the DEIR.

**Section 4 – Environmental Effects Found Not to be Significant and Initial Study/Notice of Preparation Comment Letters** identifies those environmental effects found not to be significant during preparation of the IS/NOP and discusses why the effects were found not to be significant. This section also identifies the agencies that provided comments in response to the IS/NOP, summarized the comments provided, and identifies the location in the DEIR in which the comments are addressed.

**Section 5 – Environmental Impact Analysis** satisfies the requirements of Sections 15125, 15126, 15126.2, and 15126.4 of the State *CEQA Guidelines* by including an analysis of each environmental issue area determined to have potentially significant impacts during preparation of the IS/NOP or as a result of comments received in response to the IS/NOP. For each issue area analyzed, this section includes a discussion of the setting to which each issue area is analyzed against, defines the related regulations affecting the proposed project, identifies the thresholds used to determine significance, describes any project design features that would reduce impacts, analyzes the proposed project’s impacts, provides a description of the mitigation measures used to reduce or lessen potential impacts, and discusses the project’s impacts after mitigation.

**Section 6 – Consistency with Regional Plans** presents an analysis of the project’s consistency with applicable regional plans.

**Section 7 – Other CEQA Topics** includes the project’s cumulative impact analysis, unavoidable adverse impacts of the proposed project, and growth inducing impact discussion.
Section 8 – Alternatives satisfies the requirements of Section 15126.6 of the State CEQA Guidelines by identifying and discussing the no project alternative in addition to alternatives to the proposed project that lessen the severity of significant impacts and identifying the environmentally superior alternative.

Section 9 – References includes a listing of all reference materials, the organizations and persons contacted in preparing the DEIR, and a list of preparers as required by Section 15129 of the State CEQA Guidelines.

2.6 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 throughout this DEIR, where that information is relevant to the analysis of potential impacts of the Project. All documents incorporated by reference are available for review at, or can be obtained through, the City of Riverside Planning Division of the Community Development Department. Technical studies cited below were specifically developed in conjunction with the Project. Where noted as appendices, the reports are included in their entirety in the CD-ROM version of the DEIR, and are also included in the CD-ROM attached to the front cover of hard copy versions of the DEIR.

2.6.1 City of Riverside General Plan 2025

The City of Riverside General Plan 2025 (GP 2025) was adopted in 2007. The GP 2025 is a long-range plan designed to control and regulate growth in the City and to maintain the quality of the human and natural environment. The GP 2025 is the City’s planning “constitution,” or a blueprint for development, and is the single-most important policy document in guiding land use and development decisions within the City (GP 2025 FPEIR, p. 2-5). To that end, the GP 2025 contains goals and policies that serve as the planning framework for the City in addition to providing direction for City operations and programs and serves as a guide to public and private decision making. The GP 2025 includes the following elements: Land Use and Urban Design, Circulation and Community Mobility, Housing, Arts and Culture, Education, Public Safety, Noise Element, Open Space and Conservation, Air Quality, Public Facilities, and Park and Recreation Element.

2.6.2 City of Riverside Municipal Code

The City’s Municipal Code complements the GP 2025. The Municipal Code, which contains among other ordinances, the City’s Zoning Code, is a mechanism to implement and enforce the goals, objectives, policies and programs articulated in the GP 2025. Many of the potential environmental concerns considered in this DEIR are adequately addressed through application of regulations contained in the Municipal Code.
2.6.3 Project Technical Studies and Supporting Analyses
The analysis contained in the DEIR is supported by the following Project-specific technical studies.

2.6.3.1 IS/NOP, and IS/NOP Responses
The IS/NOP, along with the comment letters received in response to the IS/NOP, are included in Appendix A of this DEIR. Based on the IS/NOP and responses, the DEIR has been focused on the topics identified in Section 2.5.2, above.

2.6.3.2 Air Quality Analysis/Greenhouse Gas Emissions Report
Potential air quality and climate change impacts of the Project, including potential short-term construction emissions impacts, potential long-term operational emissions impacts, and greenhouse gas emissions are evaluated within the Air Quality and Greenhouse Gas Impact Analysis for the Walmart Expansion Project, (Albert A. Webb Associates, May 25, 2011). This document is included as Appendix B to the DEIR.

2.6.3.3 Phase I Environmental Site Assessment
The Phase I Environmental Site Assessment, Wal-Mart Store #2028, 5200 Van Buren Boulevard, Riverside California (Alaska Petroleum Environmental Engineering, Inc., March 24, 2009) evaluates the Project site based on records searches, site inspection, and interviews with people knowledgeable about the Project site. The intent is to identify “recognized environmental conditions” in connection with the property that resulted from activities conducted thereon or from adjacent properties. This document is included as Appendix C.1 to the DEIR.

2.6.3.4 Underground Storage Tank Removal Work Plan
The UST Removal Work Plan (Shaw Environmental, Inc., September 14, 2011) details a work plan for the Project’s removal of the existing underground storage tanks associated with the Tire & Lube Express. This document is included as Appendix C.2 to the DEIR.

2.6.3.5 Acoustical Impact Analysis
The Acoustical Impact Analysis for the Walmart Expansion, City of Riverside, CA (Albert A. Webb Associates, October 14, 2011) evaluates potential noise impacts associated with the proposed Project including potential short-term construction noise impacts and potential long-term operational noise impacts. This document is included as Appendix D to the DEIR.

2.6.3.6 Traffic Impact Analysis
The Wal-Mart Expansion, Traffic Impact Analysis, City of Riverside, California (Urban Crossroads, October 18, 2010 (Revised)) evaluates potential traffic and circulation system impacts resulting from implementation of the Project. This report is included as Appendix E to the DEIR.

2.6.3.7 Retail Market Impact Analysis
The Retail Market Impact Analysis for Van Buren (Riverside) Walmart Expansion (The Natelson Dale Group, Inc., January 5, 2010) evaluates whether the Project has the potential to result in a potentially significant urban decay impact due to economic effects on competitive retail projects. This study
contains a comprehensive analysis of the potential economic impacts of the proposed Walmart expansion. This document is included as Appendix F to the DEIR.

2.6.3.8 Geotechnical Engineering Investigation
The Geotechnical Engineering Investigation, Proposed Wal-Mart Expansion 5200 Van Buren Boulevard, Riverside, California (Krazan & Associates, Inc., October 11, 2007), presents an evaluation of the subsurface soils and groundwater conditions at the Project site and provides geotechnical recommendations for use in the design and construction of the earthwork, foundation, and pavement components of the Project. This document is included as Appendix G to the DEIR.

2.6.3.9 Preliminary Water Quality Management Plan
The Project-Specific Water Quality Management Plan for Riverside (S) Walmart Expansion (Nasland Engineering, August 12, 2010) was prepared in compliance with the City of Riverside Public Works Department and Site Design Best Management Practices (BMPs) for the Project. This document is available for review at the City of Riverside Planning Division of the Community Development Department.
Section 3 – Project Description

This DEIR analyzes the potential environmental effects of the proposed Walmart Expansion including all on- and off-site supporting improvements and associated discretionary actions, which are herein collectively referred to as the “Project.”

3.1 Project Location and Setting

3.1.1 Project Location

The overall Project vicinity is shown on Figure 3-1 – Vicinity Map. The Project site encompasses approximately 13.73 acres and is located at 5200 Van Buren Boulevard, within the Arlanza neighborhood of the City of Riverside (City) (Figure 3-2 – Location Map). The Project site is located adjacent to the west side of Van Buren Boulevard, approximately one-half mile south of Arlington Avenue. The Assessor’s parcel numbers (APNs) for the Project site are 151-290-020 and 151-380-048.

3.1.2 Project Site – Existing Conditions

The Project site is fully developed and includes the existing 125,827-square-foot (SF) Walmart store with associated 5,300-SF exterior Garden Center and parking areas. The existing store also includes a 5,170-SF Tire & Lube Express facility located on the east side of the Project site, adjacent to Van Buren Boulevard.

Access to the Project site is currently provided by three driveways: one at Audrey Avenue toward the middle of the site, and one each at the north and south ends of the site hereinafter referred to as N. Project Driveway and S. Project Driveway, respectively. The primary entrance of the three is the central driveway at Audrey Avenue, which operates as a signalized, full access driveway. S. Project Driveway and N. Project Driveway provide only right-in/right-out access from and to the southbound lanes of Van Buren Boulevard. The main parking area is directly accessed by both the S. Project Driveway and the driveway at Audrey Avenue; the N. Project Driveway is primarily used by trucks for unloading purposes and patrons using the existing Tire & Lube Express, but can also be used to access the main parking area. Presently, due to the parking area’s current configuration, vehicles entering the site using the central driveway at Audrey Avenue can queue, as a result of pedestrian and vehicular movement conflicts, and cause traffic-related hazards.

The current Walmart store includes a depressed (i.e., below grade) loading dock with two loading bays located on the north side of the existing structure. With regard to exposure, both of the loading docks are blocked from line-of-sight to the north by an existing 10-foot high masonry block wall that extends the length of the loading area.
Figure 3-1. Vicinity Map

Source: County of Riverside, 2011
Section 3
Project Description

The entire site has been previously graded as a part of the existing store’s construction process. The site is predominantly occupied by the paved parking areas and structure. Currently, on-site landscaping is somewhat typical for a commercial shopping center which includes parking lot area, bushes and shade trees in small, concrete-curbed islands and along the outer edges of the site. Along the south edge of the Project property, there is a grassy open space area. On the site’s eastern side, running parallel to Van Buren Boulevard, is a landscaped area that is approximately 30 feet wide (varies marginally in width) which includes grass and trees that are generally larger than those located within the actual parking areas.

The existing Walmart’s hours of operation are from 6:00 a.m. to 12:00 midnight, seven days per week. During the holiday season, the store operates 24 hours per day, seven days per week.¹

3.1.3 Land Use Designation and Zoning
The GP 2025 designates the Project site, “Commercial.” The City of Riverside Zoning Map designates the Project site, “CR-S-2-X” (Commercial Retail – Two-Story Building and Building Setback Overlay Zones). The existing Walmart store is consistent with both the land use designation and the zone. The proposed Project does not entail any changes to land use or zoning.

3.1.4 Surrounding Land Uses
Adjacent to the north side of the Project site is the Plymouth Manor apartment complex, a multi-family residential use. Adjacent to the east side of the Project site is Van Buren Boulevard; to the east and south of the Project site, the existing conditions include commercial and single-family residential uses, and underutilized, graded, vacant parcels. The City of Riverside Zoning Map shows the majority of these nearby vacant parcels are currently zoned for low- to medium-density single-family residential uses, which is likely indicative of the previous land use at that site. This indication is evidenced by Figure LU-10 – Land Use Policy Map of the GP 2025, which shows these currently vacant parcels designated for commercial, medium-high and high-density residential, which is tempered to better utilize Van Buren Boulevard as a high-volume arterial. The GP 2025 designation reflects the preferred land use for the site. Further, it should be noted that two of these vacant lots near the Project site have been approved for future development. Specifically at the southeast corner of Colorado Avenue and Van Buren Boulevard, a Fresh & Easy Market has been approved, and near the southwest corner of Wells Avenue and Van Buren Boulevard a multi-family residential complex has been approved (see Section 5.8 Transportation/Traffic in this DEIR for additional discussion of cumulative development projects).
Adjacent to the west side of the Project site are single-family residential uses. These surrounding existing land uses are indicated on Figure 3-3 – Aerial Photograph.

¹ The “holiday season” in the retail sense, varies year-to-year. The holiday season, in which the store is open 24-hours a day, generally begins the day after Thanksgiving and lasts until Christmas Eve.
Figure 3-3. Aerial Photograph

Walmart Expansion DEIR

Sources: County of Riverside, 2010; Eagle Aerial, April 2010.

Albert A. WEBB Associates
3.2 Project Characteristics

3.2.1 Proposed Project

The proposed Project represents an expansion of the existing Walmart store. The existing Walmart building encompasses approximately 125,827 SF. The Project involves a total expansion of 22,272 SF on the east side of the building where the Tire & Lube Express and exterior Garden Center are currently located, resulting in an approximately 153,399-SF store, including approximately 28,036 SF of a grocery sales area and new entry vestibules. The Project involves the demolition of the existing Garden Center and Tire & Lube Express that is currently located on the east side of the existing Walmart building (Figures 3-4a and 3.4b – Site Plan), adjacent to Van Buren Boulevard and the replacement of these areas by the expanded store. The existing Garden Center will be relocated to the southwest corner of the existing building, while the Tire & Lube Express will be eliminated in its entirety. The Project’s proposed site plan is presented on Figure 3-4a and 3.4b – Site Plan.

Other improvements that will be made to the existing store as part of the Project include revised building facades, one additional store entry vestibule, updated signage, parking lot upgrades, and improved landscaping that will bring the number of parking lot shade trees in compliance with the City’s Zoning Code. The parking lot upgrades consist of signalizing the entrance/exit of S. Project Driveway creating access from northbound lanes of Van Buren Boulevard by removing a portion of the existing median, reconfiguration and restriping of the parking area; straightening of the main drive aisle southerly of the building, extended drive aisles to better accommodate on-site traffic flow, and expanding the parking lot area on the southerly portion of the site. Further, approximately 23,000 SF of new parking area is proposed at the southern portion of the site to provide the Project with adequate parking.
Figure 3-4a. Site Plan
Walmart Expansion DEIR

Source: Nasland Engineering, Sept., 2010

Not to Scale
C-150E-GL-NO
EXISTING WALMART ±131,127 S.F.
PROPOSED WALMART ±153,399 S.F.
WALMART PARCEL ±13.73 ACRES

PORTION OF EXISTING BUILDING AREA TO REMOVED AND REPLACED WITH THE PROPOSED GARDEN CENTER

EXISTING TLE TO BE REMOVED

PROPOSED TRUCK DOCK

PROPOSED EXPANSION AREA

LIMITS OF EXISTING BUILDING EXTERIOR WALL TO BE REMOVED

GARDEN CENTER

PROPOSED EXPANSION AREA

Source: Nasland Engineering, Sept., 2010

Figure 3-4b. Site Plan
Walmart Expansion DEIR
Table 3-A – Existing Site and Proposed Expansion Areas, details proposed improvements to the site in terms of square footage of area affected. The expanded Walmart store will operate 24 hours a day, seven days a week except for certain designated holidays.

Table 3-A – Existing Site and Proposed Expansion Area\(^a\)

<table>
<thead>
<tr>
<th>Description</th>
<th>Existing Area</th>
<th>Proposed Area</th>
<th>Net Square-Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interior Area – Grocery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Sales Area</td>
<td>359</td>
<td>28,036</td>
<td>27,677</td>
</tr>
<tr>
<td>Food Sales Support Area</td>
<td>371</td>
<td>8,330</td>
<td>7,959</td>
</tr>
<tr>
<td>Stockroom/Receiving Area</td>
<td>9,265</td>
<td>15,168</td>
<td>5,903</td>
</tr>
<tr>
<td>Ancillary Area</td>
<td>9,675</td>
<td>13,043</td>
<td>3,368</td>
</tr>
<tr>
<td><strong>Sub-Total – Grocery</strong></td>
<td></td>
<td></td>
<td>44,907</td>
</tr>
<tr>
<td><strong>Interior Area – Non-Grocery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Merchandise Area</td>
<td>99,301</td>
<td>84,564</td>
<td>(14,737)</td>
</tr>
<tr>
<td>Restaurant Tenant Area</td>
<td>1,686</td>
<td>2,165</td>
<td>479</td>
</tr>
<tr>
<td>Tire &amp; Lube Express</td>
<td>5,170</td>
<td>0</td>
<td>(5,170)</td>
</tr>
<tr>
<td>Other(^b)</td>
<td>0</td>
<td>2,093</td>
<td>2,093</td>
</tr>
<tr>
<td><strong>Sub-Total – Non-Grocery</strong></td>
<td></td>
<td></td>
<td>(17,335)</td>
</tr>
<tr>
<td><strong>Total – Interior</strong></td>
<td>125,827</td>
<td>153,399</td>
<td>27,572</td>
</tr>
<tr>
<td><strong>Exterior Area – Garden Center</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total – Exterior</td>
<td>5,300</td>
<td>0</td>
<td>(5,300)</td>
</tr>
<tr>
<td><strong>Total Expansion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Totals</td>
<td>131,127(^d)</td>
<td>153,399</td>
<td>22,272(^c)</td>
</tr>
</tbody>
</table>

Notes:
\(^b\) Approximately 2,093 SF of the existing outdoor garden center will be allocated among the store interior space; specific uses are unknown.
\(^c\) Square-footage analyzed in DEIR.
\(^d\) Includes the 5,300-SF exterior Garden Center with Walmart building square footage.

### 3.2.1.1 Loading Facilities

A set of two additional depressed (i.e., below grade) loading docks are proposed on the north side of the Project site, more specifically, located directly adjacent to the north side of the two existing truck loading docks that will remain. As part of this improvement, a second 10-foot high masonry block wall will be constructed at the north perimeter of the new loading dock area, in addition to the existing 10-foot high masonry block wall that exists at the current loading docking and will remain. Ultimately, the proposed Project would include two depressed loading docks, totaling four loading bays, shielded by two 10-foot high masonry block walls. The new loading bays will be accessed by roll-up doors similar to the existing loading bays.
3.2.1.2 Parking
The Project proposes to reconfigure, remove, and repave portions of the store’s parking areas. This will include the removal and replacement of some of the non-native trees contained within the existing parking lot. Through improved design, the proposed parking lot configuration will be modified to include extended drive-aisles to better accommodate vehicular traffic flow, particularly in relation to pedestrians, and reduce or eliminate the current configuration’s propensity to result in congested conditions causing inefficient and potentially unsafe conditions.

Vehicular
The Project will include 45-degree angled parking stalls (spaces), as currently exist on the Project site, for ease of parking stall access and on-site vehicular circulation. In addition, approximately 23,000 SF of new parking area is proposed at the southern portion of the site to provide the Project with adequate parking. The Project will include 614 total parking spaces, which complies with the City’s minimum required ratio of 1 parking space for every 250 SF of retail floor area.

On January 1, 2011, the 2010 California Green Building Standards Code (CALGreen) took effect. Pursuant to CALGreen, a portion of the total number of parking spaces provided must be designated for any combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles (CALGreen, Section 5.106.5.2). Although the Project is not required to comply with the new CALGreen standards, which pertains to new construction only and does not include additions to existing structures, the Project will designate a portion of its total parking towards the goals set forth by CALGreen, Section 5.106.5.2. Table 3-B – Parking Data, provides existing and proposed parking lot data.

Table 3-B – Parking Data

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store Square Footage</td>
<td>131,127&lt;sup&gt;b&lt;/sup&gt;</td>
<td>153,399</td>
</tr>
<tr>
<td>ADA-Compliant Parking (Stalls)</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Standard Parking (Stalls)</td>
<td>721</td>
<td>599</td>
</tr>
<tr>
<td>Total Parking (Stalls)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>738</td>
<td>614</td>
</tr>
<tr>
<td>Ratio Provided (Stalls/SF)</td>
<td>5.63/1,000</td>
<td>4.00/1,000</td>
</tr>
<tr>
<td>City-Required Ratio (Stalls/SF)</td>
<td>4.00/1,000</td>
<td>4.00/1,000</td>
</tr>
<tr>
<td>Parking Required by Code</td>
<td>525</td>
<td>614</td>
</tr>
<tr>
<td>Parking deficiency?</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes:

<sup>a</sup> Source: Nasland Engineering, Riverside (S) Walmart Expansion #2028-03 – Site Plan, April 13, 2011.

<sup>b</sup> Net building (including the 5,300 SF exterior Garden Center) area square footage.

<sup>c</sup> Count does not include stalls utilized by cart corrals.
Table 3-C – Parking Dimensions, presents various planned dimensions that will occur in the Project’s parking areas.

Table 3-C – Parking Dimensions

<table>
<thead>
<tr>
<th>Area</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Stall Width</td>
<td>9 feet minimum</td>
</tr>
<tr>
<td>Parking Stall Depth</td>
<td>18 feet minimum</td>
</tr>
<tr>
<td>One-Way Aisle Width</td>
<td>20 feet</td>
</tr>
<tr>
<td>Two-Way Aisle Width</td>
<td>25 feet</td>
</tr>
<tr>
<td>Store Front Aisle Width</td>
<td>30 feet</td>
</tr>
</tbody>
</table>

Notes:

a Source: Nasland Engineering, Riverside (S) Walmart Expansion #2028-03 – Plot Plan.

Cart Corrals
The existing store’s parking lot configuration utilizes 24 vehicular parking stalls for use by shopping cart corrals. The Project proposes to modify the parking lot configuration which will result in 28 parking stalls designated for use as shopping cart corrals. The cart corrals are not included in the count of parking stalls proposed by the Project, which, as shown on Table 3-B, will not result in a parking deficiency.

Bicycles
Based on the City’s recommended bicycle parking formula of 5 percent of 75 percent of the total parking spaces, short-term bicycle parking for a minimum of 23 bicycles will need to be provided.² Although additions to existing structures are not required to comply with CALGreen, the proposed bicycle parking do meet the requirements set forth in CALGreen, Section 5.106.4.1.

3.2.1.3 Vehicular Access
With implementation of the Project, the N. Project Driveway is anticipated to remain as a right-in/right-out access, primarily for delivery truck access. Audrey Avenue is proposed to be reconfigured to right-in/right-out/left-out access only. The S. Project Driveway is proposed to be reconfigured to a signalized right-in/left-in/right-out access only intersection. Patrons are anticipated to utilize the driveway at Audrey Avenue and the S. Project Driveway to access the Project site. The S. Project Driveway is planned to serve as the main entry for the Project site, for vehicles approaching from the south. To further improve vehicle access and circulation from the S. Project Driveway, an existing drive aisle, which provides access to the off-site fast-food McDonald’s restaurant from the on-site parking lot, will be removed and replaced with landscaping (Figure 3-4a – Site Plan).

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² 75% of 614 spaces = approximately 461; 5% of 460 = approximately 23
3.2.1.4 Design and Appearance
The Project will include a complete façade redesign to complement Walmart’s current architectural design requirements with the intent to enhance the visual quality and character of the Project site. Additionally, the landscaping will be improved and enhanced with additional vegetation for visual appeal and functionality. A portion of the Van Buren Boulevard median from S. Project Driveway to N. Project Driveway will also receive a landscaping renovation. The renderings of the Project’s exterior elevations and the façade redesign are shown on Figure 3-5a and 3-5b – Exterior Elevations and described below.

Architecture
Façade improvements of the south elevation, which includes the main entrance, include relocating the existing primary entrance from the southwest portion of the elevation and creating two entrances with one to the east of the elevation’s center and the other to the west. The east entrance will provide direct access to the home and living sales area, and the west entrance will provide direct access to the market and pharmacy sales area. Splitting and relocating the patron entrance will create improved use of proportionality in the building design. The new entrances will protrude from the building and include arched roofs with metal awnings. The elevation’s center will display Walmart’s current logo and company name stylization on a wall panel with a prominent roof form. The elevation will include a considerable amount of articulation, varying roof lines, and clearly delineated design creating an appearance of a “base” and “top” of the structure in order to decrease the feeling and appearance of “big box” massing, or bulkiness. Further, the elevation will include a combination of materials such as painted masonry, EIFS-material (Exterior Insulation and Finish System) parapets, stone veneer pilasters as well as increased presence of vegetation and seating areas with a canopy.

The east elevation, which fronts Van Buren Boulevard, includes a façade improvement that is more reflective of the street’s Scenic Boulevard designation. The elevation’s façade is generally similar to that of the south elevation, although there is no entrance from this side of the building. The elevation incorporates spandrel glass to create the look of windows and façade transparency. Walmart’s current logo and company name stylization is also on the east elevation, at the center on a wall panel with a prominent roof form nearly exact to how it appears on the south elevation. Additionally, a tower feature will be located at the northeast corner (the tower feature will achieve a height of 30 feet from grade) to create architectural interest and soften the corner instead of a traditional sharp corner. These façade improvements will add to the visual appeal and interest of pedestrians and drivers along Van Buren Boulevard, and create a heightened sense of interaction with the street’s Scenic Boulevard designation. Further, the east elevation will complement other commercial developments along Van Buren Boulevard, the primary facades and entrances of which are generally oriented toward Van Buren Boulevard.
Figure 3.5a. Exterior Elevations

Source: Perkowitz & Ruth, 2011.
Figure 3.5b. Exterior Elevations

Source: Perkowitz & Ruth, 2011.

Not to Scale
The north and west elevations, which are not visible from either Van Buren Boulevard or the surface parking lot will incorporate the earth tone color palette of the façade improvements as well as painted masonry, “base” and “top” design delineation, and EIFS-material parapets. Specific to the north elevation, a second 10-foot masonry wall will be constructed for the two additional loading docks to prohibit views and noise of loading dock operations from the off-site uses to the north of the Project site. The design of these block walls will complement and blend with the façade improvements. Further, the tower feature, which is at the northern-most portion of the east elevation, will also be a feature of the north elevation in order to complete the tower appearance of the structure’s northeast corner.

**Landscaping**

The Project will also include landscaping improvements throughout the surface parking lot area and along the existing buffers around the Project site. The Project’s landscaping will include approximately 80 more parkway median trees to the surface parking lot area with height potentials of 40 feet to 80 feet and 30-foot spread. The landscaped buffers generally encircling the property will be comprised of low-scale, drought-resistant shrubs, ground covers and grasses. Along the landscaped buffers near the north and west elevations will include approximately 30 evergreen edge trees with height potentials of 30 feet to 40 feet and 30-foot spread. The landscaping plan will also include parkway accent trees with height potentials of 20 feet to 30 feet and 20-foot spread generally concentrated along the eastern portion of the Project site. Further, the median along Van Buren Boulevard from S. Project Driveway to N. Project Driveway will also be comprised of the low-scale, drought-resistant shrubs, ground covers and grasses, and approximately 20 parkway median trees. The landscape plan is shown on **Figure 3-6 – Landscape Plan**.

The City requires five percent of the site’s parking area to be landscaped. The site’s total acreage is decreasing due to the proposed Van Buren Boulevard street widening. While the Project’s proposed net on-site landscaped area will be marginally reduced as a result of the street widening, as shown in **Table 3-D – Landscaped Area Comparison**, percentage-wise the amount of landscaping proposed by the Project will be essentially the same as it exists today at approximately 16 percent.

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Acreage</td>
<td>13.73</td>
<td>13.49</td>
</tr>
<tr>
<td>Site Landscaped Acreage</td>
<td>2.32</td>
<td>2.17</td>
</tr>
<tr>
<td>Percentage of Landscaped Parking Area</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>City-Required Percentage of Landscaped Parking Area</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

**Notes:**

a Source: Nasland Engineering, August 11, 2011.
Figure 3-6. Landscape Plan


Not to Scale
3.2.1.5 Infrastructure and Utilities

Drainage

The existing area of the proposed building expansion is paved and graded to drain into two existing private storm drain systems. One system is an existing 24-inch reinforced concrete pipe (RCP) storm drain, which discharges off the property to an existing public 42-inch RCP storm drain in Van Buren Boulevard. The other system is an existing 18-inch RCP storm drain, which discharges off the property to an existing public 18-inch RCP storm drain at Gramercy Place. No modifications to the main storm drain systems are proposed. In addition, the proposed building expansion will be constructed at the paved portion of the property. This area is currently used for the Tire & Lube Express, exterior Garden Center, and parking. As such, no significant changes in grade will be necessary for storm drain discharge. The original basin at the proposed expansion site will not be increased or modified for the proposed building expansion. All proposed storm drain facilities are designed to accommodate a one-hundred-year storm event.

The erosion and sedimentation control plan for the Project will be designed in accordance with National Pollutant Discharge Elimination System (NPDES) permit guidelines. The Project will implement a Storm Water Pollution Prevention Plan (SWPPP) to meet the requirements of the NPDES permit during construction. The SWPPP will identify Best Management Practices (BMPs) to control erosion and water runoff during the Project’s construction phase. Erosion and sediment controls will include BMPs designed to reduce erosion of exposed soil, and may include, but not be limited to, soil stabilization controls, perimeter silt fences, placement of hay bales, and use of sediment basins. All SWPPP erosion and sediment controls will be in accordance with the currently adopted California State General Permit.

Wet Utilities

The Project will be served by existing water and sewer utilities and does not propose any new or relocated water or sewer facilities. Moreover, the City’s Water Engineering Division of the Public Utilities Department has identified its ability to provide water service to the Project.

Dry Utilities

There are existing overhead telephone lines located along Van Buren Boulevard on the east side of the Project site, across the entire Project site frontage. As part of the City’s street widening project, these lines will either be relocated above ground or installed underground. Since the telephone lines will be relocated as part of the City’s widening of Van Buren Boulevard, they are not a part of the Project analyzed in this DEIR.

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3 Gramercy Place is an east-west local street that terminates at the western boundary of the Project site.
4 According to a letter titled, “Water Service Availability to 5200 Van Buren Blvd, Riverside, California, APN#151-290-020,” from Toni Redman, Senior Engineering Aide, with the Public Utilities Department on May 11, 2011. The letter is available for review at the City of Riverside Planning Division of the Community Development Department.
3.2.1.6  **Sustainability Features**

Following the completion of the Project, the entire store will exceed the energy efficiency standards of Title 24. This will be accomplished by designing the expansion area of the building to an efficiency rating that is greater than the Title 24 requirement, and also by retrofitting certain features of the existing store in order to meet Title 24 requirements. To achieve this reduction in energy consumption, the expanded Walmart will incorporate, at a minimum, the following sustainability features or other features that are equally efficient:

**Energy Efficiency**

- **Lighting**
  
  - The entire store will include occupancy sensors in most non-sales areas, including restrooms, break rooms, and offices. The sensors automatically turn the lights off when the space is unoccupied.
  
  - Interior Lighting Retrofit Program: All lighting in the store, including the expansion area, will utilize T-8 fluorescent lamps and electronic ballasts, which are the most efficient lighting on the market.
  
  - All internally illuminated exterior building signage and many refrigerated food cases will use light emitting diodes (LEDs). In refrigerated food cases, LEDs perform well in the cold and produce less heat than fluorescent bulbs—heat which must be compensated for by the refrigeration equipment. LEDs also contain no mercury or lead.
    
    - LED technology is up to 52 percent more energy efficient than fluorescent lights.
    
    - Total estimated energy savings for LED lighting in the store’s grocery section is approximately 59,000 kWh per year, enough energy to power five single-family homes.

- **Central Energy Management System**
  
  - Walmart employs a centralized energy management system (EMS) to monitor and control the heating, air conditioning, refrigeration, and lighting systems for all stores from Walmart’s corporate headquarters in Bentonville, Arkansas. The EMS enables Walmart to constantly monitor and control the expanded store’s energy usage, analyze refrigeration temperatures, observe HVAC and lighting performance, and adjust system levels from a central location 24 hours per day, seven days per week. Energy usage for the entire store will be monitored and controlled in this manner.

- **Heating, Ventilation and Air Conditioning (HVAC)**
  
  - The store will employ one of the industry’s most efficient heating, ventilating and air-conditioning (HVAC) units available. The new HVAC units have EER (Energy Efficiency Ratio) ratings of approximately 12.1 to 14.3 which exceed the requirements of California Title 24.
- **Dehumidification**
  - The building will include a dehumidifying system that allows Walmart to operate the store at a higher temperature, use less energy, and allow the refrigeration system to operate more efficiently.

- **Food Displays**
  - The building will include a film on the freezer doors that combats condensation and requires no energy, unlike heating systems that are typically used to combat condensation.

- **White Roofs**
  - The existing store currently utilizes a white roof. After the expansion, the entire store will feature a white membrane roof instead of the typical darker colored roof materials employed in commercial construction. The white membrane roof’s higher reflectivity helps reduce building energy consumption and reduces the heat island effect, as compared to buildings utilizing darker roofing colors. The high solar reflectivity of this membrane results in lowering the “cooling” load by about 10 percent as compared to comparable stores with darker colored membranes.

- **Refrigeration**
  - Walmart uses non ozone-depleting refrigerants, such as R407a for refrigeration equipment and R410a refrigerant for air conditioning. The existing store currently utilizes this technology and the expansion area will also incorporate it.
  - The store’s refrigeration equipment will be roof-mounted in close proximity to the refrigerated cases. This reduces the amount of copper refrigerant piping, insulation, and refrigerant charge needed, as well as the potential for leaks.

- **Heat Reclamation**
  - The store will reclaim waste heat from on-site refrigeration equipment to supply approximately 70 percent of the hot water needs for the store.

**Water Conservation**

It is estimated that Walmart’s water conservation measures could save up to 530,000 gallons of water annually at this store location.

- Walmart will install high-efficiency urinals that use only 1/8 gallon (one pint) of water per flush.
  - This fixture reduces water use by 87 percent compared to the conventional one gallon per flush urinal.
- All restroom sinks will use sensor-activated, 1/2 gallon per minute, high-efficiency faucets.
  - These faucets reduce water usage by approximately 75 percent compared to mandated 1992 Environmental Protection Agency (USEPA) Standards.
  - During use, water flows through turbines built into the faucets to generate the electricity needed to operate the motion sensors.
- All restroom toilets will be highly efficient and reduce water use.
  - The fixture uses 20 percent less water compared to mandated EPA Standards of 1.6 gallon per flush fixtures.
  - The toilets utilize built-in water turbines to generate the power required to activate the flush mechanism. These turbines save energy and material by eliminating electrical conduits required to power automatic flush valve sensors.

**Materials and Finishes**
- The newly-constructed expansion area will be built using cement mixes that include up to 15–20 percent fly ash, a waste product of coal-fired electrical generation, or 25–30 percent slag, a by-product of the steel manufacturing process. By incorporating these waste product materials into its cement mixes, Walmart offsets the greenhouse gases emitted in the cement manufacturing process.
- The expansion area will use Non-Reinforced Thermoplastic Panel (NRP) in lieu of Fiber Reinforced Plastic (FRP) sheets on the walls in areas where plastic sheeting is appropriate, including food preparation areas, utility and janitorial areas, and associate break rooms. NRP can be recycled, has better impact resistance and, like FRP, is easy to keep clean.
- The expansion area will use plant-based oil extracted from a renewable resource as a concrete form release agent (a product sprayed on concrete forms to allow ease of removal after the concrete has set). This release agent is non-petroleum based, non-toxic, and a biodegradable agent.
- For the store’s exterior and interior field paint coatings, Walmart will use low volatile organic compound (VOC) paint.
- Paint products required for the Project will be primarily purchased in 55-gallon drums and 275-gallon totes, reducing the number of one gallon and five gallon buckets needed. These plastic buckets are filled from the drums and totes and then returned to the paint supplier for cleaning and reuse once construction is complete.
- Recycled Building Materials:
  - Construction of the expansion area will use steel containing approximately 85–90 percent recycled structural steel, which utilizes less energy in the mining and manufacturing process than does new steel.
All of the plastic baseboards and much of the plastic shelving included in the expansion area will be composed of recycled plastic.

- With regard to construction and demolition (C&D) recycling, Walmart will employ a C&D program during Project construction in order to capture and recycle as much of the metals, woods, floor and ceiling tiles, concretes, asphalts, and other materials generated as part of Walmart’s demolition and construction process as possible. Walmart will work with a waste management company to fully research all available C&D recycling facilities in the area, and its C&D program will seek to include the widest possible range of materials recovery options.

**Air Quality**

- Walmart limits delivery truck idling to three minutes through use of electronic engine controls that automatically shut off the engine after the set timeframe which limits idling on the Project site. Any emissions associated with idling or delivery trucks accessing the Project site will therefore be minimal.

### 3.2.1.7 Employment

The Project will expand the sales area square footage by 22,272 SF, resulting in a total area of 153,399 SF. As such, the Project will result in a need for additional employees to adequately staff added sales area. Utilizing internal employment data, the Applicant has determined the Project will generate approximately 85 new employees to staff the expanded store with implementation of the Project.

### 3.2.1.8 Truck Deliveries

The Project will expand the sales area for groceries sales floor and reduce the sales area for general merchandise sales floor as shown in Table 3-A – Existing Site and Proposed Expansion Areas. As such, the Project proposes an additional depressed loading dock with two new loading bays, which will result in a total of two depressed loading docks and four loading bays. Similar to the existing loading dock, the proposed addition will also be shielded by a 10-foot high masonry block wall.

Currently, a total of 18 trucks per week make deliveries to the existing Walmart store, which includes 3 refrigerated trucks. The estimated weekly truck deliveries under the Project will increase by 10 trucks to 28 trucks, with a total of 14 refrigerated trucks and one less regular truck.

### 3.2.1.9 Removal of Underground Storage Tanks, Hazardous Materials, and Airport Compatibility

The Project will involve the safe removal of the existing on-site underground storage tanks (USTs) associated with the Tire & Lube Express and any potential soil remediation that may have resulted from unknown leakage (see below). Additionally, the Project will provide for the safety of on-site employees, customers, and visitors as well as aircraft pilots through risk-reduction design measures resultant of the Project site’s proximity to Riverside Municipal Airport. Further, the Project will also provide for the safe handling of any potential occurrences of hazardous materials that may be encountered during Project construction.
Regarding the existing USTs, the Tire & Lube Express facility contains two 400-gallon used motor oil tanks, two 250-gallon new motor oil tanks, and one 200-gallon new motor oil tank. The tanks are all double-walled steel tanks. They are located below ground surface in the lower bay area, also known as the mechanic’s pit. The Project will remove the Tire & Lube Express facility and its associated components including the USTs. The Applicant has incorporated the following design considerations aimed at ensuring the safe removal of the USTs:

- Prior to removing the USTs, the Applicant or one of its contractors will obtain any necessary permits from the County and City. Removal of the USTs will be performed as described in California Fire Code Section 3404.2.14.1, and removal procedures will include:
  - Flammable and combustible liquids will be removed from the tanks and connected piping;
  - Unused piping will be disconnected from the tanks;
  - Residual liquids in piping will be drained into the tanks;
  - Tank openings will be capped and plugged, leaving one opening for pressure equalization;
  - Tanks will be purged of vapor and inserted with dry ice prior to removal;
  - Vapors will be monitored during tank removal to ensure safety; and
  - Removed tanks and piping will be disposed of in accordance with regulatory restrictions.

- Undisturbed soil samples will be collected at the lowest elevation beneath each former UST. A hole will be cored in the concrete floor to allow for sample collection. A California-registered professional geologist will use a hand auger to collect two soil samples beneath each of the former USTs, for a total of 10 soil samples. The soil samples will be collected approximately two and six feet below the top of the concrete floor of the lower bay. The soil samples will be placed in a glass jar and sealed with Teflon-lined lids. The samples will be labeled, placed on ice, and logged on a chain-of-custody form, which will accompany the samples to the analytical laboratory.

The soil samples will be submitted to a California-certified analytical laboratory. The laboratory will be instructed to analyze the soils samples for total petroleum hydrocarbons as waste oil (TPH[C_{24}-C_{40}]) using USEPA Method 8015 modified, California Assessment Manual metals using USEPA Method 6010B, and volatile organic compounds using USEPA Method 8260B.

Following completion of the soil sampling activities and once all analytical results have been received, a Site Assessment Report (SAR) will be prepared and submitted to the County’s Department of Environmental Health. The SAR will contain a description of UST removal and soil sampling activities, equipment disposal manifests, laboratory results in both written and tabular form, figures showing soil sampling locations, and a conclusion. The SAR will be signed by a California-registered professional geologist.
If impacted soil exceeds regulatory cleanup goals, a work plan for additional site assessment and/or remediation will be prepared and submitted to the County’s Department of Environmental Health Local Oversight Program.

Regarding the potential handling and/or disposal of existing hazardous materials, the Applicant has incorporated the following design considerations aimed at ensuring the safe removal of any existing hazardous materials:

- If any of the potentially hazardous products and materials identified by the Phase I Environmental Site Assessment require removal and disposal as part of the implementation of the Project, such activities will be conducted in accordance with all applicable federal, State, and local regulations. Such products and materials may include fluorescent lights and/or HID lights, HVAC and refrigeration units, lead-acid batteries, waste oil, antifreeze, asbestos-containing building materials, universal wastes, etc.; and

- If asbestos is encountered during construction of the Project, its removal and disposal will be conducted in accordance with all applicable federal, State, and local regulations.

Regarding risk-reduction design measures, and as a result of the Project site’s proximity to RMA, the Applicant has incorporated the following design considerations aimed at ensuring the safety of on-site customers, employees, and visitors, as well as aircrafts in flight:

- The Project will not include:
  - Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light, visual approach slope indicator, or FAA-approved obstruction lighting;
  - Any use which would cause sunlight to be reflected toward an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport;
  - Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area; or
  - Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

- This following notice will be provided to all potential purchasers of the Project site property and tenants of the buildings:

  **NOTICE OF AIRPORT IN VICINITY.** This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or
inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. *Business & Professions Code Section 11010 (b) (13)(A)*

- Any outdoor lighting that is installed will be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. All outdoor lighting will be downward facing;
- Any new retention basins on site will be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the retention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations will not be utilized in the Project landscaping;
- The single-story height will be preserved;
- No skylights will be included;
- Exterior walls will consist of 8-inch-thick solid grouted, 4-hour-rated concrete masonry;
- Building roof will consist of structural steel columns and steel roof structure framing elements, including structural steel decking;
  Use of windows will be limited to only the doors on the south elevation’s store entrances. The total area of glass (including doors) will account for only 2.3 percent of the total building face;
- Structure will incorporate an enhanced fire sprinkler system to exceed California Fire Code requirements; and
- Structure will include emergency exits that exceed the exit requirements set forth by the Riverside County Fire Code by approximately 15 to 20 percent.

### 3.2.1.10 Geotechnical Engineering Design Considerations

The Project will include the recommendations set forth in the most up to date geotechnical engineering investigation report. Currently, the Project will incorporate into its design the recommendations of *Geotechnical Engineering Investigation, Proposed Wal-Mart Expansion, 5200 Van Buren Boulevard, Riverside, California*, prepared by Krazan & Associates, Inc., on October 11, 2007 (hereinafter referred to as GEI), which is included as Appendix G to this DEIR.

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5 The east and south elevations facing Van Buren Boulevard and the parking lot, respectively, incorporates spandrel glass overlaying solid walls with no opening in the building structure. Spandrel glass is an architectural design technique utilized in creating only the appearance of an actual window for increased aesthetic appeal.
3.2.1.11 Project Implementation
Project construction will involve the demolition and removal of the Tire & Lube Express facility, removal and relocation of the Garden Center, and modifications to the parking lot, in addition to the new construction of the expansion area and new building-wide façade. All grading, site preparation, and foundation design for the expansion area will be performed in accordance with the recommendations contained in the Geotechnical Engineering Investigation, Proposed Wal-Mart Expansion 5200 Van Buren Boulevard, Riverside, California (Krazan & Associates, Inc.), which is included as Appendix G to the DEIR. Grading and site preparation activities will not be extensive since the Project site has previously been developed.

3.2.2 Project Objectives
The objectives of the proposed Project are:

- Positively contribute to the local economy.
- Create new job opportunities for local residents.
- Maximize affordable grocery shopping options for residents of the City and the immediate surrounding area.
- Provide a retail establishment that serves local residents and visitors with essential goods and services, in a safe and secure, 24-hour shopping environment.
- Provide regional commercial retail activities that would complement existing local retail activities and enhance commercial retail opportunities available in the City of Riverside.
- Promote economic growth and development that is consistent with the policies of the City of Riverside General Plan 2025.
- Develop a project consistent with the City of Riverside Municipal Code.
- Generate tax revenues to accrue to the various agencies within the Project area.
- Provide payments or physical improvements to mitigate for Project-related impacts on public services and infrastructure.
- Expand and develop retail uses near regional roadway and freeway facilities, and near other commercial uses to minimize travel lengths and utilize existing infrastructure to the extent possible.
- Ensure that commercial development has sufficient on-site parking to minimize impacts to the surrounding area and ensure that adequate parking is provided for customers and employees.
- Implement parking lot layout modifications to reduce nuisance and safety impacts related to vehicular traffic.
- Implement a high-quality architectural design that complements the existing design characteristics of the surrounding commercial uses and improves the aesthetics of the existing store.
3.2.3 Discretionary Actions and Approvals

In conformance with State CEQA Guidelines Sections 15050 and 15367, the City has been designated the “Lead Agency,” defined as the “public agency which has the principal responsibility for carrying out or approving a project,” for the Project’s environmental analysis. The DEIR serves as an informational document for use by the public agencies, the general public, and decision-makers. This DEIR discusses the impacts of development pursuant to the Project and related components, and analyzes the Project alternatives. This DEIR will be used by the City in assessing impacts of the Project.

The following public officials and agencies will use this DEIR when considering the following actions, as well as any other discretionary actions necessary or desirable to implement the Project identified through consultation with the appropriate public agencies:

- City of Riverside Planning Commission
  - Recommendation to the City Council for Certification of the Environmental Impact Report for the Walmart Expansion Project, Case Number P09-0601; and
  - Approval of Design Review Number P09-0600

- City Council of the City of Riverside
  - Certification of the Environmental Impact Report, Case Number P09-0601
  - Approval of the proposed Project

- City of Riverside
  - Issuance of applicable permits
Section 4 – Environmental Effects Found Not to be Significant and Initial Study/Notice of Preparation Comment Letters

CEQA requires that a DEIR discuss all potentially significant effects created by a project on the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an Initial Study as insignificant and unlikely to occur need not be discussed further in the DEIR unless information inconsistent with the finding in the Initial Study is subsequently received or a reasonable argument is raised in the public comment period.

4.1 Effects Found Not to be Significant During Preparation of the Initial Study/Notice of Preparation

Section 21100(c) of the Public Resources Code states that an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore, not discussed in detail in the EIR. Section 15128 of the State CEQA Guidelines adds, “Such a statement may be contained in an attached copy of an Initial Study.”

The Initial Study/Notice of Preparation (IS/NOP prepared for the Project (included as Appendix A to this DEIR) concluded that the proposed Project would not result in significant impacts to the following issue areas or portions of those issue areas, as described below. These specific issues listed are not substantively discussed further within the body of the DEIR.

4.1.1 Aesthetics

The following issues related to Aesthetics were determined to be less than significant during preparation of the IS/NOP. The analyses of other Aesthetic issues are presented in Section 5.1 of the DEIR.

4.1.1.1 Effect on a Scenic Vista

Due to the topography in the general area, the Project site does not provide a scenic vista which is generally defined as an area deemed aesthetically pleasing when viewed from a certain vantage point. The Project site is located in a built out urban environment currently occupied by the existing Walmart building and parking lot. The Project’s proposed building expansion of 22,272 SF represents a less than 20 percent increase in size over that of the existing building and will extend horizontally, not vertically in a way that will affect any scenic vista. Thus, implementation of the Project will not have an adverse effect on scenic vistas. Therefore, no impacts are anticipated.

4.1.1.2 Damage to Scenic Resources

The Project site is located adjacent to Van Buren Boulevard which is identified in the City of Riverside General Plan 2025 (GP 2025) as an Arterial roadway, with a Scenic and Special Boulevard and Parkway designation. A scenic resource is an element of a scenic area that contributes to the area’s scenic value and includes landform, vegetation, water, adjacent scenery, and may include a cultural modification to the natural environment. There are no scenic resources located on the Project site, which is the existing Walmart store, parking lot, and portions of Van Buren Boulevard adjacent to Walmart. There are no scenic resources located on the Project site, which currently consists of the existing Walmart store, that
could be affected by the Project. No officially designated State scenic highways or any eligible State scenic highways traverse the City of Riverside. Further, this Project proposes a 22,272-SF expansion that will include façade upgrades, particularly along the front of the building and the Van Buren frontage. Thus, implementation of the Project will not result in substantial damage to scenic resources within a State scenic highway. Therefore, no impacts are anticipated and this topic will not be further discussed in the DEIR.

4.1.1.3 Light or Glare
The Walmart store is visible from the adjacent residential areas and currently contains light sources associated with the existing Walmart store, including interior, store perimeter and signage lighting, and lighting necessary for the parking areas. Current lighting elements and signage may be removed, replaced, or relocated; however, implementation of the Project would not substantially increase the existing quantity or intensity of on-site light sources, or create any substantial new sources of light. Additionally, the Project site is not located within or near to the Mount Palomar Nighttime Lighting Policy Area. Thus, implementation of the Project will not conflict with Mount Palomar lighting policies or introduce new substantial sources of light to the Project site. Therefore, impacts are considered less than significant and this topic will not be further discussed in the DEIR.

4.1.2 Agriculture and Forest Resources
4.1.2.1 Farmland Conversion
The Project site, which is currently developed with an existing Walmart store and its associated parking areas, portions of Van Buren Boulevard, as well as the surrounding areas, are not designated as Farmland by the California Department of Conservation, Farmland Mapping and Monitoring Program. All Project-related activities will take place within previously-disturbed land designated as Urban and Built-Up Land. Thus, implementation of the Project will not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.2.2 Conflict with Existing Zoning/Williamson Act Contract
The Project site, which is currently developed with an existing Walmart store and its associated parking areas, and portions of Van Buren Boulevard, is not used or zoned for agriculture, or subject to a Williamson Act contract. Thus, implementation of the Project will not conflict with existing zoning for agricultural use or a Williamson Act contract. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.2.3 Conflict with Forest Land
Forest land, as defined in California Public Resources Code (PRC) Section 12220(g), is land that can support 10 percent of native tree cover of any species under natural conditions and that allows for the management of one or more forest resources. Timberland, as defined in PRC Section 4526, means land other than land owned by the federal government and land designated as experimental forest land, which is capable of growing a crop of trees for any commercial species, including Christmas trees. The Project site is zoned Commercial Retail – Two Story Building and Building Setback Overlay Zones (CR-S-2-
X) and currently developed with an existing Walmart store, associated parking areas, and portions of Van Buren Boulevard. Thus, implementation of the Project will not conflict with existing zoning for, or cause the rezoning of forest land or timberland. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.2.4 Forest Land Conversion
The Project site does not contain forest land or timberland and is not zoned for forest land or timberland. The Project site is currently developed with an existing Walmart store, its associated parking areas, and portions of Van Buren Boulevard. The areas surrounding the Project site are developed with existing commercial and residential uses. Thus, implementation of the Project will not influence land use changes in the surrounding area. For these reasons, implementation of the Project will not result in the loss of forest land or the conservation of forestland to non-forest uses. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.2.5 Other Changes in Environment
The Project site is currently developed with an existing Walmart store, its associated parking areas, and portions of Van Buren Boulevard. Land uses surrounding the Project site consist of existing commercial and residential uses and are not used for agricultural purposes. There is no forest land on, or in the vicinity of the Project site. Thus, implementation of the Project will not involve changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or forest land to non-forest use. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.3 Air Quality
The following issue related to Air Quality was determined to be less than significant during preparation of the IS/NOP. The analysis of other Air Quality issues is presented in Section 5.2 of the DEIR.

4.1.3.1 Air Quality Plan
The Air Quality Management Plan (AQMP) for the South Coast Air Basin (Basin) sets forth a comprehensive program that will lead the Basin into compliance with all federal and State air quality standards. The AQMP’s control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections.

The proposed Project, involves the expansion of the existing Walmart store on property designated in the GP 2025 as commercial and surrounded by existing multi-family residential use to the north; commercial and single-family residential uses and vacant land to the east; commercial and multi-family residential uses and vacant land to the south; and single-family residential uses to the west. The proposed Project is the expansion of an existing commercial land use on property designated for commercial use. Thus, the Project is in compliance with local land use plans and will not conflict with or
obstruct implementation of the AQMP. Therefore, impacts are considered less than significant and this topic will not be discussed further in the DEIR.

4.1.4 Biological Resources
The following issues related to Biological Resources were determined to be less than significant during preparation of the IS/NOP. The analysis of other Biological Resource issues is presented in Section 5.3 of the DEIR.

4.1.4.1 Riparian Habitat
There is no riparian habitat or surface water present on or adjacent to the Project site, which is located in an urbanized and built up area. The Project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies and regulations, or by the California Department of Fish and Game (CDFG) or United States Fish and Wildlife Services. Thus, implementation of the Project will not result in an adverse effect on riparian habitat or other sensitive natural community. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.4.2 Native/Migratory Fish or Wildlife
The Project site is fully developed and located within an existing shopping center and urbanized area. The Project site is bounded by residential and commercial uses and Van Buren Boulevard. The Project site is not located within a designated wildlife movement corridor. Thus, implementation of the Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.4.3 Local Policies/Ordinances
Construction of the proposed Project would remove approximately 100 existing ornamental trees from the Project site. The existing vegetation that would be removed is ornamental and was planted in conjunction with development of the original Walmart. After completion of the exterior building and parking lot improvements, the Project would install new landscaping that will include planting replacement and additional trees throughout the landscaped areas on site. After completion of the proposed Project, 16 percent of the Walmart parking area will be landscaped. This exceeds the City’s requirement of 5 percent landscaping in parking areas and this topic will not be discussed further in the DEIR.

There is a potential that some trees located outside of the store’s parking lot areas will need to be removed such as those located in medians within street rights-of-way that are planned for modification. The City has an adopted Urban Forest Tree Policy Manual; this Manual provides guidelines for the planting, pruning, preservation, and removal of all trees located within street rights-of-way and recreational facilities. The intent of the Urban Forest Tree Policy Manual is to provide guidelines for the preservation and protection of the City of Riverside’s tree heritage and the Urban Forest of Riverside.
Any removal of or modifications made to existing trees that are located within rights-of-way or associated with the Project, are subject to and will be handled in accordance with the Urban Forest Tree Policy Manual. Adherence to the procedures and requirements contained in that document will ensure that conflicts between the removal of any trees and the City’s existing policies would not occur. Thus, implementation of the proposed Project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.4.4 Habitat Conservation Plan
The Project site is within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). However, the Project site is located within a fully developed area and is not located within a Criteria Cell and there are no other approved local, regional, or State habitat conservation plans applicable to the Project site. Thus, implementation of the proposed Project will not conflict with the provisions of an adopted habitat conservation plan or natural community conservation plan. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.5 Cultural Resources

4.1.5.1 Historical Resource
Section 15064.5(a)(3) of the State CEQA Guidelines generally defines historical resources as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with events, important persons, or distinctive characteristics of a type, period, or method of construction; representing the work of an important creative individual; or possessing high artistic value; and are generally 50 years old or more. The structures to be impacted by the Project on the site are not 50 years old or more and do not meet the criteria found in Section 15064.5(a)(3) of the State CEQA Guidelines. Thus, implementation of the Project will not result in a substantial adverse change in the significance of a historical resource. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.5.2 Archaeological Resource
The Project site’s archaeological sensitivity is classified in the GP 2025 as being “Low” and the Project site has been previously graded and developed with a commercial structure and its associated parking areas. Therefore, the potential for the Project to cause a substantial impact to archaeological resources is less than significant and this topic will not be discussed further in the DEIR.

4.1.5.3 Paleontological Resource
The Project site’s prehistoric cultural (i.e., paleontological) resources sensitivity is classified in the GP 2025 as being “Unknown.” Areas classified as “Unknown” are those areas confined to the City’s downtown area that were urbanized during the early and mid-1900s, whereby the current
environmental conditions may not reflect the original environmental conditions. Although the Project site is classified as having an “Unknown” sensitivity level to paleontological resources, the site has been previously graded and subsequently developed with a commercial structure and its associated parking areas. Project implementation would not disturb any areas on the Project site not previously graded as part of the construction of the original Walmart. Minor earthmoving/grading is proposed along the southerly side of the Project site, which currently consists of landscaped planting. Additionally, there are no unique geologic features on the Project site. Therefore, potential impacts related to the direct or indirect destruction of a unique paleontological or geologic feature will be less than significant and this topic will not be discussed further in the DEIR.

### 4.1.5.4 Human Remains

The Project site has been previously graded and developed with a commercial structure and its associated parking areas. There are no known human remains interred within the site. In the unlikely event that human remains are encountered during Project grading activities, the proper authorities will be notified and standard procedures for the respectful handling of human remains during the earthmoving activities would be adhered to in compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097.98. Therefore, potential impacts with regard to the disturbance of human remains will be less than significant and this topic will not be discussed further in the DEIR.

### 4.1.6 Geology and Soils

The following Geology and Soils analysis is based, where cited, on the Project-specific geotechnical study titled *Geotechnical Engineering Investigation, Proposed Wal-Mart Expansion, 5200 Van Buren Boulevard, Riverside, California*, prepared by Krazan & Associates, Inc., on October 11, 2007 (hereinafter referred to as GEI), which is included as Appendix G to this DEIR. The following issues related to Geology and Soils are found to be less than significant based upon the geotechnical study.

#### 4.1.6.1 Earthquake Fault

The Project site is located in a seismically active area of Southern California (GEI, p. 3). The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to identify earthquake fault zones along traces of both recently and potentially active major faults. Cities and counties that contain such zones must inform the public regarding the location of these zones, which are usually one-quarter mile or less in width. Proposed development plans within these earthquake fault zones must be accompanied by a geotechnical report prepared by a qualified geologist describing the likelihood of surface rupture.

The nearest substantial active fault is Elsinore, which is approximately 10 miles away, and the nearest fault zone is Cucamonga, which is approximately 17 miles away (GEI, p. 3). The area shows no mapped faults on site, according to maps prepared by California Geologic Survey (GEI, p. 3). In addition, no evidence of surface faulting was observed on site during the reconnaissance by the preparers of the

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1 *GP 2025 FPEIR*, page 5.5-4.
geotechnical study (GEI, p. 3). There are no fault zones within the City (GP 2025, Figure PS-1 – Regional Fault Zones). Therefore, no impacts will occur and this topic will not be discussed further in the DEIR.

4.1.6.2 Seismic Ground Shaking
Although ground rupture is not considered to be a major concern at the Project site, the Project site will likely be exposed to moderate to severe ground shaking during an earthquake in the structure’s lifetime, as well as periodic slight to moderate earthquakes (GEI, p. 5). Unabated, structures may be at risk of failure during a severe seismic event. Some degree of structural damage due to stronger seismic shaking should be expected at the Project site, but the risk can be reduced through adherence to seismic design codes (GEI, p. 5). The Project will implement all applicable requirements of the 2010 California Green Building Standards (CALGreen) Code, or current edition of the California Building Standards Code, applicable to the Project at time plans are approved and building permits are issued, which provides criteria for the seismic design of buildings. Seismic design criteria account for peak ground acceleration, soil profile, and other site conditions; furthermore, they establish corresponding design standards intended primarily to protect public safety and secondly to minimize property damage. Further, surface ground motions based on United States Geologic Survey information requires modification to address the presence of deep alluvial soils, such as those found at the Project site (GEI, p. 5). Based on California Geologic Survey, Probabilistic Seismic Hazards Mapping, the horizontal Peak Ground Acceleration is anticipated to be 0.444 g-force for a 10 percent probability of being exceeded in 50 years resulting from a maximum magnitude earthquake of 6.7 on the Richter magnitude scale (GEI, p. 5). However, with adherence to seismic design codes encompassed in the CALGreen Code, potential impacts related to strong seismic ground shaking will be less than significant, and this topic will not be discussed further in the DEIR.

4.1.6.3 Liquefaction
Soil liquefaction is a state of soil particle suspension caused by a complete loss of strength when the effective stress drops to zero and normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional, although liquefaction has occurred in soils other than clean sand. Liquefaction usually occurs under vibratory conditions such as those induced by seismic events. The Project site is located within an area classified as having a high potential for liquefaction (GP 2025, Figure PS-2 – Liquefaction Zones). To determine the liquefaction potential of the Project site, the following items were evaluated: soil type, groundwater depth, relative density, initial confining pressure, and intensity and duration of ground shaking. The predominant soils with the Project site consist of alternating layers of loose to medium dense silty sand and medium stiff sandy clayey silt. Low to very low cohesion strength is associated with the sandy soil. Groundwater was encountered at a depth of nine feet below existing Project site grade during the field investigation and the maximum possible high groundwater depth of five feet was used in the geotechnical analysis. The liquefaction analysis indicated that the sandy soils below the existing grade had a moderate potential for liquefaction under seismic conditions. (GEI, p. 5)

To minimize potential post-construction soil movement from liquefaction, the Project will be constructed in accordance with the provisions of the 2010 California Building Code (CBC) and in
accordance with the design recommendations of the GEI study specifically addressing liquefaction (see Section 3.2.1.10 Geotechnical Engineering Design Considerations in the Project Description of the DEIR). Therefore, as the Project will adhere to recommendations in the geotechnical study, potential impacts related to ground failure including liquefaction will be less than significant and this topic will not be discussed further in the DEIR.

4.1.6.4 Landslides
The Project site is located in an area categorized in the City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR, Figure 5.6-1 – Areas Underlain by Steep Slope) as having slopes of zero to 10 percent. The Project site is on relatively flat ground and there are no topographic features, such as slope hazards, that would contribute to a landslide. Thus, implementation of the Project would not result in adverse effects involving landslides. Therefore, no impact is anticipated and this topic will not be discussed further in the DEIR.

4.1.6.5 Soil Erosion
The Project will not result in substantial soil erosion or the loss of topsoil. The Project site is relatively flat and mostly paved as a result of the development of the original Walmart; therefore, grading activities will be minimal. The Project will incorporate an erosion and sedimentation control plan as stipulated in the Project’s Storm Water Pollution Prevention Plan (SWPPP) (see Section 5.6 Hydrology and Water Quality in this DEIR for additional discussion). This plan will be prepared in accordance with the current adopted version of the California State Construction General Permit. Additionally, the Project is required to adhere to applicable grading and building permit requirements, as detailed in Title 17 Grading Code of the City of Riverside Municipal Code, and adherence to the City’s standard conditions for grading and construction. Additionally, the geotechnical study prepared for the Project contains recommendations addressed soil conditions to minimize potential impacts (see Section 3.2.1.10 Geotechnical Engineering Design Considerations in the Project Description of the DEIR). Due to the nature of the Project, which requires only minimal grading, and with adherence to the erosion and sedimentation control plan in its SWPPP and the recommendations in the geotechnical study, potential impacts related to substantial soil erosion or the loss of topsoil are considered less than significant and this topic will not be discussed further in the DEIR.

4.1.6.6 Geologic Unit
The Project site is located within an area that is shown in the GP 2025 as not having a high shrink-swell or landslide potential (GP 2025, Figure PS-3 – Soils with High Shrink-Swell Potential). However, the Project site is located in an area identified as having a high potential for liquefaction (see Section 4.1.6.3). The Project site was previously developed with the existing Walmart store, parking lot, and portions of Van Buren Boulevard. Remedial grading and earthwork, if required, would have been completed as part of the development of the existing Walmart store. The geotechnical study prepared for the Project contains recommendations relative to site preparation and foundation design that will be incorporated into the Project (see Section 3.2.1.10 Geotechnical Engineering Design Considerations in the Project Description of the DEIR). Therefore, with adherence to the recommendations in the GEI study and existing local and State regulations, impacts with respect to being located on an unstable
geologic unit are anticipated to be less than significant and this topic will not be discussed further in the DEIR.

4.1.6.7 Expansive Soil
The Project site was previously developed and any remedial site preparation for the existing Walmart would have been completed prior to construction of the existing building. The recommendations in the GEI study relative to the foundation of the building expansion will be implemented and will reduce potential impacts related to being located on expansive soil or creating substantial risks to life or property (see Section 3.2.1.10 Geotechnical Engineering Design Considerations in the Project Description of the DEIR). Therefore, with adherence to the recommendations in the GEI study, impacts regarding expansive soils will be less than significant and this topic will not be discussed further in the DEIR.

4.1.6.8 Septic Tanks/Disposal Systems
The existing Walmart, as well as surrounding development, is currently served by City sanitary sewers for the disposal of wastewater. The proposed Walmart expansion will also be served by sanitary sewers. The Project does not include septic tanks or alternative waste water disposal systems. Therefore, no impacts will occur and this topic will not be discussed further in the DEIR.

4.1.6.9 Seismic Induced Settlement
One of the most common phenomena during seismic shaking accompanying any earthquake is the induced settlement of loose unconsolidated soils. Based on subsurface conditions at the Project site, the moderate seismicity of the region, any loose fill materials at the Project site could be vulnerable to this potential hazard. However, the GEI study contains recommendations, which will be implemented by the Project to address potential over-excavation and rework of disturbed soils and/or loose fill materials (see Section 3.2.1.10 Geotechnical Engineering Design Considerations in the Project Description of the DEIR). The sandy soils encountered will be subject to seismic settlement. The total and differential seismic-induced settlement, prior to Project construction, is expected to be approximately 5 inches and 2½ inches, respectively. (GEI, p. 6) Therefore, as the Project will adhere to the recommendations in the GEI study specifically addressing seismic-induced settlement, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.6.10 Collapsible Soils
The upper, on-site native soils are moisture-sensitive and are moderately compressible under saturated conditions. Structures within the Project vicinity have experienced excessive post-construction settlement, when the foundation soils become near saturated. The geotechnical study prepared for the Project contains recommendations to address to removal of collapsible soils and the compaction of soil to reduce potential impacts (see Section 3.2.1.10 Geotechnical Engineering Design Considerations in the Project Description of the DEIR). (GEI, p. 6) Therefore, as the Project will implement the recommendations in the GEI study specifically addressing collapsible soils, impacts will be less than significant and this topic will not be discussed further in the DEIR.
4.1.7 Hazards and Hazardous Materials

The following issues related to Hazards and Hazardous Materials were determined to be less than significant during preparation of the IS/NOP. The analysis of Hazards and Hazardous Materials issues is presented in Section 5.5 of the DEIR.

4.1.7.1 Routine Transport

The existing Walmart store currently stores and sells items considered to be hazardous materials such as paint and paint thinners, bleaches, household cleaning substances, pesticides, fertilizers, pool chemicals, and automotive materials including new and used oil, batteries, and tires. The proposed expansion of the Walmart store will offer groceries, including meat, produce, bakery, and deli items, and alcohol for off-site consumption. The additional products/services proposed would not create a significant hazard to the public, as potential uses would not involve a significant amount of hazardous materials being transported to or stored on site. Removal of the existing Tire and Lube Express facility from the store may cause a reduction in the storage and sales of those products.

A variety of State and federal laws govern the transport, generation, treating, and disposal of hazardous wastes. The City and County of Riverside have the authority to inspect on-site uses and to enforce State and federal laws governing the storage, use, transport, and disposal of hazardous materials and wastes. In addition, the City and County of Riverside currently require that an annual inventory of hazardous materials in use on site and a business emergency plan be submitted for an annual review, as required by Chapter 6.95 of the California Health and Safety Code. Chapter 6.95 of the California Health and Safety Code requires any business handling or storing in excess of 55 gallons or 500 pounds of a solid or liquid hazardous material, or 200 cubic feet of gas, to submit hazardous materials management business plans (HMBPs). These plans are to provide emergency responders with emergency contact information, site-specific chemical inventories, and maps of the vicinity and facilities. Facilities storing materials that are “acutely” hazardous and in excess of the quantities provided in CCR, Title 19, must submit a more comprehensive risk management plan which includes off-site consequences analysis, maintenance, training programs, and an executive summary. Walmart is already in compliance with these requirements for the existing store, which are mandated per State and federal law. Therefore, potential impacts associated with the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials will be less than significant and this topic will not be discussed further in the DEIR.

4.1.7.2 Vicinity of a School

There are three schools located within one-quarter mile of the Project site: Melody Lane Children’s Center, Kids of America private school, and Jackson Elementary School. The Project’s current and future on-site hazardous materials and chemicals are and will be stored in accordance with accepted practices, as discussed under item 4.1.7.1, above. Therefore, potential impacts associated with hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school will be less than significant and this topic will not be discussed further in the DEIR.
4.1.7.3 Hazardous Materials Site
The Public Safety Element of the GP 2025 provides locations and descriptions of various hazardous waste sites in the City and its sphere. The GP 2025 Figure PS-5, Hazardous Waste Sites, indicates the Project site is near to a site that is listed as an active State Response site in the GP 2025 FPEIR, Table 5.7-C. However, the Project site itself is not located on a site that is included on any list of hazardous materials sites compiled pursuant to California Government Code Section 65962.5. All Project-related construction will take place at the site of the existing Walmart and will not entail any off-site improvements. Therefore, no impacts will occur and this topic will not be discussed further in the DEIR.

4.1.7.4 Vicinity of an Airport
According to the Riverside County Airport Land Use Compatibility Plan Policy Document’s (RCALUCP) Compatibility Map (Map RI-1), the majority of the Project site is located in Compatibility Zone D with a small portion located in Compatibility Zone E for Riverside Municipal Airport (RMA). Compatibility Zone D allows a maximum density/intensity of 300 people. Per Policy 4.2.6 of the RCALUCP, an intensity bonus of 390 people per acre is available if the building design incorporates risk-reducing features such as concrete walls, limiting building heights to a single story, and increasing the number of emergency exits. The proposed Walmart expansion and upgrade, incorporates these features. There is no limitation on the number of people allowed within Compatibility Zone E. Therefore, no impacts are anticipated and this topic not be discussed further in the DEIR.

4.1.7.5 Vicinity of Private Airstrip
The Project site is not located in the vicinity of a private airstrip. Therefore, no impacts are anticipated and this topic not be discussed further in the DEIR.

4.1.7.6 Emergency Response/Evacuation Plan
The proposed Project includes the expansion of an existing retail store in an area with existing developed commercial and residential uses and would not involve any uses or site plan changes that would interfere with emergency operations within the City. In addition, the proposed Project includes modifications to the three existing site entrances, including the signalizing of a currently unsignalized entrance intersection, adding an additional southbound lane adjacent to the site, and adding dual northbound left turn lanes into the southernmost site entrance, which will improve access and circulation. The additional traffic trips generated by the Project are not anticipated to obstruct or impact any major transportation routes that could be used for emergency evacuations out of the area. For
these reasons, the Project will not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts are anticipated to be less than significant and this topic will not be discussed further in the DEIR.

4.1.7.7 Wildland Fires
Figure PS-7 of the GP 2025, identifies two fire hazard areas within the City and its sphere of influence. The Project site does not lie within either fire hazard area and is located in an urbanized area, surrounded by residences and other commercial businesses. The adjacent areas do not contain the brush- and grass-covered hillsides often associated with wildfires. The proposed Project is an expansion of an existing use within an area designated for commercial and residential uses and will not encroach into wildland areas. Thus, implementation of the Project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.8 Hydrology and Water Quality
The following issues related to Hydrology and Water Quality were determined to be less than significant during preparation of the IS/NOP. The analysis of other Hydrology and Water Quality issues is presented in Section 5.6 of the DEIR.

4.1.8.1 Deplete Groundwater Supplies
Domestic water for the City of Riverside area is mostly supplied from local groundwater. Approximately 97 percent of the water supplied by the City of Riverside Public Utilities Department (RPU) is supplied from Bunker Hill, Riverside North and South, and the Gage Exchange groundwater basins. According to the GP 2025 FPEIR, future water supply for the City includes additional groundwater pumping and treatment, additional exchange with the Gage Canal Company, additional potable water made available through increased recycled water use, additional supply made available through the Seven Oaks Dam Conservation Storage Project, and increased imported water from Western Municipal Water District.

The City quantifies water demand in terms of acre feet per year (AFY), per meter. Commercial uses have an equivalent of one meter, which is consistent with the commercial water demand of the existing Walmart store and will also be consistent with the demand of the expanded Walmart store. According to the GP 2025 FPEIR Table 5.16-G, one commercial meter represents five AFY. Therefore, there is no significant increase in water demand from the Project and this topic will not be discussed further in the DEIR.

The Project’s commercial water supply needs are within the parameters anticipated by the GP 2025 and those parameters were determined to be less than significant in the GP 2025 FPEIR. As discussed in the GP 2025 FPEIR, because safe yield will be maintained in the groundwater basins and none of the basins are over drafted (nor are they projected to become so); because other forms of conservation such as recycled water will be developed; and because the Project will have no significant direct impacts to groundwater recharge, the Project will not 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. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.8.2 Alter Existing Drainage Resulting in Erosion
The Project site is located in a developed area that already connects to the City’s drainage system. No alteration of the existing drainage pattern of the site or area is proposed. Grading on the site will be minimal and altered portions of the site will be designed to generally drain in the same direction as they currently drain. There are no streams or rivers that cross the site or that will be impacted by the Project. Thus, implementation of the Project would not substantially alter the drainage pattern of the site or area resulting in substantial erosion on or off site. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.8.3 Alter Existing Drainage Resulting in Flooding
The Project site is located in a developed area that already connects to the City’s drainage system. No alteration of the existing drainage pattern of the site or area is proposed. Grading on the site will be minimal, and altered portions of the site will be designed to generally drain in the same direction as they currently drain. There are no streams or rivers that cross the site or that will be impacted by the Project. Thus, implementation of the Project would not substantially alter the drainage pattern of the site or area resulting in substantial flooding on or off site. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.8.4 Exceed Stormwater Drainage System Capacity
The Project site is located in a developed area that already connects to the City’s drainage system. No alteration of the existing drainage pattern of the site or area is proposed. Grading on the site will be minimal and altered portions of the site will be designed to generally drain in the same direction as they currently drain. Runoff volumes will remain generally the same as existing runoff volumes since the Project site is already fully developed. During temporary construction activities, the Project will employ a SWPPP that will include Best Management Practices (BMPs). This will serve to reduce construction-related polluted runoff to below the level of significance. The Project will also incorporate a Water Quality Management Plan to reduce long-term operational-related polluted runoff. Thus, implementation of the proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.8.5 Housing in Flood Hazard Area
The Project site is not located in either the 100- or 500-year flood zones and no housing components are proposed. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.8.6 Impede or Redirect Flood Flows
The Project site is not located within a 100-year flood hazard zone. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.
4.1.8.7  **Levee or Dam Failure**
The Project site is located in an area that could be impacted by water resulting from the failure of four separate dams: Woodcrest Dam, Prenda Dam, Alessandro Dam, and Mary Street Dam. However, due to the distance between the Project site and the dams, the time from dam failure to arrival of “first water” at the site would be approximately 96 minutes for Woodcrest Dam, 240 minutes for Prenda Dam, 364 minutes for Alessandro Dam, and 412 minutes for Mary Street Dam. According to the GP 2025 FPEIR (p. 5.8-23), the “instantaneous failure of the dam,” as assumed for purposes of mapping on GP 2025 Figure PS-4 – Flood Hazard Areas, is unlikely; therefore, repairs could be made to a leaking or damaged dam to avoid significant damage to life and/or property. Additionally, Division 3 of the California Water Code, places supervision of non-federal dams the responsibility of the State Division of Safety of Dams (DSOD). The DSOD routinely inspects operating dams to ensure that they are adequately maintained, and to direct the dam owner to correct any deficiencies. Although the Project site is located within dam inundation areas, under a worst-case condition, the minimum time for “first water” to reach the site would take over one and one-half hours which provides reasonable time for notification and preparation or potential evacuation. Furthermore, the dams are routinely inspected and maintained. Thus, the Project’s potential impacts related to exposing people or structures to a significant loss, injury, or death involving flooding, will be less than significant and this topic will not be discussed further in the DEIR.

4.1.8.8  **Inundation by Seiche, Tsunami, or Mudflow**
A seiche is a to-and-fro vibration of a body of water that is similar to the slopping of water in a basin. According to Chapter 5.8 of the GP 2025 FPEIR, the two most likely areas within the City that could be subject to seiche are Lake Evans and Lake Mathews, located approximately five and one-half miles northeast and five and one-half miles south of the Project site, respectively. Thus, the Project site is not prone to impacts related to seiche. Tsunamis are tidal waves that occur in coastal areas. However, the Project site is located over 30 miles from the ocean. Therefore, there is no foreseeable risk associated with tsunami. The Project site is also not located near to a large body of water (the nearest large bodies of water are the Santa Ana River, nearly two miles north of the Project site, and Lake Mathews, over five and one-half miles from the Project site), or significant slope, thus making mudflows highly unlikely. Therefore, with regard to impacts related to seiche, tsunami, or mudflow, no impacts will occur and this topic will not be discussed further in the DEIR.

4.1.9  **Land Use and Planning**
4.1.9.1  **Divide Established Community**
The Project site has a General Plan land use designation of Commercial (C) and a zoning designation of CR-S-2-X – Commercial Retail – Two Story Building and Building Setback Overlay Zones. The surrounding existing land uses are comprised of Commercial (C) and Medium Density Residential (MDR). The Project proposes to expand the existing store by 22,272 SF on the already-developed site. Because the Project will not physically divide an established community, no impact will occur and this topic will not be discussed further in the DEIR.
4.1.9.2 Conflict with Land Use Plan, Policy or Regulation
The Project’s General Plan Land Use Designation is Commercial (C) and the zoning designation is CR-S-2-X – Commercial Retail – Two-Story Building and Building Setback Overlay Zones. These land use and zoning designations allow for a wide variety of retail, office, and service-oriented uses to meet the needs of residents and visitors.

The Project is consistent with and supported by the following GP 2025 Goals, Objectives, and Policies:

<table>
<thead>
<tr>
<th>General Plan Element</th>
<th>Goal/Objective/Policy</th>
<th>Project’s Relationship to Goal/Objective/Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use and Urban Design</td>
<td>Policy LU-8.1: Ensure well-planned infill development Citywide, allow for increased density in selected areas along established transportation corridors.</td>
<td>The proposed Project constitutes an infill project along Van Buren Boulevard, which is an established transportation corridor.</td>
</tr>
<tr>
<td>Land Use and Urban Design</td>
<td>Objective LU-15: Recognize Van Buren Boulevard as a significant parkway, linking neighborhoods along its path to the Santa Ana River, the Arlington Heights Greenbelt, Victoria Avenue and the California Citrus State Historic Park. Policy LU-15.3: Balance the traffic carrying function of Van Buren Boulevard with goals to enhance neighborhood aesthetics, pedestrian/bicycle safety and the historic environments of Arlington Village and the Arlington Heights Greenbelt.</td>
<td>The proposed Project includes improvements to Van Buren Boulevard to facilitate the safe movement of traffic generated by the Walmart expansion and exterior improvements to the Walmart store that will improve its visual appearance.</td>
</tr>
<tr>
<td>Land Use and Urban Design</td>
<td>Policy LU-22.5: Review all proposed projects within the airport influence areas of RMA, Flabob Airport or March Air Reserve Base/Inland Port Airport as noted on Figure PS-6 – Airport Safety Zones and Influence Areas for consistency with all applicable airport land use compatibility plan policies adopted by the Riverside County Airport Land Use Commission (ALUC) and the City of Riverside, to the fullest extent the City finds feasible.</td>
<td>The majority of the Project site is located in Compatibility Zone D with a small portion of the site located in Compatibility Zone E of RMA. The Project has been reviewed by ALUC and determined to be conditionally consistent with the 2005 Riverside Municipal Airport Compatibility Plan because the design incorporates risk reduction features in addition to the design considerations discussed in Section 3.2.1.9 of the DEIR (ALUCDR).</td>
</tr>
</tbody>
</table>

GP 2025 Goals, Objectives, and Policies not discussed, are not applicable to the proposed Project because they either identify a City responsibility or program or pertain to a geographic area or feature not associated with the Project site.
The proposed Project is consistent with the City’s General Plan and Zoning Code. Thus, implementation of the Project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.9.3 Conflict with Habitat Conservation Plan
The Project site is within the boundaries of the MSHCP. However, the Project site is not located within a Criteria Cell. Additionally, there are no other approved local, regional, or State habitat conservation plans applicable to the Project site. Further, the proposed Project is located within a fully developed area. Thus, implementation of the proposed Project will not conflict with the provisions of any habitat conservation plan or natural community conservation plan. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.10 Mineral Resources
4.1.10.1 Known Mineral Resource
The State Mining and Geology Board (SMGB) has established four Mineral Resources Zones (MRZ) for the classification of potentially valuable resources. However, the California Department of Conservation is primarily interested in preservation of access to significant resource areas included in MRZ-2a and 2b. MRZ-2a establishes areas where the available geologic information indicates that there are significant mineral deposits while MRZ-2b establishes areas where the available geologic information indicates that there is a likelihood of significant mineral deposits. The Project site is located in an area identified as MRZ-4. This designation indicates that there is insufficient data to assign any other designation. The Project site has been previously disturbed and is currently developed with an existing Walmart store, associated parking areas, and portions of Van Buren Boulevard. However, given the relatively small size of the Project site and the amount of existing commercial and residential development surrounding the Project, it is highly unlikely that any surface mining or mineral recovery operation could feasibly take place on the Project Site. Thus, implementation of the Project would not result in the loss of availability of a known mineral resource. Therefore, the impact will be less than significant and this topic will not be discussed further in the DEIR.

4.1.10.2 Locally Important Mineral Resource
The Project site is in an area designated as MRZ-4 and is not located in an area designated in the General Plan, specific plan, or other land use plan as a locally important mineral resources recovery site. Therefore, potential impacts related to the loss of availability of a locally-important mineral resource recovery site will be less than significant and this topic will not be discussed further in the DEIR.

4.1.11 Noise
The following issues related to Noise were determined to be less than significant during preparation of the IS/NOP. The analysis of other Noise issues is presented in Section 5.7 of the DEIR.
4.1.11.1 Groundborne Vibration/Noise
Long-term Project operations will not produce any substantial groundborne vibration or noise levels. These impacts are typically associated with heavy construction activities such as blasting, pile driving or extensive grading which will not be required for the Project because the site has previously been developed and Project construction will not require heavy or extensive grading activities. Additionally, both the GP 2025 and the Municipal Code (Section 7.35.010) limit construction activities within the City to specific times and days of the week (and restrict construction activities on federal holidays). Further, even during those specified times, construction activity is subject to the noise standards provided in the Municipal Code. Therefore, the short-term nature of the construction activities, the lack of blasting, pile driving, or heavy construction activities, and through compliance with GP 2025 policies and Section 7.35.010 of the Riverside Municipal Code, the Project’s potential to produce excessive groundborne vibration or noise levels will be less than significant and this topic will not be discussed further in the DEIR.

4.1.11.2 Temporary Ambient Noise
Within the City of Riverside, both the GP 2025 and the Municipal Code (Section 7.35.010) limit construction activities to specific times and days of the week (and restrict construction activities on certain holidays). Further, even during those specified times, construction activity is subject to the noise standards provided in the Municipal Code. Therefore, due to the short-term nature of the construction activities and through compliance with GP 2025 policies and Section 7.35.010 of the Riverside Municipal Code, the Project’s temporary noise impacts associated with construction activities will be less than significant and this topic will not be discussed further in the DEIR.

4.1.11.3 Vicinity of Airport Plan
The Project site is located approximately one-half mile south of the RMA and approximately one-third of a mile south of that airport’s lowest indicated noise contour, 55 a-weighted decibel (dBA) Community Noise Equivalent Level (CNEL), shown in the GP 2025. According to the RCALUCP Compatibility Map (Map RI-1), the majority of the Project site is located within Compatibility Zone D and a small portion of the Project site is within Compatibility Zone E. With respect to noise concerns for projects located in Compatibility Zones D and E, the only land use criteria listed in Table 3A – Compatibility Zone Factors, of the RCALUCP, applies to residential uses in Zone D, which are not proposed for the Project. There are no noise concerns with respect to Compatibility Zone E. While single-event airport noise could be audible at the Project site, noise levels will not be significant. Cumulative airport noise levels will be below 55 dBA CNEL which is below the Project’s noise standard of 60 dBA CNEL. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.11.4 Vicinity of Private Airstrip
The Project site is not located in the vicinity of a private airstrip. Therefore, no impacts are anticipated and this topic will not be discussed further in the DEIR.
4.1.12 Population and Housing

4.1.12.1 Induce Population Growth
The Project does not propose the construction of residential units that could directly lead to population growth. The Project site is currently occupied by the existing Walmart store, including the Tire and Lube Express facility. However, the area currently occupied by the Tire and Lube Express facility is to be replaced with an expansion of the general portion of the store. Although the Project may incrementally increase the employment population base in the City, this increase is not significant enough to directly induce substantial population growth in the area. Additionally, the land uses surrounding the Project site are already developed and served by existing water, sewer, gas, electrical, and roadway infrastructure. Other than the Project-related improvements to Van Buren Boulevard, no expansion of infrastructure is required. Therefore, the potential for the Project to indirectly induce substantial population growth will be less than significant and this topic will not be discussed further in the DEIR.

4.1.12.2 Displace Existing Housing
Implementation of the proposed Project will not displace existing housing. The area surrounding the Project site is completely developed and the Project site is located in a developed retail/commercial center. The Project will expand the existing Walmart store from 125,827 commercial SF to 153,399 commercial SF, within the existing Walmart property boundaries. Thus, implementation of the Project will not displace substantial numbers of existing housing which would necessitate the construction of replacement housing elsewhere. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.12.3 Displace People
Implementation of the proposed Project will not displace people, necessitating the construction of replacement housing. The Project proposes the expansion of an existing Walmart store from 125,827 commercial SF to 153,399 commercial SF, within the existing Walmart property boundaries. Implementation of the Project will not displace substantial numbers of people which would necessitate the construction of replacement housing elsewhere. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.13 Public Services

4.1.13.1 Fire Protection
The Project proposes the 22,272-SF expansion of a retail store which could lead to an incremental increase in the number of potential calls placed with the fire department; however, the Project will not cause substantial adverse physical impacts requiring new or physically-altered fire protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives. Therefore, impacts are considered less than significant and this topic will not be discussed further in the DEIR.
4.1.13.2 Police Protection
The Project proposes the 22,272-SF expansion of a retail store which could lead to an incremental increase in the number of potential calls placed with the police department; however, the Project will not cause substantial adverse physical impacts requiring new or physically altered police protection facilities in order to maintain acceptable service ratios, response times or other performance objectives. Therefore, impacts are considered less than significant and this topic will not be discussed further in the DEIR.

4.1.13.3 Schools
The Project proposes the 22,272-SF expansion of a retail store. The Project would neither create additional housing nor substantial population numbers; however, the Project will pay school mitigation fees as established by State and local laws. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.13.4 Parks
The Project proposes the 22,272-SF expansion of a retail store. The Project would neither create additional housing nor a substantial increase in park users. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.13.5 Other Public Facilities
The Project proposes the 22,272-SF expansion of a retail store. The Project would neither create additional housing nor substantial population numbers. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.14 Recreation
4.1.14.1 Increased Use of Existing Facilities
The Project will expand the existing Walmart store by approximately 22,272 SF. The Project would neither create additional housing nor substantially increase population or the number of park users. Thus, implementation of the Project will not increase the use of existing neighborhood or regional parks, or other recreational facilities such that substantial physical deterioration of the facility would occur. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.14.2 Construction/Expansion of New Facilities
The Project generally consists of the expansion of an existing retail store. The land use is designated for Commercial (C) and zoned for Commercial Retail (CR). The Project does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.15 Transportation/Traffic
The following issues related to Transportation/Traffic were determined to be less than significant during preparation of the IS/NOP. The analysis of other Transportation/Traffic issues is presented in Section 5.8 of the DEIR.
4.1.15.1 Air Traffic Patterns
A majority of the Project site is located within Airport Land Use Compatibility Zone D and a small portion of the Project site is located within Airport Land Use Compatibility Zone E of the ALUCP; however, the Project does not contain any component that could alter air traffic patterns. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.15.2 Design Feature Hazards
The Project’s use is compatible with the GP 2025. The Project will include internal parking lot circulation and roadway improvements along Van Buren Boulevard. These improvements include lane reconfigurations, the addition of one southbound through lane adjacent to the Project site and the signalization of a currently unsignalized entrance. However, the proposed on-site internal circulation improvements will be within a parking lot and are designed to increase circulation efficiency and facilitate parking, and will not include any component that could be considered a hazard to driving. The roadway improvements will not substantially alter the existing nature of the roadways or introduce sharp curves or dangerous intersections. Thus, implementation of the Project will not result in a substantial increase of hazards due to a design feature. Therefore, impacts are considered less than significant and this topic will not be discussed further in the DEIR.

4.1.15.3 Inadequate Emergency Access
The Project site is adjacent to Van Buren Boulevard and will be accessible via three separate entrances. The parking lot will include striping that delineates appropriate drive aisles and parking areas. Improvements to Van Buren Boulevard will include lane reconfigurations, the addition of one southbound lane and signalization of a currently unsignalized entrance. All parking and roadway improvements will be approved by the City’s Public Works Department based on acceptable criteria that includes avoidance of emergency obstructions. Thus, implementation of the Project will not result in inadequate emergency access. Therefore, no impact will occur and this topic will not be discussed further in the DEIR.

4.1.15.4 Alternative Transportation
Riverside Transit Agency (RTA) provides service to the Project area via Route 21 and there is a bus stop on Van Buren Boulevard along the Project site frontage. RTA recommends a bus turn-out be incorporated as part of the Project-related improvements on Van Buren Boulevard; however a bus turn-out is not needed as the proposed southbound lanes of Van Buren Boulevard and existing Class II bike lane will allow buses to be out of the through lane, which satisfies RTA’s design guidelines. The Project will therefore continue to accommodate the needs of the RTA. Since the Project is commercial, it is anticipated that most of the persons visiting the Project site will be via automobile. Additionally, there is a Class 2 bike route on Van Buren Boulevard and the Project will not result in blocked roadways, bikeways, or reduced parking. Thus, implementation of the Project will not conflict with policies, plans, or programs that support alternative transportation, such as buses and bicycles. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.
4.1.16 Utilities and System Services

4.1.16.1 Exceed Wastewater Treatment Requirements
The Project will not exceed water or wastewater treatment requirements of the Santa Ana region of the Regional Water Quality Control Board (RWQCB). The Riverside Public Works Department operates a comprehensive wastewater collection, treatment, and disposal system. Treatment occurs at the Riverside Regional Water Quality Treatment Plant. In 2005, the plant had a capacity of 40 million gallons per day with capacity anticipated to be reached not before year 2025; a planned expansion of the plant, approved in October 2010, will allow the facility to ultimately treat 52.2 million gallons of wastewater per day. GP 2025 states the City has adequate planned capacity to meet the wastewater treatment needs of all future Riverside residents and businesses (p. PF-13). Additionally, the Project’s proposed expansion will not substantially increase the Project’s current generation of wastewater; therefore, potential impacts related to exceeding wastewater treatment requirements of the applicable RWQCB, will be less than significant and this topic will not be discussed further in the DEIR.

4.1.16.2 New Water/Wastewater Treatment Facilities
The City quantifies water demand in terms of AFY, per meter. Commercial uses have an equivalent of one meter, which is consistent with the commercial water demand of the existing Walmart store and will also be consistent with the demand of the expanded Walmart store. According to the GP 2025 FPEIR Table 5.16-G, one commercial meter represents five AFY so there is no significant increase in water demand from the Project. The Project’s commercial water supply needs are within the parameters anticipated by the GP 2025 and those parameters were determined to be less than significant in the GP 2025 FPEIR. Thus, implementation of the Project will not result in the need for construction of new water or wastewater treatment facilities or the expansion of existing facilities. Therefore, impacts are considered to be less than significant and this topic will not be discussed further in the DEIR.

4.1.16.3 New Stormwater Drainage Facilities
The Project will not require the construction of new storm water drainage treatment facilities or expansion of existing facilities. The Project is located within an existing urbanized area and the storm water would be collected in the existing drainage system connecting to the City’s storm water system. In general, site drainage will be consistent with current conditions and will not substantially increase over existing conditions. Thus, implementation of the Project will not result in the need for new or expanded storm water facilities. Therefore, no impacts will occur and this topic will not be discussed further in the DEIR.

4.1.16.4 Sufficient Water Supplies
Domestic water for the City of Riverside area is mostly supplied from local groundwater. In 2010, 99.9 percent of the water supplied by the RPU was extracted from Bunker Hill Basin, and Riverside North and South Basins (UWMP 2010, p. 4-7). According to the GP 2025 FPEIR, future City water supply includes additional groundwater pumping and treatment, additional exchange with the Gage Canal Company, additional potable water made available through increased recycled water use, additional supply made available through the Seven Oaks Dam Conservation Storage Project, and increased imported water from Western Municipal Water District. Furthermore, none of the groundwater basins are over drafted
(nor are they projected to become so) and other forms of conservation such as recycled water will be developed. Thus, sufficient water supplies are available to serve the Project. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.16.5 Adequate Wastewater Treatment Capacity
The Project will not exceed water or wastewater treatment requirements of the Santa Ana region of RWQCB. The Riverside Public Works Department operates a comprehensive wastewater collection, treatment, and disposal system. Treatment occurs at the Riverside Regional Water Quality Treatment Plant. In 2005, the plant had a capacity of 40 million gallons per day with capacity anticipated to be reached not before year 2025; a planned expansion of the plant, approved in October 2010, will allow the facility to ultimately treat 52.2 million gallons of wastewater per day. GP 2025 states the City has adequate planned capacity to meet the wastewater treatment needs of all future Riverside residents and businesses (p. PF-13). Additionally, the Project’s proposed expansion will not substantially increase the Project’s current generation of wastewater. Thus, implementation of the Project will not result in an inadequate capacity determination by the wastewater treatment provider. Therefore, impacts are considered less than significant and this topic will not be discussed further in the DEIR.

4.1.16.6 Sufficient Landfill Capacity
All non-hazardous solid waste collected is taken to the Robert A. Nelson Transfer Station which is owned by the County of Riverside and operated under a 20-year franchise by a private company. Waste is then transferred to the Badlands Landfill for disposal. All Riverside County landfills are Class III disposal sites that are permitted to receive non-hazardous municipal solid waste. The Project’s proposed store expansion of 22,272 SF will marginally increase solid waste generation at the site; however, the Project does not represent a significant increase over existing solid waste generation. Thus, the Project will be served by a landfill with sufficient permitted capacity to accommodate the Project’s solid waste disposal needs. Therefore, impacts will be less than significant and this topic will not be discussed further in the DEIR.

4.1.16.7 Solid Waste Regulations
The City is currently achieving a 60 percent diversion rate, well above State requirements. The City remains committed to continuing its existing waste reduction and minimization efforts with the programs that are available through the City. Implementation of the Project, which is consistent with the GP 2025, will not conflict with any federal, State, or local regulations related to solid waste. Therefore, no impacts will occur and this topic will not be discussed further in the DEIR.

4.2 Initial Study/Notice of Preparation Comment Letters
The public review period for the IS/NOP began on September 30, 2010 and ended on October 29, 2010. The agencies that commented on the IS/NOP and a brief summary of the issues raised are presented in Table 4.2-A – Summary of Comments Received in Response to the IS/NOP. As indicated in Section 4.1.7.4., above, the comment letter received from ALUC resulted in the addition of a discussion of safety hazards for people working in the Project area. This analysis is presented in Section 5.5, Hazards and Hazardous Materials of the DEIR. Copies of the comment letters are included in Appendix A.
Table 4-A – Summary of Comments Received in Response to the IS/NOP

<table>
<thead>
<tr>
<th>Commenting Agency (Date of Letter)</th>
<th>Summary of Comment</th>
<th>Location in DEIR in which Comment is Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airport Land Use Commission (ALUC) (10-19-2010)</td>
<td>This letter suggests an incorrect analysis of airport land use compatibility issues was presented in the Initial Study and requests the analysis be corrected and resubmitted to ALUC. This letter further requests that if the revised analysis indicates the Project is inconsistent with the ALUCP, that issue be treated as significant and addressed in the DEIR.</td>
<td>The analysis has since been revised and is included in Section 5.5, Hazards and Hazardous Materials of this DEIR. Following receipt of the ALUC comment letter, ALUC has reviewed the Project and determined it is conditionally consistent with the 2005 Riverside Municipal Airport Land Use Compatibility Plan (ALUCDR).</td>
</tr>
<tr>
<td>Department of Toxic Substances Control (DTSC) (10-26-2010)</td>
<td>The department requested current or historic uses that may result in the release of hazardous materials be identified and identify mechanisms in which to initiate any required investigation and/or remediation of any contaminated site.</td>
<td>The requested discussion regarding current and historic uses that may have resulted in the release of hazardous materials is included in Section 5.5, Hazards and Hazardous Materials.</td>
</tr>
<tr>
<td>Department of Toxic Substances Control (11-10-2010)</td>
<td>The department recommends an environmental site investigation and/or remediation under a Work Plan be conducted to evaluate whether the underground storage tank at the Tire and Lube Express facility poses a threat to human health or environment prior to Project implementation and requests that the DEIR identify how any required investigation and/or remediation will be conducted.</td>
<td>The requested discussion regarding underground storage tank removal is included in Section 5.5 Hazards and Hazardous Materials.</td>
</tr>
<tr>
<td>Soboba Band of Luiseño Indians (10-06-2010)</td>
<td>Request for consultation with project developer and land owner and the presence of a Native American Monitor from the Soboba Band of Luiseño Indians during any ground-disturbing proceedings, including surveys and archaeological testing.</td>
<td>The request for consultation is not required per CEQA and is not an environmental issue; therefore, this does not need to be addressed in the DEIR. Nonetheless, the City consulted with Mr. Joseph Ontiveros of the Soboba Band of Luiseño Indians on June 28, 2011, at which time Mr. Ontiveros indicated the Soboba Band of Luiseño Indians had no concerns.</td>
</tr>
<tr>
<td>Commenting Agency</td>
<td>Summary of Comment</td>
<td>Location in DEIR in which Comment is Addressed</td>
</tr>
<tr>
<td>-------------------</td>
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</tr>
<tr>
<td>South Coast Air Quality Management District (SCAQMD) (10-06-2010)</td>
<td>The district requests that air quality analysis be in accordance with all SCAQMD methodology and provides recommended mitigation measures.</td>
<td>The analysis presented in Section 5.2, Air Quality was conducted in accordance with SCAQMD methodology. Said Section 5.2 also identifies mitigation measures.</td>
</tr>
</tbody>
</table>

regarding the proposed Project. With respect to the use of a Native American Monitor during Project-related ground disturbance, as discussed in Section 4.1.5, above, the IS/NOP prepared for the Project (Appendix A) determined that potential impacts to cultural resources would be less than significant because implementation of the Project would not entail any grading or ground-disturbing activity on any portion of the site that was not previously graded and subsequently developed with the existing Walmart, its associated parking areas, or perimeter landscaping. For these reasons, monitoring is not deemed necessary and this issue will not be further addressed in this DEIR.
<table>
<thead>
<tr>
<th>Commenting Agency (Date of Letter)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Riverside Transit Agency (RTA)</td>
<td>RTA states it currently serves the Project site with a bus stop on Van Buren Boulevard. RTA further states that the Project is a potential destination for its patrons. RTA requests public transportation is considered with the Project. RTA provides bus stop design recommendations that accommodate a large transit bus.</td>
<td>As discussed in Section 4.1.15.4, above, although RTA provides service to the Project area via Route 21, because the Project is a commercial one, it is anticipated that most of the persons visiting the Project site will arrive via automobile. Implementation of the Project will not conflict with policies, plans, or programs that support alternative transportation, such as buses. Walmart will work with the City and RTA regarding appropriate bus stop amenities. Therefore, impacts with respect to bus service will be less than significant and this topic will not be discussed further in the DEIR.</td>
</tr>
</tbody>
</table>

### 4.3 Effects Found Not to be Significant as Part of the EIR Process

#### 4.3.1 Aesthetics

As discussed in Section 5.1, Aesthetics, the Project site is located in the Arlanza neighborhood. Development in this neighborhood experienced its peak between the 1950s and 1970s, and currently consists of natural land, hillsides, traditional single-family residential subdivisions, industrial uses, and commercial uses generally concentrated along the Van Buren Boulevard corridor. The Project site is developed with an existing 125,827-SF Walmart structure constructed in 1993 and first occupied in 1994, an attached Tire & Lube Express facility, an exterior 5,300-SF Garden Center, 732-stall parking lot, and landscaped buffers at the property lines. The terrain of the Project site and immediate area is relatively flat. On-site vegetation includes landscaped buffers consisting of manicured grass and ornamental non-native trees located around the property boundary, shade trees located in small, concrete-curbed islands throughout the parking lot. The existing parking lot currently does not comply with the shade tree ratio required under Section 19.580.090 of the City’s Zoning Code with respect to the trees that are dispersed throughout the parking lot in concrete-curbed islands.

The existing Walmart structure incorporates an older and dated appearance with design trends that are generally discouraged in modern design. The existing elevations create an appearance of mass or bulkiness as a result of the limited articulation and lack of proportionality. The existing design of the eastern elevation does not take into account Van Buren Boulevard as a Scenic and Special Boulevard and Parkway or as a commercial corridor. The Project will include a complete façade redesign and improved landscaping plan with the intent of improving the existing Project site. The new architecture and color...
palette, combination of building materials, varying roof lines, and an east elevation that reflects and engages Van Buren Boulevard as a Scenic and Special Boulevard and Parkway will generate heightened visual appeal of the site, and thus, result in a beneficial aesthetic enhancement compared to existing conditions. In addition, the Project will add approximately 135 trees to the Project site and Van Buren Boulevard median from the S. Project Driveway to the N. Project Driveway, climate-appropriate shrubs, groundcover and grasses.

While the façade redesign will greatly alter and enhance the appearance of the existing Walmart store, general design features such as building height and density will be generally comparable with the existing structure and consistent with the Zoning Code. Further, the Project will result in a beneficial impact to the visual character and quality of the surrounding locale that has already been the focus of redevelopment or infill efforts. Therefore, the Project will result in a beneficial aesthetic enhancement to the existing Walmart structure and landscaping in compliance with applicable Zoning Code requirements and heighten the visual quality of surrounding locale. The Project’s potential to substantially degrade the existing visual character or quality of the site and its surroundings is considered to be less than significant without mitigation.

4.3.2 Air Quality
As discussed in Section 5.2, Air Quality, the Project is located within the South Coast Air Quality Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin consists of Orange County, coastal and mountain portions of Los Angeles County, as well as Riverside and San Bernardino Counties. Air quality impacts can be divided into short-term and long-term impacts. Short-term impacts are usually related to construction and grading activities. Long-term impacts are usually associated with build-out conditions and long-term operations of a project. Both short-term and long-term air quality impacts can be analyzed on a regional and localized level. Regional air quality thresholds examine the effect of project emissions on the air quality of the Basin, while localized air quality impacts examine the effect of project emissions on the neighborhood around the project site.

Based on the regional significance threshold (RST) analysis for the proposed Project, the short-term construction and long-term operation emissions will not exceed any thresholds. Regional air quality impacts from short-term construction and long-term operation are considered less than significant. Based on the localized significance threshold (LST) analysis of the proposed Project, the short-term construction of the Project will not result in localized air quality impacts to sensitive receptors in the Project vicinity for oxides of nitrogen (NOx), carbon monoxide (CO), particulate matter 10 microns or less in diameter (PM-10), or particulate matter 2.5 microns or less in diameter (PM-2.5). No long-term LST analysis is needed due to the lack of stationary source emissions. Additionally, the proposed Project will not contribute to an exceedance of either the California ambient air quality standards (CAAQS) or the national ambient air quality standards (NAAQS) for CO emissions and will not form any CO hot spots in the Project area.
The portion of the Basin within which the Project is located is designated as a non-attainment area for nitrogen dioxide (NO₂) under State standards, and for ozone, PM-10, and PM-2.5 under both State and federal standards. The Project will not conflict with or obstruct the implementation of the Air Quality Management Plan (AQMP), and as the Project’s short- and long-term emissions are below regional and localized thresholds, the Project is not considered to have a cumulatively considerable net increase on non-attainment pollutants in the region under applicable State and federal standards.

The closest sensitive receptors are residents adjacent to the Project site. The short- and long-term LST analysis and the CO hot spots analysis indicate that localized impacts to sensitive receptors in the immediate vicinity of the Project site will not be significant. On a localized level, the Project will not result in the exposure of sensitive receptors to substantial pollutant concentrations during construction or operation.

According to the California Air Resources Board (CARB) Air Quality and Land Use Handbook, common sources of odor complaints include: sewage treatment plants, landfills, recycling facilities, petroleum refineries, and auto body shops. The proposed Project does not contain land uses typically associated with emitting objectionable odors and is therefore not anticipated to create any objectionable odors during Project operation. Recognizing the short-term duration and quantity of construction emissions in the Project area and the limited outdoor exposure of persons to outdoor odors, the Project will not expose substantial numbers of people to objectionable odors. The proposed Project would also be required to comply with SCAQMD Rule 402 to correct occurrences of public nuisances.

Therefore, the Project’s potential to 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 in non-attainment 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 is considered to be less than significant without mitigation.

4.3.3 Greenhouse Gas Emissions
As discussed in Section 5.4, Greenhouse Gas Emissions, the Project will incorporate a number of Project design considerations that will significantly reduce greenhouse gas (GHG) emissions, many of which are consistent with GHG reduction strategies developed by groups and public agencies, such as CARB, the California Air Pollution Control Officer’s Association and the California Attorney General’s Office. To ensure that the latest, most advanced technology can be used, the proposed Project may substitute design considerations so long as they are proven to be equally effective or more effective at reducing GHG emissions.

The total GHG emissions generated from the Project is approximately 1,583 metric tonnes of carbon dioxide equivalent (MTCO₂E) per year which includes construction-related emissions amortized over a typical project life of 30 years. The Project’s emissions are less than the SCAQMD draft threshold for
commercial projects of 3,000 MTCO\textsubscript{2}E per year. On this basis, the Project does not generate GHG emissions that would cause a significant impact on the environment. Further, the City has adopted policies and programs in the GP 2025 to promote the use of clean and renewable energy sources, facilitate alternative modes of transportation and reduction in vehicle miles traveled, waste reduction, water conservation, and for the efficient and sustainable use of energy. The City also recently updated its Green Action Plan. However, there are no local or regional plans specifically adopted for the purpose of reducing GHG emissions. Since the Project involves the expansion of an existing building that in and of itself will not result in any changes to the existing land use patterns in the Project area, incorporates many design features to reduce water and energy consumption, and does not generate significant amounts of GHG, it will not conflict with any applicable plan, policy, or regulation for the reduction in GHG emissions.

Therefore, the Project’s potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and conflict with or obstructing the implementation of applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases is considered to be less than significant without mitigation.

4.3.4 Hazards and Hazardous Materials

As discussed in Section 5.5, Hazards and Hazardous Materials, the Project site was assessed for recognized environmental conditions in the Phase I Environmental Site Assessment (Phase I). The Phase I was performed within the scope and limitations of American Society of Testing and Materials (ASTM) International Practice E1527-05 and an Applicant-imposed environmental due diligence policy for business environmental risks. The Phase I resulted in no recognized environmental conditions being identified on the Project site that affects or may affect development or use of the Project site, or otherwise warrants additional investigation. However, ASTM non-scope considerations/business environmental risks were identified. Specifically, potential universal wastes were identified on site. When decommissioned/discarded, certain items located on the Project site would be considered a “universal waste.” Occurrences of on-site universal wastes included the beverage refrigerators that are located within the northern exterior refrigeration unit enclosure. According to the Phase I, these items have subsequently been removed by the vendors.

Together with the Project design considerations and the mandatory compliance of regulations, standards, and guidelines established at the federal, State, and local level, related to storage, use, and disposal of hazardous materials, and compliance with applicable manufacturers’ instructions, the public and environment would be protected from the accidental release of hazardous materials during construction. The Project is not anticipated to present any hazards to RMA or its associated activities during construction. Further, through adherence to regulatory guidelines, operation activities would not create a significant hazard to the public or environment through the release of hazardous materials, and the removal of the Tire & Lube Express and its associated components including the underground storage tanks may constitute an overall reduction in potential on-site hazards and hazardous materials.
The Project site is located in Zone D and Zone E of RMA and subject to the compatibility analysis of RCALUCP. The portion of the Project site including the existing Walmart is located in Zone D. Due to the over- and under-projection potentials, which result in inconsistent compatibility determinations with RCALUCP, the ALUC has determined applying the standard person-to-total-gross-building-square-footage ratio that is used in the individual airport policies of French Valley, Chino, and Perris Valley. In applying said ratio, the single-acre intensity surpasses the single-acre maximum intensity of 300 persons; however, risk-reduction measures, when granted, can provide up to a 30 percent intensity bonus. As a result of the risk-reduction measures (see Section 3.2.1.9 and Section 5.5.5 Project Design Consideration) proposed by the Applicant, which ALUC found satisfactory, ALUC has determined the project is conditionally consistent with the 2005 Riverside Municipal Airport Land Use Compatibility Plan.

Therefore, the Project’s potential to result in a safety hazard for people residing or working in the Project area 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; or to create a significant hazard to the public or the environment through a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment is considered to be less than significant without mitigation.

4.3.5 Hydrology and Water Quality

As discussed in Section 5.6, Hydrology and Water Quality, the Project site is located within the larger Santa Ana River Watershed, and is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). Construction of the proposed Project has the potential to result in discharges from soil disturbance; however, through compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Statewide General Construction Permit (“General Permit for Stormwater Discharges Associated with Construction Activity – Order No. 2009-0009-DWQ”), which includes preparation of a SWPPP and implementation of BMPs to prevent storm water pollution, the Project is not expected to violate any water quality standards or waste discharge requirements during construction, and impacts will be less than significant.

After construction, stormwater may convey pollutants from roof and parking lot runoff. However, the proposed Project includes a porous landscape detention sedimentation/filtration facility to treat stormwater for pollutants of concern (POC) and to slow down runoff prior to discharge into the existing public storm drain. A preliminary Project-specific Water Quality Management Plan (WQMP), which identifies and incorporates source control and treatment control BMPs that will effectively treat all POCs and hydrologic conditions of concern, has been prepared for the Project. Through the use of the BMPs identified in the preliminary Project-specific WQMP, the Project’s potential to violate water quality standards or waste-discharge requirements or otherwise substantially degrade water quality is considered to be less than significant without mitigation.
4.3.6 Urban Decay

As discussed in Section 5.9, Urban Decay, the Project’s potential economic impacts on the community that may be directly tied to physical changes in the market area, or the Trade Area (e.g., physical deterioration of existing retail centers/facilities) were analyzed in the Retail Market Impact Analysis. As the grocery area is the only sales area of the store that is being substantially expanded, the subsequent Project-impact analysis focuses on the potential for the proposed 44,907-SF expanded grocery component of the Walmart to impact the 17 existing supermarkets in the Trade Area. This analysis also considers the potential impacts of the 479-SF expansion of the restaurant tenant area. Further, the Project impact analysis also evaluates the cumulative impacts associated with the Project when its economic impacts are considered together with the economic impacts of all major retail projects currently planned for development in the Trade Area at the time the Retail Market Impact Analysis was prepared.

Urban decay is a potential consequence of a downward spiral of store closures and long-term vacancies. While urban decay is not defined under CEQA, it is assumed to be indicated by significant deterioration of structures and/or their surroundings. Such deterioration can occur when property owners reduce property maintenance activities below that required to keep their properties in good condition. Property-owners are likely to make reductions in maintenance under conditions where they see little likelihood of future positive returns due to prolonged vacancy. Given the conclusion in the Retail Market Impact Analysis that no store closures are likely to occur as a result of the proposed Walmart expansion, it is unlikely that owners of existing unoccupied retail space will allow their properties to physically deteriorate solely as a result of the proposed Project. While there are some strip malls with high vacancies, and several large vacant spaces in the Trade Area, implementation of the Project is not anticipated to have any negative effect on the reuse of properties and will not contribute to their falling into a state of urban decay. In other words, the grocery and fast-food components of the proposed Project are not likely to cause a diversion of sales from existing retail facilities severe enough to result in closure of any existing supermarkets or restaurants in the Trade Area.

Therefore, the Project’s potential to result in an economic impact so severe that stores might close as a result and building and/or properties, rather than being used within a reasonable time, would remain vacant and such vacancies would cause the buildings and/or properties to deteriorate, and lead to the physical decline of the associated or nearby real estate is considered to be less than significant without mitigation.

4.3.7 Energy Conservation

As discussed in Section 5.10, Energy Conservation, the Project’s potential for its anticipated electricity demand, natural gas demand, and direct and indirect fuel consumption to significantly affect non-renewable energy resources was analyzed. Electricity service is provided by RPU, which provides service to most of the City, including the Project site. RPU is dedicated to conserving energy generated by fossil fuels and increasing its renewable energy generation. RPU anticipates increasing renewable resources to 25 percent of its supply by 2015 and to 33 percent by 2020, and further phasing out its reliance on coal-
fired plants for electricity supply. Achieving 33 percent by 2020 will put RPU in compliance with a renewable energy goal set by then-Governor Arnold Schwarzenegger in 2009 with Executive Order S-21-09. Moreover, natural gas service is provided by Southern California Gas Company (SCG), which is the principal distributor of natural gas in Southern California. SCG also implements energy efficiency programs. Further, fossil fuels supply more than 99 percent of transportation fuel in the United States, and in 2007, 20 billion gallons of gasoline and diesel fuel was consumed in California. However, gasoline consumption is anticipated to decline as a result of high fuel prices, efficiency gains, competing fuel technologies, and changing trends in transportation.

Demands on non-renewable energy resources during Project construction will be lessened through a number of means. Over half of the waste materials from demolition and construction will be recycled. Also, the amount of construction proposed is relatively insubstantial and will not require high amount of transportation of build materials and equipment. In addition, it is assumed that secondary facilities, such as those that would produce construction materials for the Project would utilize all reasonable energy conservation practices in order to minimize the costs associated with energy use.

Operation of the Project and its subsequent demand of non-renewable energy resources will be insignificant in comparison to the existing supply infrastructure and expected level of service. Without factoring reductions for the Project design considerations, the Project’s electricity consumption represents approximately 0.01 percent of RPU’s total usage, and approximately 0.03 percent of the electricity supplied to commercial buildings. As such, the current available supply is adequate to accommodate the needs of the Project. RPU is satisfactorily meeting its obligations to its current and future customers, which includes proactively planning future major energy projects. RPU has initiated strong efforts toward renewable energy sources and conservation measures, and is on track to meet the Governor’s goal of 33 percent renewable energy by 2020. Further, GP 2025 FPEIR found that impacts resulting in the need for new power capacity or supplies, or substantial alterations to existing systems were less than significant under the typical General Plan buildout scenario.

Without factoring reductions for the Project design considerations discussed previously, the Project’s natural gas consumption represents an extremely small percentage of SCG’s total usage, and approximately 0.0004 percent of the natural gas supplied to commercial buildings. As such, the current available supply is adequate to accommodate needs of the Project. SCG is satisfactorily meeting its obligations to its current and future customers. In fact, growth for SCG is anticipated to remain virtually flat for the next 21 years, in part due to aggressive energy conservation measures encouraged by SCG and mandated by CPUC, of which the Project will be a beneficial contributor. As such, SCG’s existing infrastructure and storage supplies are well-prepared for the long-term forecasts.

Although the Project is not required to comply with the new CALGreen standards, which pertain to new construction only and does not include additions to existing structures, the Project site will promote and accommodate alternative transportation with its bicycle stall parking, which meet the requirements set forth in CALGreen, Section 5.106.4.1; and “clean air vehicle” parking, for which the Project will designate a portion of its total parking towards the goals set forth by CALGreen, Section 5.106.5.2. Vehicle fuel
efficiency, which is regulated at the federal level, in combination with continued bus service by RTA will also contribute to reducing in fuel consumption. The Project’s added sales space will introduce new inventory, specifically grocery foods, that will contribute to the Walmart store as a place for one-stop shopping. The diverse and affordable inventory available for purchase will reduce the need for Walmart’s existing and future customers within its Trade Area to travel to additional stores for groceries, thus further offsetting and reducing fuel consumption and conserving resources. Further, the Project will incorporate a number of sustainable design considerations, which will surpass Title 24 requirements.

Therefore, the Project’s potential to result in the wasteful, inefficient, or unnecessary consumption of energy; increasing demand on available energy resources that are not renewable; and failing to comply with existing established energy standards is considered to be less than significant without mitigation.

4.4 Effects Found to be Less Than Significant with Mitigation

4.4.1 Biological Resources

As discussed in Section 5.3, Biological Resources, the Project site is located in an area identified by the MSHCP as requiring burrowing owl surveys; however, because the Project site is within an urbanized area and is highly disturbed as a result of the development and construction of the existing Walmart store, the Project site does not contain suitable burrowing owl habitat and impacts to burrowing owl habitat will be less than significant.

Although the Project site has been disturbed and is nearly entirely covered with structures or pavement, the non-native trees that occur in the parking lot areas (planned to be removed and replaced as part of the Project) may support nests utilized by birds protected under the Migratory Bird Treaty Act (MBTA) of 1918 (C.F.R. Section 10.13) or the California Fish and Game Code. Thus, the potential exists for direct and indirect construction-related disturbance to nesting birds. This disturbance can be minimized or eliminated by avoiding impacts to potential nest sites present in the Project area. While there is no established protocol for nest avoidance, when consulted, the CDFG generally recommends avoidance buffers of about 500 feet for birds-of-prey, and 100 to 300 feet for songbirds. Thus, the Project is required to adhere to mitigation measure MM BIO 1, which requires a pre-construction survey if construction cannot be avoided during the nesting season and avoidance of any active nests.

Therefore, the Project’s potential to have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service is considered to be less than significant with mitigation incorporated.
4.4.2 Noise

As discussed in Section 5.7, Noise, the Project site is fully developed with the existing Walmart store (which includes the Garden Center and Tire & Lube Express) and parking lot. There is a depressed loading dock with two loading bays behind a 10-foot high masonry wall at the north side of the main store building in addition to masonry walls of varying heights (but with a minimum height of six feet above ground) located on the north and west side of the Project site. Land uses adjacent to the Project site include multi-family residences to the north, Van Buren Boulevard to the east (with commercial and residential uses east of Van Buren Boulevard), commercial development and multi-family residences to the south, and single-family residences to the west.

The main source of ambient noise at the Project site and surrounding area is vehicular noise from area streets. Vehicles using Van Buren Boulevard in proximity to the Project site are the primary contributors of existing noise. Noise is also produced at the Project site from the offloading of materials at the loading docks. While the Project will not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project, the Project may generate noise levels in excess of standards established in Riverside Municipal Code noise ordinance.

Noise resulting from Project implementation includes noise from construction equipment, noise from new Project-related vehicular trips, and noise from grocery-related deliveries at the proposed additional loading dock with two loading bays. As is analyzed in Section 5.7 of this DEIR, while the predicted construction noise levels exceeds the Riverside Municipal Code noise limit of 55 dBA relating to daytime exterior nuisance noise at residential property lines, the Riverside Municipal Code Section 7.35.010.B.5 permits construction activities to exceed these levels between the hours of 7 a.m. and 7 p.m. on weekdays, and between 8 a.m. and 5 p.m. on Saturday. Spikes in noise level resulting from construction are anticipated to last no longer than a few minutes in a given hour and the entire construction period for the Project is anticipated to take approximately 14 months, with the parking lot and paving phase anticipated to last approximately 6 weeks. All factors considered, together with the fact that sensitive receptors adjacent to the Project site already exposed to maximum noise levels in excess of the 55 dBA residential standard, the Project’s temporary construction-related noise increase is not considered substantial. However, to reduce noise impacts from construction and assure impacts will be less than significant, construction-related mitigation measures MM NOI 1 through MM NOI 5 will be incorporated for this Project.

Project operation will nominally increase noise associated with loading dock activity, which is estimated to be less than 3 dBA, and thus, imperceptible. However, in the highly unlikely event that four refrigerated trucks arrive simultaneously and are unloading at the same time, the predicted noise levels would be greater than 3 dBA and may be perceived. This increase has the potential to be considered substantial. As such, to avoid this potentially significant, albeit unlikely noise impact, an operation-related mitigation measure MM NOI 6 to limit the number of trucks arriving at the same time between midnight and 6:00 a.m. will be incorporated for this Project.
Therefore, while construction and operation of the Project is not expected to result in substantial noise, the prescribed mitigation measures will assure a significant impact does not result, and as such, Project impacts are less than significant.

### 4.4.3 Transportation/Traffic

As discussed in Section 5.8, Transportation/Traffic, the Project’s potential traffic impacts were analyzed in a Traffic Impact Analysis (TIA). The TIA considered several factors such as ambient growth, trip generation, trip distribution, and trip assignment. Understanding these factors is important in order to properly analyze the Project’s contribution to traffic load and capacity. The TIA concluded that although any construction-related impacts would be temporary, they are potentially significant without mitigation. Regarding traffic load and street capacity implementation of the Project will introduce additional traffic to the Study Area. These new vehicular trips will result in less than significant impacts to the Study Area intersections under the existing-plus-Project scenario as the proposed Project includes improvements to the three intersections that provide direct access to the Project site. Further, Project-related traffic is not projected to degrade the level of service (LOS) operation at any of the Study Area intersections.

The addition of Project-related trips will not contribute to an increase in traffic volumes that is not already anticipated in the City’s GP 2025 Buildout scenario. Under the GP 2025 Buildout scenario, five of the nine Study Area intersections will operate at LOS F without any improvements, although these intersection operations will not be degraded from acceptable to unacceptable when compared to the LOS for the GP 2025 Buildout scenario and all changes in delay under the GP2025 Buildout-plus-Project scenario are considered less than significant. Moreover, the City strives for LOS D or better on all arterial streets whenever possible, except for certain key locations such as portions of Arlington Avenue/Alessandro Boulevard and Van Buren Boulevard, which may warrant a standard of LOS E. The Project will not directly cause an exceedance of any performance standards.

Under existing conditions, none of the Study Area intersections exceed the applicable LOS, and with the inclusion of Project-specific traffic, all of the Study Area intersections will continue to operate at acceptable LOS. With implementation of mitigation measures **MM TRANS 1**, **MM TRANS 2**, and **MM TRANS 3**, potential Project-specific impacts resulting from Project construction, on-site circulation, and sight distance will be less than significant.

Therefore, the Project’s potential to cause a substantial increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., resulting in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections), or 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 is considered to be less than significant with mitigation incorporated.
4.5 References

In addition to other documents, the following references were used in the preparation of this section of this DEIR:

- Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Wal-Mart Expansion, 5200 Van Buren Boulevard, Riverside, California, October 11, 2007. (Included as Appendix G.) [Cited as GEI]

- Riverside County Airport Land Use Commission, Airport Land Use Commission (ALUC) Development Review, May 10, 2011. (Included as Appendix C.3) [Cited as ALUCDR]

Section 5 – Environmental Impact Analysis

The purpose of this DEIR is to evaluate the potential environmental effects of the proposed Project. The City of Riverside (City) circulated an Initial Study/Notice of Preparation (IS/NOP) for which the public review period ended November 29, 2010. The IS/NOP was transmitted to the State Clearinghouse, responsible agencies, and other affected agencies to solicit issues and concerns related to the Project. The IS/NOP and comment letters are contained in Appendix A of this DEIR.

Sections 5.1 through 5.10 of the DEIR, examine the potential environmental impacts associated with implementation of the proposed Project and focuses on the following issues:

- Aesthetics
- Biological Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Transportation/Traffic
- Air Quality
- Energy Conservation
- Hazards and Hazardous Materials
- Noise
- Urban Decay

Technical Studies
Technical studies in the areas of air quality/greenhouse gas emissions, noise, traffic, and a retail market analysis were produced providing detailed technical analyses that were used in this DEIR. These documents are identified in the discussion for the individual environmental issue, and included as technical appendices on a CD attached to the DEIR.

Analysis Format
The DEIR assesses how the proposed Project would impact the issue areas identified above. Each environmental issue addressed in this DEIR is presented in terms of the following subsections:

- Setting: Provides information describing the existing setting on or surrounding the Project site which may be subject to change as a result of the implementation of the Project. This setting describes the conditions that existed when the IS/NOP was sent to responsible agencies and the State Clearinghouse.

- Comments Received in Response to the Notice of Preparation: Identifies those parties responding to the IS/NOP and provides a summary of their comments.

- Thresholds of Significance: Provides criteria for determining the significance of Project impacts for each environmental issue.

- Related Regulations: Provides a discussion of the applicable regulations with respect to each environmental issue.

- Project Design Considerations: Provides a discussion of the Project design considerations and features with respect to each environmental issue.
- **Environmental Impacts before Mitigations**: Provides a discussion of the characteristics of the proposed Project that may have an effect on the environment; analyzes the nature and extent to which the proposed Project is expected to change the existing environment, and whether or not the Project impacts meet or exceed the levels of significance thresholds.

- **Mitigation Measures**: Identifies mitigation measures to reduce significant adverse impacts to the extent feasible.

- **Summary of Environmental Effects After Mitigation Measures are Implemented**: Provides a discussion of significant adverse environmental impacts that cannot be feasibly mitigated or avoided, significant adverse environmental impacts that can be feasibly mitigated or avoided, adverse environmental impacts that are not significant, and beneficial impacts.

- **Summary of Cumulative Environmental Effects After Mitigation Measures are Implemented**: Provides a discussion of the combined effects of the proposed Project along with other regional projects.
5.1. Aesthetics

This section describes existing and potential impacts to aesthetics from the implementation of the Project. From the perspective of CEQA, the term “aesthetics” pertains to the perceived visual quality of an area characterized by one or more visual elements such as an open space, scenic view, or architecture. Aesthetically, significant features can occur in a diverse array of environments, ranging from urban centers to rural agricultural lands to natural woodlands. A project can have significant impacts on visual quality if it negatively affects the aesthetically significant features by altering them in part or whole, e.g., by destroying vegetation integral to a scenic vista or by constructing a building in an architectural style that conflicts with the existing setting.

Potential impacts related to:

- having a substantial adverse effect on a scenic vista;
- substantially damaging scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway; and/or
- creating a new source of substantial light or glare which would adversely affect day or nighttime views in the area,

were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A). The following discussion addresses potential impacts related to:

- substantially degrading the existing visual character or quality of the site and its surroundings.

As discussed below, the Project’s potential to substantially degrade the existing visual character or quality of the site and its surroundings is considered to be less than significant. In addition, the Project’s potential to result in an economic impact so severe that stores might close or contribute to the vacancies of buildings and/or properties that would lead to the physical decline or urban decay within the Project area is discussed in Section 5.9, Urban Decay in this DEIR, and was found to be less than significant.

5.1.1 Setting

5.1.1.1 Project Site

The Project site is located along the eastern boundary of the City of Riverside’s (City’s) Arlanza neighborhood, and is generally bounded by the following streets: Van Buren Boulevard on the east, Wells Avenue on the south, Harold Street on the west, and Philbin Avenue on the north. The Arlanza neighborhood is generally characterized by its history as a United States Army base, known as Camp Anza, during World War II before its incorporation into the City in 1961. Development in this neighborhood experienced its peak between the 1950s and 1970s and currently consists of natural land, hillsides, traditional single-family residential subdivisions, industrial uses, and commercial uses generally concentrated along the Van Buren Boulevard corridor. (DD H&N)
The Project site consists of approximately 13.73 acres and is currently developed with an existing Walmart retail structure, which was constructed in 1993 and first occupied in 1994. The Project site also includes Walmart’s 738-stall surface parking lot as well as landscaped buffers generally at the property lines. The Walmart store encompasses a 125,827-square-foot (SF) structure, which includes a Tire & Lube Express and a 5,300-SF exterior Garden Center. Both the Tire & Lube Express and Garden Center are located on the eastern portion of the existing structure, adjacent to Van Buren Boulevard (Figures 3–4a and 3–4b – Site Plan). The Walmart store’s main entrance is located on the western end of the structure’s south elevation. There are two depressed loading docks on the northeastern portion of the Project site, views of which are blocked from the off-site uses to the north by a 10-foot tall masonry wall. Further, off site and immediately to the southeast of the Project site, is a fast-food restaurant (McDonald’s) with a drive-through lane. However, this off-site use is only accessible to vehicles via the Project site’s access points and surface parking lot.

Vehicular access is provided via three east-west access points along the eastern border of the Project site from Van Buren Boulevard. The northern-most access point, referred throughout this DEIR as the “N. Project Driveway,” is a right-in/right-out driveway accessible only from southbound lanes of Van Buren Boulevard. The N. Project Driveway is primarily used by heavy trucks with deliveries and patrons of the Tire & Lube Express. Approximately in the middle of the eastern boundary of the Project site is the traffic signal-controlled intersection of Van Buren Boulevard and Audrey Avenue (Audrey Avenue terminates at the Project site boundary) (Figure 3-4a – Site Plan). This intersection provides access from northbound and southbound lanes of Van Buren Boulevard and westbound lanes of Audrey Avenue, and serves as the Project site’s primary vehicular ingress and egress. The southern-most access point, referred to throughout this DEIR as the “S. Project Driveway,” is a right-in/right-out driveway, accessible only from southbound lanes of Van Buren Boulevard.

The terrain of the Project site and immediate area is relatively flat. On-site vegetation includes landscaped buffers consisting of manicured grass and ornamental non-native trees located around the property boundary, and shade trees located in small, concrete-curbed islands throughout the surface parking lot. It should be noted, however, that the existing amount of shade trees throughout the surface parking lot currently does not comply with the City’s Zoning Code, which requires a ratio of one shade tree per four parking spaces (Zoning Section 19.580.090). The Project will include upgraded parking lot landscaping in order to bring the parking lot into compliance with the City’s landscaping requirements for shade trees. Additionally, the trees generally located in the landscaped buffers are larger than the shade trees throughout the surface parking lot.

While the existing Walmart store is located along Van Buren Boulevard, which is a designated Scenic and Special Boulevard and Parkway in the City of Riverside General Plan 2025 (GP 2025, Figure CCM-4 Master Plan of Roadways), the existing Walmart main entrance is oriented southward toward its parking lot and in the direction of Wells Avenue.
5.1.1.2 Surrounding Area
The Project site is directly bounded by Van Buren Boulevard on the east; multi-family residential and commercial uses on the north; single-family residential uses on the west; and multi-family residential and commercial uses on the south. Additionally, in the area of the Project site all uses to the east of Van Buren Boulevard are within the Ramona neighborhood of the City; however, land use characteristics are similar to the eastern portion of the Arlanza neighborhood as described above in Section 5.1.1.1.

The Project site is located in an area that is urbanized and built-out. In a regional context, the City is also characterized as urban and built-out. Similarly, the immediately surrounding cities of Corona, Norco, Jurupa Valley, and Moreno Valley are also characterized by urban development. In a local context, the surrounding area of the Project site is largely characterized by single- and multi-family residential uses, public parks, and commercial uses generally concentrated along Van Buren Boulevard. Other uses in the area are general industrial uses and business manufacturing uses, which are generally concentrated along Arlington Avenue. Additionally, the Riverside Municipal Airport is located approximately one-half mile to the northeast. The height of structures in the Project area is characterized by low-rise development, meaning that buildings generally do not surpass the height of a two-story structure, with the exception of the Riverside Municipal Airport traffic control tower.

5.1.1.3 Visual Character of Project Site and Surrounding Locale
As the Project area is generally characterized by low- to medium-density urban development that is also generally low-rise development, current views of the Project site are limited beyond a number of points where the Project site can be viewed at the pedestrian and street level. Specifically, direct views of the Project site are available from a portion of Van Buren Boulevard, north of Wells Avenue to approximately the Project site’s northern property line; the western terminus of Audrey Avenue; the south-facing, second-story windows and balconies of the multi-family residential use to the north of the Project site; and the north-facing, second-story windows and balconies of the multi-family residential use to the south of the Project site. Views are also available from the adjacent off-site, fast-food restaurant (McDonald’s) located to the southeast of the Project site.

The majority of the 13.73-acre Project site consists of the associated surface parking lot, while much of the remainder is occupied by the existing, 34-foot-tall Walmart store. The existing façade and color palette are common for the Walmart stores constructed between 1992 and 2008. The current design of the building’s southern elevation, where the main entrance is located, lacks proportion with the overall length of the structure. The eastern elevation, visible from Van Buren Boulevard and Audrey Avenue, does not include any features interacting with Van Buren Boulevard or otherwise reflecting the street’s Scenic and Special Boulevard and Parkway designation. For the most part, with the exception of the main entrance, design articulation is minimal, thus creating a heightened sense of mass from street level. Overall, the existing Walmart façade style and color palette is indicative of its approximately 20-year-old age and past design trends and priorities.

Due to the amount of development on the Project site from the existing structure and parking lot, landscaping is limited. Specifically, the existing landscaped area consists of 2.32 acres of the 13.73-acre
Section 5 Environmental Impact Analysis

5.1 Aesthetics

City of Riverside

Walmart Expansion DEIR

Project site. As mentioned above in Section 5.1.1.1, the existing parking lot currently does not comply with the shade tree ratio required under Section 19.580.090 of the City’s Zoning Code with respect to the trees that are presently dispersed throughout the parking lot in concrete-curbed islands. The grass landscaping that generally exists along the border of the Project site is flat and manicured with some non-native trees larger than the parking lot shade trees. Along Van Buren Boulevard, the landscaping includes a raised-grass berm with some larger non-native trees. Additionally, some non-native trees and other plant species are adjacent to the southern elevation of the building in established concrete-lined planters to break up some of the perceived building mass.

Views of the Project site are shown on Figures 5.1-1 and 5.1-2 – Site Photographs. A brief summary of the views is provided on the following Table 5.1-A – Site Photograph View Summary.

Table 5.1-A – Site Photograph View Summary

<table>
<thead>
<tr>
<th>View</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>View looking west from the Van Buren Boulevard median toward the existing N. Project Driveway.</td>
</tr>
<tr>
<td>2</td>
<td>View looking northwest from the southeast corner of Audrey Avenue at Van Buren Boulevard toward the eastern portion of Walmart where the existing Garden Center and Tire &amp; Lube Express are located.</td>
</tr>
<tr>
<td>3</td>
<td>View looking west from Van Buren Boulevard at Audrey Avenue toward the existing primary ingress and egress.</td>
</tr>
<tr>
<td>4</td>
<td>View looking north-northwest from surface parking lot toward the existing Garden Center.</td>
</tr>
<tr>
<td>5</td>
<td>View looking west from Van Buren Boulevard toward the existing S. Project Driveway.</td>
</tr>
<tr>
<td>6</td>
<td>View looking south from northern property line toward the eastern portion of existing Walmart.</td>
</tr>
<tr>
<td>7</td>
<td>View looking east from northwest portion of Project site toward existing loading docks.</td>
</tr>
<tr>
<td>8</td>
<td>View looking northwest from southeastern property line at Van Buren Boulevard of existing Walmart façade and surface parking lot with shade trees in small, concrete-curbed islands</td>
</tr>
</tbody>
</table>

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Photographs taken March 2011
Figure 5.1-1. Site Photographs
Walmart Expansion DEIR
Figure 5.1-2. Site Photographs

Walmart Expansion DEIR
The surrounding land uses are generally characterized as single- and multi-family residential with commercial uses generally concentrated along Van Buren Boulevard. General industrial and business manufacturing uses are located further away from the Project site, generally concentrated along Arlington Avenue. Much of the single-family residential development was constructed during the 1950s and 1970s, and there are also scattered pockets of newer single-family residences. The multi-family residential uses appear to have been constructed in the 1970s and 1980s. Generally, the area’s structures are comprised of older development that is representative of the area’s development peaks from the 1950s to 1970s. However, there are pockets of newer commercial development, redevelopment, and façade redesigns as there has been an active effort on the part of the City to revitalize and redevelop the area. Further, there are a number of underutilized and graded vacant lots in the Project site vicinity, consisting of parcels which are sized for urbanized uses and medium-density development. Overall, the age and existing visual quality of the area is exhibited in the visual character of the surrounding land uses. Views of the surrounding land uses are shown on Figures 5.1-3 through 5.1-5 – Surrounding Uses Photographs. A brief summary of the views is provided in the Table 5.1-B – Surrounding Uses Photograph View Summary, which is on the page following the figures.

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2 Photographs taken March 2011
Figure 5.1-4. Surrounding Uses Photographs

Walmart Expansion DEIR
Figure 5.1-5. Surrounding Uses Photographs

Walmart Expansion DEIR
Table 5.1-B – Surrounding Uses Photograph View Summary

<table>
<thead>
<tr>
<th>View</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>View looking west from the Van Buren Boulevard toward the multi-family residential use to the immediate north of the Project site.</td>
</tr>
<tr>
<td>10</td>
<td>View looking northwest along Van Buren Boulevard toward the multi-family residential and commercial uses to the north of the Project site.</td>
</tr>
<tr>
<td>11</td>
<td>View looking north-northeast from Van Buren Boulevard toward a single-family residential use to the east of the Project site.</td>
</tr>
<tr>
<td>12</td>
<td>View looking north-northeast from Van Buren Boulevard toward a vacant lot at the corner of Audrey Avenue to the east of the Project site.</td>
</tr>
<tr>
<td>13</td>
<td>View looking at a commercial/residential use on the corner of Audrey Avenue and Van Buren Boulevard to the east of the Project site.</td>
</tr>
<tr>
<td>14</td>
<td>View looking northeast along Audrey Avenue with views of single-family residential uses to the east of the Project site.</td>
</tr>
<tr>
<td>15</td>
<td>View looking northwest from the western side of the Project site toward the single-family residential uses immediately west of the Project site.</td>
</tr>
<tr>
<td>16</td>
<td>View looking southeast from the on-site surface parking lot toward a multi-family residential use to the immediate south of the Project site.</td>
</tr>
<tr>
<td>17</td>
<td>View looking south from S. Project Driveway toward the off-site, fast-food restaurant to the immediate southeast of the Project site.</td>
</tr>
<tr>
<td>18</td>
<td>View looking east from Van Buren Boulevard toward a vacant lot across from S. Project Driveway east of the Project site.</td>
</tr>
<tr>
<td>19</td>
<td>View looking west from Van Buren Boulevard toward a large lot with a single-family residence to the immediate east of the Project site’s southern property line and to the immediate south of the off-site fast-food restaurant. (The urban decay study prepared for their DEIR recognizes the site for firewood sales. See Section 5.9, Urban Decay.)</td>
</tr>
<tr>
<td>20</td>
<td>View looking southeast from the northwest corner of the Van Buren Boulevard and Wells Avenue/Colorado Avenue intersection toward a vacant lot planned for future development.</td>
</tr>
</tbody>
</table>

5.1.2 Comments Received in Response to the Initial Study/Notice of Preparation

No comments were received regarding aesthetics in response to the IS/NOP.

5.1.3 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the City’s “Environmental Checklist” for the subject project (provided in Appendix A of this document) indicates that impacts to aesthetics may be considered potentially significant if the project would:

- substantially degrade the existing visual character or quality of the site and its surroundings.
5.1.4 Related Regulations

5.1.4.1 California Scenic Highways

The California Scenic Highways program was established in 1963 to “preserve and protect scenic highway corridors from change which would diminish any aesthetic value of lands adjacent to highways.” The State laws governing the scenic highway program are found in the California Streets and Highways Code Section 260 et seq. No State-designated or eligible scenic highways exist within or near the Project site.

Therefore, there are no applicable State regulations that pertain to this Project.

5.1.4.2 City of Riverside General Plan 2025

The GP 2025 sets forth policies and goals to not only preserve, but improve existing visual resources within the City and its Sphere of Influence. The City has a long-standing history, which is reflected in its historic buildings, parkways, and local landmarks. Additionally, the topographic characteristics of the City also contribute to the City’s richness in visual character. The following GP 2025 policies and objective, which are applicable to the Project, are intended to preserve and enhance the visual character of the City and neighborhoods therein:

Land Use and Urban Design Element (LU)

Policy LU-11.2: Recognize Victoria Avenue, Magnolia Avenue/Market Street, University Avenue, Van Buren Boulevard, Riverwalk Parkway, La Sierra Avenue, Arlington Avenue, Canyon Crest Drive, and Overlook Parkway as the fundamental elements of the City’s parkway landscape network, and components of Riverside Park.

Objective LU-15: Recognize Van Buren Boulevard as a significant parkway, linking neighborhoods along its path to the Santa Ana River, the Arlington Heights Greenbelt, Victoria Avenue, and the California Citrus State Historic Park.


Circulation and Community Mobility Element (CCM)

Policy CCM-2.10: Emphasize the landscaping of parkways and boulevards.

As discussed in Section 5.1.5 Project Design Considerations, below, the proposed Project includes enhanced architectural features not only to the entire building elevations, but also to the building elevation that faces Van Buren Boulevard.
5.1.4.3 City of Riverside Zoning Code

The Zoning Code, which is contained within Title 19 of the City of Riverside Municipal Code, regulates all land uses in the City and includes design standards such as building height and size, setbacks, lighting, parking design and quotas, landscaping, and density at the individual parcel level, as well as standards and permitted uses for signs. In the City, there are four zones for commercial and office uses. The existing zoning of the Project site is Commercial Retail Zone – Two Story Building and Building Setback Overlay Zones (CR-5-2-X), which is intended for a broad range of indoor-oriented retail sales and service, and office uses as either stand-alone businesses or as part of commercial centers or office developments. Zoning Code Chapter 19.110 contains the development standards specific to the commercial and office zones.

Through the City’s development plan review process, the architectural design of the proposed Project will be revised to ensure consistency with the provisions of Title 19 and other applicable sections of the Riverside Municipal Code.

The following objectives, which are applicable to the Project, are intended to provide direction and purpose for the design criteria and guidelines with regard to character and urban design:

- Provide for distinct architectural character and physical enhancement of future and existing development to foster revitalization and rehabilitation of the neighborhood, commercial and industrial centers; and
- Create pedestrian-oriented neighborhoods and business environments with architectural and landscape architectural design that allows for active, healthy, and safe interaction of pedestrians and vehicles.

The following guidelines, which are applicable to the Project, are intended to promote high-quality construction and materials and pedestrian-friendly design for commercial development, which is likely to improve economic performance and attractiveness:

**Site Design**

**Service Access and Equipment Screening**

- To reduce the visual impact, service areas and mechanical equipment shall be located out of public view.
  - Service access areas, including loading areas and docks, service yards, and refuse/recycling enclosures should be located out of public view. Do not front these areas onto a primary street as well.
  - In addition to any solid enclosures required by the Zoning Code, landscaping, such as tall shrubs and clinging vines, should be used to screen these areas, especially for those properties whose side yard fronts a primary street or abuts a residential property.
  - Mechanical equipment shall be located behind or on top of the building, screened from public view with parapet walls, landscaping, etc. Any architectural
features used for screening shall be compatible in style and colors with on site buildings.

Locations of Required Parking

- Design parking to encourage the accessibility from the rear of the property on parcels with alleys. For parcels without alley access, driveways should be minimized in width and provide for good visibility of pedestrians.

- Design and locate off-street parking to minimize conflicts with pedestrians and to minimize the physical and visual impact to the traditional streetscape appearance. Where practical, adjoining uses should share parking to minimize the number of parking lots, driveways, and surface hardscape area.

- Bike parking for commercial uses should be conveniently located within the sidewalk or front courtyard. Placement of bike racks should be carefully considered to minimize conflicts with pedestrian travel.

Parking Lot Landscaping and Lighting

- Particularly with stand-alone commercial development, landscaping with mature shade trees and adequate lighting are important components to the attractiveness and safety of parking lots.
  - Perimeter planter – Design and locate perimeter planters and plantings for the purpose of creating a physical barrier, visual screen, and shading of the parking lot area. The parking lot and perimeter landscape should also be designed for safe and convenient pedestrian circulation throughout, including designated paths across perimeter planters.

  - Additional parking lot plantings - Within the parking area, shade trees shall be provided per the Zoning Code requirements. The cutout area for the tree island should be a minimum of 40 square feet.

  - Parking lot light sources should be designed, located and/or shielded to prevent light spillover onto abutting residential property.

  - Every five stalls should contain a tree planter, including end planters, center row planters, and diamond planters.

  - Landscaping should be in scale with adjacent buildings and be of appropriate size at maturity to accomplish its intended goals.

  - Landscaping around the entire base of buildings (except loading and service areas) is recommended to soften the edge between the parking lot and the structure. This should be accentuated at entrances to provide a focal point.

  - Trees should be located throughout the parking lot and not simply at the ends of parking aisles. In order to be considered within the parking lots, trees should be
located in planters that are bounded on at least three sides by parking area paving.

- Landscaping should be protected from vehicular and pedestrian encroachment by raised planting surfaces, depressed walks, or the use of curbs. Concrete mow strips are required per development regulations between turf and shrub areas.

- Landscaping should consist of a variety of plant materials (minimum of three types of trees, three types of shrubs, and two types of ground cover) suited for Riverside's climate such as native, drought-tolerant and water-efficient plantings. A balance of deciduous and evergreen trees should be used.

- Landscaping should be used to soften views of parking lots, loading areas, trash enclosures, storage areas, and utility areas. All backflow preventers, gas meters, transformers, air conditioning condensers, above ground pipes and valves or any other equipment shall be screened with appropriate planting.

- Planter beds shall be protected by 6 inches wide by 6 inches tall concrete curbing.

- Landscaping shall be used to screen parking lots from view in compliance with the Zoning Code (Section 19.580.090 (B)) through the use of: i) a three-foot high landscaped berm; ii) a three-foot high shrub row, with all shrubbery to be located towards the rear of the landscaped setback; or iii) a combination of the above two items, or an alternative buffer subject to the written approval of the Planning Director.

- Within the parking lot, closely spaced minimum five-gallon shrubs shall be provided within the end row planters and finger planters to discourage pedestrian traffic across these planters.

- Canopy trees shall be provided to shade parking areas as follows: i) tree wells, one tree shall be provided within each tree well centered between the stalls at every 4-5 spaces; ii) end row planters, one tree shall be provided within each end planter, next to each parking stall. Two trees shall be provided at the end of each double row of stalls; iii) finger planters, one tree shall be provided within each finger planter, centered with the adjacent parking stall; and iv) strip planters, one tree shall be provided in line with the edge of the parking stall, spaced at every 4-5 stalls.

- Sod, not seed, shall be used for lawn areas.
Architectural Design

Form, Mass, and Scale

- Delineate new buildings and additions both vertically and horizontally to reflect traditional patterns and convey a human scale. A clear visual division between street level and upper floors should be incorporated through the change of materials, colors and/or canopies and awnings.

- Avoid designing large monotonous façades, long straight-line building fronts, plain box shapes, and barren exterior treatment.

- Building form should be used to emphasize individual units within a building, larger units and/or anchor stores within retail projects, and foyers, lobbies, and reception areas within non-retail commercial projects. Use building form and articulation to emphasize public entrances and deemphasize service areas, and to define and shelter pedestrian walks and exterior spaces.

- Parapet walls should be used for screening flat roofs and articulating the building design. These walls should be detailed with architectural elements such as cornices and brackets should be used to define the building roofline. Low-pitched roofs with wide, overhanging eaves and decorative brackets can be used in conjunction with parapet walls.

Façade Treatment

- All visible building façades should be subject to significant architectural detailing. However, the front building façade commonly receives more attention with higher quality finish materials and more ornamentation than an interior side or rear façades. Corner lots are considered to have two fronts and each façade should receive significant architectural detailing.

- Commercial façades should be modulated at least every 50 feet with changes in building mass or façade treatment. Articulate façades to show this separation with projected entrance windows, roof form or other architectural features.

- Building articulation and detailing shall be used to create an interesting and individual design.

Lighting

- Exterior and accessory building lighting should provide adequate illumination that ensures pedestrian safety while being unobtrusive to adjacent buildings. Lighting should be designed with fixtures that provide visual interest but are appropriate to the architectural context of the primary structure.

  - Lighting fixtures should compliment and be compatible with the building’s design and architectural style. Fixtures shall be appropriately sized and in scale with the building façade.
5.1 Aesthetics

- Exterior building lighting should be used to accentuate the building design and highlight architectural details and features integral to the building design.

- All outdoor lighting shall be designed to not blink, flash, oscillate, or be of unusually high intensity or brightness, while also providing a sufficient level of illumination for access and security purposes.

- Building entrances and street numbers should be illuminated to be visible from the street.

**Landscaping**

- The primary objective of the landscape guidelines is to create a landscape aesthetic that is inviting to the pedestrian. In the interest of improving overall quality of life and encouraging pedestrian activity, all properties are encouraged to seek means of including trees and plants in the streetscape, where space and safety considerations will allow.

- Driveways, small plazas, courtyards, outdoor seating areas, upper story decks and balconies, and pedestrian corridors should be landscaped as extensively as possible. Accent planting beds and color pots with flowering annuals are encouraged. Canopy trees and landscape structures should be used in these outdoor public areas to create “outdoor rooms” and to define spaces.

- Evergreen trees and shrubs should be used whenever a landscape screen or buffer is required.

- Landscaping should be used to soften the impact of large expanses of blank wall or fencing. These areas should be screened with upright shrubs and clinging or trellised vines. Trellises should be constructed of substantial, durable materials. Regionally appropriate plantings (e.g., ornamental and agricultural plant materials) are encouraged.

- Hardscape amenities, such as fountains, benches, seating areas, and trellises, not only should be included but be consistent with the landscaping.

**Walls and Fencing**

- Walls and fencing will serve a major function in the industrial landscape. Use walls and fencing to screen automobiles, loading and storage areas, and utility structures. However, utilize walls and fencing only when specific screening or security purposes are required. Keep walls and fencing as low as possible while performing their screening and security functions.

- Long expanses of fence or wall surfaces should be offset and architecturally designed to prevent monotony. Landscape pockets should be provided.

- Permitted materials for walls shall be decorative masonry split face block, brick, natural stone, precast concrete panels, stuccoed walls or other unique wall materials or finishes that integrate well with on-site buildings, as determined on a case by case basis. Slump
stone and precision block are not considered decorative materials and shall not be permitted as acceptable wall materials. All walls must feature matching cap materials.

- Under the Design Guidelines and Zoning Code, wall height is limited primarily for aesthetic reasons. Limitations on maximum wall heights could reduce the ability to maintain noise levels in some locations to levels required by Title 24 of the California Code of Regulations and the Title 7 of the Riverside Municipal Code. In the cases where mitigation measure MM Noise 1 of the City’s General Plan 2025 EIR is implemented, the City may consider increasing wall height as one measure to reduce noise to acceptable levels. In such high level noise situations, combinations of setbacks, site design, berms, and solid walls, including walls higher than normally permitted by Code or these Design Guidelines, may be used to achieve noise standards.

**Screening**

- Screen outdoor storage areas as set forth in the Zoning Code.
  - Where screening is required, combine elements, including solid masonry walls, berms, and landscaping.
  - Screen all equipment, whether on the roof, side of building, or on the ground.
  - Employ a method of screening architecturally integrated in terms of materials, color, shape, and size.
    - The screening design shall blend with the building design.
    - Where individual equipment is provided, a continuous screen is required.
  - The need to screen rooftop equipment, as required by the Zoning Code, must be taken into consideration during the design for the structure.

### 5.1.4.4 Citywide Design Review Guidelines and Sign Guidelines

The *Citywide Design Review Guidelines* are contained with Chapter 19.710 of the Zoning Code, and the City’s Sign Guidelines are contained in Chapter 19.620 of the Zoning Code. These guidelines are intended to ensure the design of development, including the landscaping, is consistent with and compatible to the City’s high quality expectations. High quality designs protect and preserve property values and are a benefit to the public. Design review, which includes the approval of the Project’s plot plan, architecture, landscaping, and sign plans, is approved by either the City’s Planning Commission or Zoning Administrator. As the Project is commercially zoned and will expand the existing structure’s footprint, the *Citywide Design Review Guidelines* are applicable and will be adhered to.
5.1.5 Project Design Considerations

The proposed Project includes a number of Project design considerations that are applicable to aesthetics, specifically, on-site visual character and quality. The Project will include a complete façade redesign consistent with Walmart’s current architectural design requirements, with the intent to enhance the visual quality and character of the Project site. Additionally, the parking lot and landscaping will be improved and enhanced with additional vegetation for visual appeal and functionality as well as to bring the parking lot into compliance with the City’s shade tree requirements. A portion of the Van Buren Boulevard median from the S. Project Driveway to the N. Project Driveway will also be renovated by the Applicant.

5.1.5.1 Architecture

Facade improvements to the south elevation and main entrance include relocating the existing primary entrance from the southwest portion of the elevation and creating two entrances at the east and the west of the southern elevation. The east entrance will provide direct access to the home and living sales area, and the west entrance will provide direct access to the market and pharmacy sales area. Splitting and relocating the patron entrance will create improved proportionality in the building design. The new entrances will protrude from the building and include appealing arched roofs with metal awnings. The elevation’s center will display Walmart’s current logo and company name stylization on a wall panel with a prominent roof form. The elevation will include a considerable amount of articulation, varying roof lines, and a clearly delineated design creating an appearance of a “base” and “top” of the structure in order to decrease the feeling and appearance of “big box” massing, or bulkiness. Further, the elevation will include a combination of materials such as painted masonry, EIFS-material parapets, stone veneer pilasters, in addition to increased vegetation along the southern elevation and seating areas with a canopy.

The east elevation, which faces Van Buren Boulevard, includes a façade improvement that is more representative of the street’s Scenic and Special Boulevard and Parkway designation. The east elevation’s façade is generally similar to that of the south elevation, although there is no entrance from the east side of the building. The elevation incorporates spandrel glass to create the look of windows and façade transparency without requiring openings in the structure. Walmart’s current logo and company name stylization will also be centered on the east elevation, on a wall panel with a prominent roof form as it appears on the south elevation. Additionally, a tower feature will be located at the northeast corner (the tower feature will achieve a height of 30 feet from grade) to create architectural interest and soften the corner instead of a traditional sharp corner. These façade improvements will add to the visual appeal and interest of pedestrians and drivers along Van Buren Boulevard, and create a heightened sense of interaction with the street’s Scenic and Special Boulevard and Parkway designation. Further, the east elevation will complement other commercial developments along Van Buren Boulevard, the primary façades and entrances of which are generally oriented toward Van Buren Boulevard.
The north and west elevations, which are not visible from either Van Buren Boulevard or the surface parking lot will incorporate the earth tone color palette of the façade improvements as well as painted masonry, “base” and “top” design delineation, and EIFS-material parapets. Specific to the north elevation, a second 10-foot masonry wall will be constructed for the two additional loading docks to prohibit views and noise of loading dock operations from the off-site uses to the north of the Project site. The design of these block walls will complement and blend with the façade improvements. Further, the tower feature, which is at the northern-most portion of the east elevation, will also be a feature of the north elevation in order to complete the tower appearance of the structure’s northeast corner. The renderings of the Project’s exterior elevations and the façade redesign are shown on Figure 5.1-6a and Figure 5.1-6b – Exterior Elevations.

5.1.5.2 Landscaping
The Project will also include landscaping improvements throughout the surface parking lot area and along the existing buffers around the Project site. The Project’s landscaping will include approximately 80 additional parkway median trees to the surface parking lot area, with growth potential of 40–80 feet in height and 30 feet in diameter. The landscaped buffers generally encircling the property will be comprised of low-scale, drought-resistant shrubs, ground covers and grasses. The landscaped buffers near the north and west elevations will include approximately 30 evergreen edge trees which may potentially grow to 30–40 feet in height and 30 feet in diameter. The landscaping plan will also include parkway accent trees which may potentially grow to 20–30 feet in height and 20 feet in diameter generally concentrated along the eastern portion of the Project site. Additionally, additional vegetation will be planted along the landscaped buffer adjacent to Van Buren Boulevard where currently a raised grass berm is currently located. Further, the median along Van Buren Boulevard from the S. Project Driveway to the N. Project Driveway will also be comprised of low-scale, drought-resistant shrubs, ground covers and grasses, and approximately 20 parkway median trees. The landscape plan is shown on Figure 5.1-7 – Landscape Plan.

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Figure 5.1-6a. Exterior Elevations
Walmart Expansion DEIR
Not to Scale

Figure 5.1-6b. Exterior Elevations

Source: Perkowitz & Ruth, 2011.
5.1.6 Environmental Impacts before Mitigation

**Threshold:** Substantially degrade the existing visual character or quality of the site and its surroundings.

5.1.6.1 Visual Impacts to the Project Site

As discussed in Section 5.1.1, setting (specifically Section 5.1.1.1, Project Site) the existing Walmart structure incorporates an older and dated appearance with design trends that are generally discouraged in modern design. The shade trees located in the surface parking lot are currently below the City-required amount of one shade tree per four parking spaces. The existing elevations create an appearance of mass or bulkiness as a result of the limited articulation and lack of proportionality. The existing design of the eastern elevation does not take into account Van Buren Boulevard as a Scenic Boulevard or as a commercial corridor in its design.

As discussed in Section 5.1.5, Project Design Considerations, the Project will include a complete façade redesign and improved landscaping plan with the intent of improving the existing Project site. The new architecture and color palette, combination of building materials, varying roof lines, and an east elevation that reflects and engages Van Buren Boulevard as a Scenic and Special Boulevard and Parkway will generate heightened visual appeal of the site, and thus, result in a beneficial aesthetic enhancement compared to existing conditions. In addition, the Project will add approximately 135 trees to the Project site and Van Buren Boulevard median from the S. Project Driveway to the N. Project Driveway, climate-appropriate shrubs, groundcover and grasses.

While the façade redesign will greatly alter and enhance the appearance of the existing Walmart store, general design features such as building height and density will be generally comparable with the existing structure and consistent with the Zoning Code. The maximum permitted building height for parcels zoned CR is 75 feet (Zoning Section 19.110.030). The existing Walmart structure achieves a height of approximately 30 feet, and the Project will achieve a maximum height of approximately 36 feet with addition of the tower features. The existing maximum permitted floor area ratio (FAR), which measures density for nonresidential uses, for parcels zoned CR is FAR 0.50 (Zoning Section 19.110.030). The existing Walmart has an FAR of 0.22, and the proposed Project will increase this ratio nominally to an FAR of 0.26. Therefore, because the Project will result in a beneficial aesthetic enhancement to the existing Walmart structure and landscaping in compliance with applicable Zoning Code requirements, aesthetic impacts to the Project site resulting from implementation of the Project will be less than significant.

5.1.6.2 Visual Impacts to the Surrounding Area

As discussed in Section 5.1.1, Setting (specifically Section 5.1.1.2, Surrounding Area and 5.1.1.3, Visual Character of Project Site and Surrounding Locale), the visual character and quality of the surrounding locale, similar to the existing Walmart, reflects its age and the development peaks of the neighborhood in the 1950s to 1970s. For this reason, the area (particularly the Arlanza neighborhood and the Van Buren Boulevard corridor), has been the focus of redevelopment or infill efforts and is also located within a redevelopment project area (RDA). Thus, the area has been recognized as blighted and due for improved and renewed development. The Project will provide a beneficial aesthetic enhancement not
only on site, but for the immediate area surrounding the Project site. The addition of a highly engaging east elevation along Van Buren Boulevard will serve to reflect the street’s Scenic and Special Boulevard and Parkway designation and also reflect a heightened development design standard for the area. The Project’s design will also serve to beautify the area with its improved landscaping along Van Buren Boulevard, including landscaping within the Van Buren Boulevard median from the S. Project Driveway to the N. Project Driveway. Further, these landscape improvements will also be consistent with the identified objective and policies of the GP 2025, which emphasizes the landscaping of parkways and boulevards, including Van Buren Boulevard. In addition, the height and density of the Project will be complementary to the existing development generally concentrated along Van Buren Boulevard. Therefore, impacts to the visual character and quality of the surrounding locale will be less than significant.

5.1.7 Proposed Mitigation Measures
An Environmental Impact Report is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Development of the proposed Project with incorporation of the architectural and landscape features discussed previously under Section 5.1.5, Project Design Considerations, will not result in any significant impacts that will require mitigation. Specifically, impacts to aesthetics were found to be less than significant; therefore, no mitigation measures are necessary.

5.1.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented
Implementation of the proposed Project with incorporation of the Project design considerations discussed previously under 5.1.5, Project Design Considerations, will not result in any potentially significant impacts. Specifically, impacts to aesthetics were found to be less than significant; therefore, no mitigation measures are necessary.

5.1.9 Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented
The cumulative impact area for impacts related to aesthetics consists of the Arlanza and Ramona neighborhoods in the City. Development of the Project in conjunction with the cumulative development projects will result in a mix of new development and redevelopment or infilling of residential, educational, warehouse, office, and retail uses. For cumulative development to result in a cumulative impact on aesthetics, those cumulative development projects typically must be contiguous to the Project site and/or be located within the same viewshed, i.e., viewable from the same points as the Project, and create a significant cumulatively considerable impact. Of the cumulative development projects, the nearest to the Project site are the Cinnamon Creek Apartments project near the southwest corner of Wells Avenue and Van Buren Boulevard, and the Fresh & Easy project at the southeast corner of Colorado Avenue and Van Buren Boulevard. The Cinnamon Creek Apartments project includes 95 multi-family residential dwelling units, and the Fresh & Easy project includes an approximately 15,011-square-foot market and 4,520 square feet of commercial retail.
Section 5 Environmental Impact Analysis

5.1 Aesthetics

The aforementioned Cinnamon Creek Apartments and Fresh & Easy projects are located across a street intersection approximately 0.1 mile south from the S. Project Driveway, and as such, are not contiguous to the Project site. Also, due to current development varying from one to two stories in height, and the presence of mature trees along Van Buren Boulevard and Wells Avenue adjacent to the Project site, and Walmart’s setbacks, cumulative viewsheds of the Project and the two identified cumulative projects are highly limited. Thus, the proposed Project and these two identified cumulative projects will not directly interact to create a cumulatively considerable impact from an aesthetics standpoint. Moreover, as these two cumulative development projects are sited on lots that are currently underutilized, graded and vacant, if and when these projects are constructed they would more than likely indirectly contribute to beneficial aesthetic conditions specific to visual character and quality of the surrounding locale along Van Buren Boulevard and in the general area. As these cumulative development projects are comparatively minor to the overall development density along Van Buren Boulevard, and visually segregated from the Project site via existing development, mature trees, and a street intersection, the Project’s contribution to cumulative impacts related to aesthetics will be less than significant.

5.1.10 References

In addition to other documents, the following references were used in the preparation of this section of the DEIR:


- City of Riverside, Redevelopment, Redevelopment Project Area Map. (Available at [http://www.riversideca.gov/redev/project-areas.asp](http://www.riversideca.gov/redev/project-areas.asp), accessed May 3, 2011.) [Cited as RDA]


5.2 Air Quality

This section of the DEIR evaluates Project-related impacts to air quality and is based on the Air Quality and Greenhouse Gas Impact Analysis for the Walmart Expansion Project (AQIA). The AQIA, which is included as Appendix B to the DEIR, evaluated whether the expected criteria air pollutant emissions generated as a result of construction and long-term operations (i.e., vehicle emissions) of the proposed Project would cause significant impacts to air resources in the Project area. The AQIA was conducted within the context of the California Environmental Quality Act (CEQA; California Public Resources Code Sections 21000 et seq.). The methodology follows the CEQA Air Quality Handbook (1993) prepared by the South Coast Air Quality Management District (SCAQMD) for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD and City staff, the California Emissions Estimator Model (CalEEMod™) version 2011.1.1 computer program was used to quantify Project-related emissions.

Potential impacts related to:

- conflicting with or obstructing the implementation of applicable air quality plans
were found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A). The focus of the following discussion is related to whether the Project will result in:

- violation of any air quality standard or contributing substantially to an existing or projected air quality violation;
- cumulatively considerable net increases of any criteria pollutants for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- exposure of sensitive receptors to substantial pollutant concentrations; and
- the creation of objectionable odors affecting a substantial number of people.

As discussed below, the Project’s potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation, results in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment 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) is considered to be less than significant.

5.2.1 Physical Setting

The proposed Project is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the SCAQMD. The Basin consists of Orange County, coastal and mountain portions of Los Angeles County, as well as Riverside and San Bernardino Counties (SCAQMD 1993, p. 2-1). Regional and local air quality within the Basin is affected by topography, atmospheric inversions, and dominant onshore flows. Topographic features such as the San Gabriel, San Bernardino, and San Jacinto Mountains form natural...
horizontal barriers to the dispersion of air contaminants. The presence of atmospheric inversions limits
the vertical dispersion of air pollutants. With an inversion, the temperature initially follows a normal
pattern of decreasing temperature with increasing altitude; however, at some elevations, the trend
reverses and temperature begins to increase as altitude increases. This transition to increasing
temperature establishes the effective mixing height of the atmosphere and acts as a barrier to vertical
dispersion of pollutants. (SCAQMD 1993, p. A8-2)

Dominant onshore flow provides the driving mechanism for both air pollution transport and pollutant
dispersion. Air pollution generated in coastal areas is transported east to inland receptors by the
onshore flow during the daytime until a natural barrier (the mountains) is confronted, limiting the
horizontal dispersion of pollutants. The result is a gradual degradation of air quality from coastal areas
to inland areas, which is most evident with the photochemical pollutants such as ozone formed under
reactions with sunlight. (SCAQMD 1993, pp. A8-1–A8-2)

5.2.1.1 Climate
Terrain and geographical location determine climate in the Basin. The Project site lies within the terrain
south of the San Gabriel and San Bernardino Mountains and north of the Santa Ana Mountains. The
climate in the Basin is typical of southern California’s Mediterranean climate, which is characterized by
dry, warm summers and mild winters. Winters typically have infrequent rainfall, light winds, and
frequent early morning fog and clouds that turn to hazy afternoon sunshine. (SCAQMD 1993, pp. A8-1–
A8-2)

The following factors govern microclimate differences among inland locations within the Basin: (1)
distance of the mean air trajectory from the site to the ocean; (2) site elevation; (3) existence of any
intervening terrain that may affect airflow or moisture content; and (4) proximity to canyons or
mountain passes. As a general rule, locations farthest inland from the ocean have the hottest summer
afternoons, the lowest rainfall, and the least amount of fog and clouds. Foothill communities in the
Basin have greater levels of precipitation, cooler summer afternoons, and may be exposed to wind
funneling through nearby canyons during Santa Ana winds. Terrain will generally steer local wind
patterns. (SCAQMD 1993, pp. A8-1–A8-2)

The Project site is located in the City of Riverside south of the Santa Ana River, north of Lake Mathews,
and southwest of Mount Rubidoux (Figure 3-1 – Vicinity Map), within the eastern portion of the Basin.

5.2.1.2 Precipitation and Temperature
Annual average temperatures in the Basin are typically in the low to mid-60 degrees Fahrenheit.
Temperatures above 100 degrees are recorded for all portions of the Basin during the summer months.
(SCAQMD 1993, p. A8-1)

The rainy season in the Basin is November to April. Summer rainfall can occur as widely scattered
thunderstorms near the coast and in the mountainous regions in the eastern Basin. Rainfall averages
vary over the Basin. The City of Riverside averages 9 inches of rainfall; the city of Corona averages 12.7
inches, while the city of Los Angeles averages 14 inches. Rainy days vary from 5 to 10 percent of all days in the Basin, with the most frequent occurrences of rainfall near the coast. (SCAQMD 1993, p. A8-1)

5.2.1.3 Winds
The interaction of land (offshore) and sea (onshore) breezes control local wind patterns in the area. Daytime winds typically flow from the coast to the inland areas, while the pattern typically reverses in the evening, flowing from the inland areas to the ocean. Air stagnation may occur in the early evening and early morning during periods of transition between day and nighttime flows.

Approximately 5 to 10 times a year, the site vicinity experiences strong, hot, dry desert winds known as the Santa Ana winds. These winds, associated with atmospheric high pressure, originate in the upper deserts and are channeled through the passes of the San Bernardino Mountains and into the inland valleys. Santa Ana winds can last for a period of hours or days, and gusts of over 60 miles per hour have been recorded.

High winds, such as the Santa Ana winds, affect dust generation characteristics and create the potential for off-site air quality impacts, especially with respect to airborne nuisance and particulate emissions. Local winds in the Project area are also an important meteorological parameter because they control the initial rate of dilution of locally generated air pollutant emissions.

5.2.1.4 Categories of Emission Sources
Air pollutant emissions sources are typically grouped into two categories: stationary and mobile sources. These emission categories are defined and discussed in the following subsections.

Stationary Sources
Stationary sources are divided into two major subcategories: point and area sources. Point sources consist of a single emission source with an identified location at a facility. A single facility could have multiple point sources located on site. Stationary point sources are usually associated with manufacturing and industrial processes. Examples of point sources include boilers or other types of combustion equipment at oil refineries, electric power plants, etc. Area sources are small emission sources that are widely distributed, but are cumulatively substantial because there may be a large number of sources. Examples include residential water heaters; painting operations; lawn mowers; agricultural fields; landfills; and consumer products, such as barbecue lighter fluid and hair spray. (SCAQMD 1993, p. 1-1)

Mobile Sources
Mobile sources are motorized vehicles which are classified as either on-road or off-road. On-road mobile sources typically include automobiles and trucks that operate on public roadways. Off-road mobile sources include aircraft, ships, trains, and self-propelled construction equipment that operate off of public roadways. Mobile source emissions are accounted for as both direct source emissions (those directly emitted by the individual source) and indirect source emissions, which are sources that by themselves do not emit air contaminants but indirectly cause the generation of air pollutants by
attracting vehicles. Examples of indirect sources include office complexes, commercial and government centers, sports and recreational complexes, and residential developments. (SCAQMD 1993, p. 1-2)

5.2.1.5 Air Pollution Constituents

Criteria Pollutants

Air pollutants are classified as either primary or secondary, depending on how they are formed. Primary pollutants are generated daily and are emitted directly from a source into the atmosphere. Examples of primary pollutants include carbon monoxide (CO), nitrogen dioxide (NO₂) and nitric oxide (NO), sulfur dioxide (SO₂), particulates (PM-10 and PM-2.5) and various hydrocarbons (HC) or volatile organic compounds (VOC), which are also referred to as reactive organic gases (ROG). The predominant source of air emissions expected to be generated by the proposed Project is vehicle emissions. Motor vehicles primarily emit CO, NOₓ, and VOC/ROG/HC.

Secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. An example of a secondary pollutant is ozone (O₃), which is one of the products formed when NOₓ reacts with HC in the presence of sunlight. Other secondary pollutants include photochemical aerosols. Secondary pollutants such as ozone represent major air quality problems in the Basin.

The Federal Clean Air Act of 1970 established the National Ambient Air Quality Standards (NAAQS). Six “criteria” air pollutants were identified using specific medical evidence available at that time, and NAAQS were established for those chemicals. The State of California has adopted the same six chemicals as criteria pollutants, but has established different allowable levels. The six criteria pollutants are: carbon monoxide, nitrogen dioxide, ozone, lead, particulates less than 10 microns in size, and sulfur dioxide. The following is a further discussion of the criteria pollutants, as well as volatile organic compounds.

- **Carbon Monoxide (CO)** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing substances. Concentrations of CO are generally higher during the winter months when meteorological conditions favor the build-up of primary pollutants. (USEPA 2005, Homepage) Automobiles are the major source of CO in the Basin, although various industrial processes also emit CO through incomplete combustion of fuels. In high concentrations, CO can cause serious health problems in humans by limiting the red blood cells’ ability to carry oxygen (SCAQMD 1993, p. 3-2).

- **Oxides of Nitrogen (NOₓ)** contribute to air pollution include nitric oxide (NO) and nitrogen dioxide (NO₂). NO is a colorless, odorless gas formed by a combination of nitrogen and oxygen when combustion takes place under high temperatures and pressures. NO₂ is a reddish-brown gas formed by the combination of NO with oxygen. Combustion in motor vehicle engines, power plants, refineries, and other industrial operations, as well as ships, railroads, and aircraft, are the primary sources of NOₓ. NO₂ at atmospheric concentrations is a potential irritant and can cause coughing in healthy people, can alter respiratory responsiveness and pulmonary functions in

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1 NO₂ and NO are collectively known as oxides of nitrogen (NOₓ).
people with preexisting respiratory illness, and potentially lead to increased levels of respiratory illness in children (USEPA 2005, Homepage).

- **Ozone (O\textsubscript{3})** is a colorless toxic gas that irritates the lungs and damages materials and vegetation. During the summer’s long daylight hours, plentiful sunshine provides the energy needed to fuel photochemical reactions between NO\textsubscript{2} and VOC which results in the formation of O\textsubscript{3}. Conditions that lead to high levels of O\textsubscript{3} are adequate sunshine, early morning stagnation in source areas, high surface temperatures, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer (all of which are characteristic of western Riverside County). Ozone represents the worst air pollution-related health threat in the Basin as it affects people with preexisting respiratory illness as well as reduces lung function in healthy people. Studies have shown that children living within the Basin experience a 10–15 percent reduction in lung function (SCAQMD 1993, p. 3-2).

- **Atmospheric Particulate Matter (PM)** is made up of fine solid and liquid particles, such as soot, dust, aerosols, fumes, and mists. PM-10 consists of particulate matter that is 10 microns or less in diameter, and PM-2.5 consists of particulate matter of 2.5 microns or less in size. Both PM-10 and PM-2.5 can be inhaled into the deepest part of the lung, contributing to health effects. The presence of these fine particles by themselves cause lung damage and interfere with the body’s ability to clear its respiratory tract. These particles can also act as a carrier of other toxic substances. (SCAQMD 1993, p. 3-3)

Sources contributing to particulate matter pollution include road dust, windblown dust, agriculture, construction, fireplaces and wood burning stoves, and vehicle exhaust. Specifically, SCAQMD data indicates the largest component of PM-10 particles in the area comes from dust (unpaved roads, unpaved yards, agricultural lands, and vacant land that has been disked). PM-2.5 particles are mostly manmade particles resulting from combustion sources. According to SCAQMD, one component of PM-2.5 pollution in Riverside comes from ammonium nitrate (NH\textsubscript{4}NO\textsubscript{3}) particulates. NO\textsubscript{x} emitted throughout the Basin by vehicles, reacts with ammonia produced from livestock and horses to form ammonium nitrate. Organic carbon particles generated from paints, degreasers, and vehicles are another component of PM-2.5 pollution. The last notable constituent of PM-2.5 sources is elemental carbon, which is used as a surrogate for diesel particulates.

- **Sulfur dioxide (SO\textsubscript{2})** is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. SO\textsubscript{2} can result in temporary breathing impairment in asthmatic children and adults engaged in active outdoor activities. When combined with PM, SO\textsubscript{2} can cause symptoms such as shortness of breath and wheezing; and, with long-term exposure, lead to the exacerbation of existing cardiovascular disease and respiratory illnesses (USEPA 2005, Homepage). Although SO\textsubscript{2} concentrations have been reduced to levels well below State and federal standards, further reductions in SO\textsubscript{2} emissions are needed because SO\textsubscript{2} is a precursor to sulfate and PM-10.

- **Lead (Pb)** concentrations once exceeded the State and federal air quality standards by a wide margin, but have not exceeded State or federal air quality standards at any regular monitoring station since 1982. Health effects associated with lead include neurological impairments, mental retardation, and behavioral disorders. At low levels, lead can damage the nervous systems of fetuses and result in lowered IQ levels in children (USEPA 2005, Homepage). Although special monitoring sites immediately downwind of lead sources recorded very localized violations of the State standard in 1994, no violations have been recorded at these stations since 1996. Unleaded
gasoline has greatly contributed to the reduction in lead emissions in the Basin. Since the proposed Project will not involve leaded gasoline, or other sources of lead emissions, this criteria pollutant is not expected to increase with Project implementation.

- **Reactive Organic Gases/Volatile Organic Compounds (ROG/VOC)** are not classified as criteria pollutants and as such do not have any State or federal ambient air quality standards. VOCs are regulated; however, a reduction in VOC emissions reduces certain chemical reactions which contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM-10 and lower visibility levels. Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOCs because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere, even at low concentrations, are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, is a hydrocarbon component of VOC emissions that is known to be a human carcinogen. (SCAQMD 2005, p. 1-5)

### 5.2.1.6 Toxic Air Contaminants

Toxic air contaminants (TACs) are chemicals generally referred to as “non-criteria” air pollutants which are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. There are hundreds of air toxics, and exposure to these pollutants can cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects. Effects on human health may be both chronic (i.e., of long duration) or acute (i.e., severe but of short duration). Acute health effects are attributable to sudden exposure to high quantities of air toxics. These effects can include nausea, skin irritation, respiratory illness, and, in some cases, death. Chronic health effects usually result from low-dose, long-term exposure from routine releases of air toxics. The effect of major concern for this type of exposure is cancer, which typically requires a latency period of 10-30 years after exposure to develop.

### 5.2.1.7 Monitored Air Quality

The Project site is located within SCAQMD Source Receptor Area (SRA) 23. The most recent published data for the Project site is presented in Table 5.2-A – Air Quality Monitoring Summary from 2000-2009 (SRA 23). This data indicates that the baseline air quality conditions in the Project area include occasional events of very unhealthful air. However, the frequency of smog alerts has dropped significantly in the last decade. Atmospheric concentrations of ozone and particulate matter are the two most significant air quality concerns in the Project area. It is encouraging to note that ozone levels have decreased in the last few years with approximately one-fifth or less days each year experiencing a violation of the State hourly ozone standard since 2000. Locally, no second stage alert (0.35 ppm²/hour) has been called by SCAQMD in the last twenty years. In fact, the last second stage alert was in 1988 in Upland.

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\[^2\text{ppm = parts per million}^2\]
## Table 5.2-A – Air Quality Monitoring Summary from 2000—2009 (SRA 23)

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<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<td>0</td>
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</tr>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1-Hour - 0.09 ppm</td>
<td>No Days Exceeded</td>
<td>41</td>
<td>41</td>
<td>56</td>
<td>80</td>
<td>59</td>
<td>46</td>
<td>45</td>
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<td>25</td>
</tr>
<tr>
<td>8-Hour - 0.070 ppm a</td>
<td></td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>75</td>
<td>62</td>
<td>59</td>
<td>69</td>
<td>88</td>
<td>57</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-Hour - 0.08 ppm (0.075 ppm) a</td>
<td>No Days Exceeded</td>
<td>29</td>
<td>34</td>
<td>38</td>
<td>62</td>
<td>35</td>
<td>33</td>
<td>30</td>
<td>15(46)</td>
<td>38(64)</td>
<td>35</td>
</tr>
<tr>
<td>Max 1-Hour Conc. (ppm) b</td>
<td></td>
<td>0.14</td>
<td>0.143</td>
<td>0.155</td>
<td>0.169</td>
<td>0.141</td>
<td>0.144</td>
<td>0.150</td>
<td>0.131</td>
<td>0.146</td>
<td>0.116</td>
</tr>
<tr>
<td>Max 8-Hour Conc. (ppm) c</td>
<td></td>
<td>0.113</td>
<td>0.120</td>
<td>0.124</td>
<td>0.140</td>
<td>0.117</td>
<td>0.129</td>
<td>0.116</td>
<td>0.111</td>
<td>0.116</td>
<td>0.100</td>
</tr>
<tr>
<td><strong>Carbon Monoxide:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Hour - 20 ppm</td>
<td>No Days Exceeded</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>8-Hour - 9.0 ppm</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Hour - 35 ppm</td>
<td>No Days Exceeded</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8-Hour - 9.0 ppm</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Max 1-Hour Conc. (ppm)</td>
<td></td>
<td>5.0</td>
<td>5.0</td>
<td>8.0</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Max 8-Hour Conc. (ppm)</td>
<td></td>
<td>4.3</td>
<td>3.4</td>
<td>3.0</td>
<td>3.7</td>
<td>3.0</td>
<td>2.5</td>
<td>2.1</td>
<td>2.9</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>Nitrogen Dioxide:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Hour - 0.18 ppm</td>
<td>No Days Exceeded</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Federal Standard:</td>
<td>Annual Arithmetic Mean (ppm) d</td>
<td>0.024</td>
<td>0.025</td>
<td>0.024</td>
<td>0.022</td>
<td>0.017</td>
<td>0.022</td>
<td>0.020</td>
<td>0.021</td>
<td>0.019</td>
<td>0.017</td>
</tr>
<tr>
<td></td>
<td>Max 1-Hour Conc. (ppm)  e</td>
<td>0.10</td>
<td>0.15</td>
<td>0.10</td>
<td>0.09</td>
<td>0.09</td>
<td>0.08</td>
<td>0.08</td>
<td>0.07</td>
<td>0.09</td>
<td>0.08</td>
</tr>
<tr>
<td><strong>Sulfur Dioxide:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Hour - 0.25 ppm</td>
<td>No Days Exceeded</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>24-Hour - 0.04 ppm</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Federal Primary Standards:</td>
<td>Annual Standard – 0.03 ppm c</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Max 1-Hour Conc. (ppm) f</td>
<td>0.11</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.01</td>
<td>0.02</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Max 24-Hour Conc. (ppm)</td>
<td>0.041</td>
<td>0.011</td>
<td>0.002</td>
<td>0.012</td>
<td>0.015</td>
<td>0.011</td>
<td>0.004</td>
<td>0.002</td>
<td>0.003</td>
<td>0.003</td>
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<tr>
<td><strong>Suspected Particles (PM10):</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24-Hour - 50 µg/m³</td>
<td>No Days Exceeded</td>
<td>68</td>
<td>78</td>
<td>81</td>
<td>62</td>
<td>72</td>
<td>69</td>
<td>71</td>
<td>66</td>
<td>49</td>
<td>34</td>
</tr>
<tr>
<td>Federal Primary Standards:</td>
<td>Annual Arithmetic Mean (µg/m³) g</td>
<td>60.1</td>
<td>63.1</td>
<td>58.5</td>
<td>56.9</td>
<td>55.5</td>
<td>52.0</td>
<td>54.4</td>
<td>54.7</td>
<td>46.6</td>
<td>42.5</td>
</tr>
<tr>
<td></td>
<td>Max 24-Hour Conc. (µg/m³)</td>
<td>139</td>
<td>136</td>
<td>130</td>
<td>164</td>
<td>137</td>
<td>123</td>
<td>109</td>
<td>118</td>
<td>115</td>
<td>77</td>
</tr>
<tr>
<td><strong>Suspected Particles (PM-2.5):</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24-Hour – 65 µg/m³ (35µg/m³) h</td>
<td>No Days Exceeded</td>
<td>11</td>
<td>19</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>1(32)</td>
<td>3(33)</td>
<td>0(14)</td>
<td>0(12)</td>
</tr>
<tr>
<td>Annual Arithmetic Mean (µg/m³) i</td>
<td></td>
<td>28.2</td>
<td>31.3</td>
<td>27.5</td>
<td>24.9</td>
<td>22.1</td>
<td>21.0</td>
<td>19.0</td>
<td>19.1</td>
<td>16.4</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>Max 24-Hour Conc. (µg/m³)</td>
<td>119.6</td>
<td>98.0</td>
<td>77.6</td>
<td>104.3</td>
<td>91.7</td>
<td>98.7</td>
<td>68.5</td>
<td>75.7</td>
<td>57.7</td>
<td>47.2</td>
</tr>
</tbody>
</table>

Note:
- a. 2004 is first year of SCAQMD records for State 8-hour Ozone standard. Federal 8-hour ozone standard 0.075 ppm effective May 27, 2008.
- b. Federal NO₂ standard is AAM > 0.053; State NO₂ standard of AAM > 0.030 effective March 20, 2008.
- c. Yes or No indicating whether or not the standard has been exceeded for that year.
- d. Federal PM-10 standard is AAM > 50 µg/m³ was revoked December 17, 2006. State standard is AAM > 20 µg/m³, effective July 5, 2003.
- e. Federal 24-hour PM-2.5 standard changed to 35 µg/m³ in 2006. State standard is AAM > 12 µg/m³. Federal standard is AAM > 15 µg/m³.
The California Air Resources Board (CARB) established a new 8-hour average California Ozone standard of 0.07 ppm, effective May 17, 2006. The federal 1-hour ozone standard was revoked and replaced by the 8-hour average ozone standard of 0.08 ppm, effective June 2005. The federal 8-hour ozone standard was recently lowered from 0.08 ppm to 0.075 ppm and became effective on May 27, 2008.

The California NO₂ standards were amended and the 1-hour standard was lowered from 0.25 ppm to 0.18 ppm. Additionally, a new annual standard of 0.030 ppm was established. The new standards became effective on March 20, 2008. A new federal 1-hour NO₂ standard of 0.100 ppm was established and became effective on January 22, 2010.

Monitoring for PM-2.5 did not begin until 1999. Since then, the annual standard has been consistently exceeded as shown in Table 5.2-A. The 1997 federal annual average standard for PM-2.5 (15 micrograms per cubic meter [μg/m³]) was upheld by the U.S. Supreme Court in February 2001. Effective in December 2006, the federal 24-hour PM-2.5 standard was revised from 65 μg/m³ to 35 μg/m³. The State annual average standard for PM-2.5 (12 μg/m³) was finalized in 2003 and became effective on July 5, 2003. Additionally, the federal annual PM-10 standard was revoked in December 2006.

5.2.2 Comments Received in Response to the Initial Study/Notice of Preparation
Potential impacts related to the Project’s consistency with applicable air quality plans was found to be less than significant in the IS/NOP prepared for this Project (available in Appendix A to this DEIR). The only comment received in response to the IS/NOP was from SCAQMD which called for analysis of air quality impacts from the construction and operation of the Project on both a regional and localized level. The analysis requested by SCAQMD is presented in Section 5.2.6, Environmental Impacts before Mitigation, below.

5.2.3 Thresholds of Significance
The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the City of Riverside’s, “Environmental Checklist” for the proposed Project (see Appendix A of this document) indicates that impacts related to air quality may be considered potentially significant if the proposed Project would:

- 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 non-attainment 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; and/or
- create objectionable odors affecting a substantial number of people.
5.2.4 Related Regulations

5.2.4.1 Criteria Air Pollutants
The federal and State ambient air quality standards (AAQS) establish the context for the local air quality management plans (AQMP) and for determination of the significance of a Project’s contribution to local or regional pollutant concentrations. The federal and State AAQS are presented in Table 5.2-A. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness, and persons engaged in strenuous work or exercise, all referred to as “sensitive receptors.” SCAQMD defines a “sensitive receptor” as a land use or facility such as schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes. (SCAQMD 1993, p. 1-2)

Both federal and State Clean Air Acts require that each non-attainment area prepare a plan to reduce air pollution to healthful levels. The 1988 California Clean Air Act and the 1990 amendments to the federal Clean Air Act (CAA) established new planning requirements and deadlines for attainment of the air quality standards within specified time frames which are contained in the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised, and approved over the past decade. (SCAQMD 1993, p. 2-4) The currently adopted clean air plan for the Basin is the 1999 SIP Amendment, approved by the U.S. Environmental Protection Agency (USEPA) in 2000.

The AQMP for the Basin establishes a program of rules and regulations directed at attainment of the State and national air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections. The SCAQMD adopted an updated AQMP in June 2007, which outlines the air pollution measures needed to meet federal health-based standards for particulates (PM-2.5) in 2014 and for ozone in 2023 (SCAQMD 2007, p. ES-8). The AQMP was forwarded to the CARB for review and approved on September 27, 2007. It was sent to the USEPA for its final approval and to be included as a revision to California’s SIP on November 16, 2007. On November 22, 2010, USEPA published its notice of proposed partial approval and partial disapproval of the 2007 AQMP PM-2.5 Plan. The disparity exists primarily because the attainment demonstration relies too heavily (i.e., greater than 10 percent) on emissions reductions from several State rules that have not been finalized or submitted to USEPA for approval. However, according to the SCAQMD Board Meeting Agenda on March 4, 2011, the proposed revision to the PM-2.5 and Ozone SIP for the South Coast Air Basin and Coachella Valley will not adversely impact the 2007 SIP attainment demonstration, or the overall SIP reduction commitment.

The CARB maintains records as to the attainment status of air basins throughout the State, under both State and federal criteria. The portion of the Basin within which the proposed Project is located is
designated as a non-attainment area for NO\textsubscript{2} under State standards, and as a non-attainment area for ozone, PM-10, and PM-2.5 under both State and federal standards.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures, which include: the application of water or chemical stabilizers to disturbed soils at least twice a day; covering all haul vehicles before transport of materials; restricting vehicle speeds on unpaved roads to 15 miles per hour (mph); and sweeping loose dirt from paved site access roadways used by construction vehicles. In addition, Rule 403 also requires establishment of a vegetative ground cover on disturbance areas that are inactive within 30 days after active operations have ceased. Alternatively, an application of dust suppressants can be applied in sufficient quantity and frequency to maintain a stable surface. Rule 403 also requires grading and excavation activities to cease when winds exceed 25 mph. The Project will comply with Rule 403 during construction.

Projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Because the proposed Project site encompasses approximately 14 acres and Project-related construction is not anticipated to move 5,000 cubic yards of material per day, a Fugitive Dust Control Plan or Large Operation Notification will not be required.

SCAQMD Rule 1113 governs the sale of architectural coatings and limits the volatile organic compounds (VOC) in paints and paint solvents. Although this rule does not directly apply to the Project, it does dictate the VOC content of paints available for use during construction of the proposed Project as well as the VOC content of paints available for purchase at the Walmart.

5.2.4.2 Toxic Air Contaminants

Toxic Air Contaminants (TACs) are regulated under both federal and State laws. Federally, the 1970 Amendments to the Clean Air Act included a provision to address air toxics. California regulates toxic air contaminants through its air toxics program, mandated in Chapter 3.5 (Toxic Air Contaminants) of the Health and Safety Code Section 39660, \textit{et seq.}, and Part 6 Air Toxics “Hot Spots” Information and Assessment (Section 44300, \textit{et seq.}). CARB, working in conjunction with the Office of Environmental Health Hazard Assessment (OEHHA), identifies toxic air contaminants. Air toxic control measures may then be adopted to reduce ambient concentrations of the identified toxic air contaminant below a specific threshold based on its effects on health, or to the lowest concentration achievable through use of best available control technology for toxics (T-BACT). The program is administered by the CARB. Air quality control agencies, including the SCAQMD, must incorporate air toxic control measures into their regulatory programs or adopt equally stringent control measures as rules within six months of adoption by CARB.
5.2.5 Project Design Considerations

Design considerations refer to ways in which the proposed Project will limit or mitigate potential impacts to air quality, through the design of the Project. As described in DEIR Section 3.2.1.6 (Project Description, Sustainability Features), at a minimum the Project will use non ozone-depleting refrigerants and low VOC paint on the building’s interior and exterior surfaces. No other specific design measures have been implemented that will avoid or reduce potentially significant impacts to air quality.

5.2.6 Environmental Impacts before Mitigation

Threshold: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Air quality impacts can be divided into short-term and long-term impacts. Short-term impacts are usually related to construction and grading activities. Long-term impacts are usually associated with build-out conditions and long-term operations of a project. Both short-term and long-term air quality impacts can be analyzed on a regional and localized level. Regional air quality thresholds examine the effect of project emissions on the air quality of the Basin, while localized air quality impacts examine the effect of project emissions on the neighborhood around the project site. The following information was derived from the AQIA which is found in Appendix B of this DEIR.

SCAQMD’s Regional Significance Threshold (RST) Analysis

The thresholds contained in the SCAQMD CEQA Air Quality Handbook are considered regional thresholds and are shown in Table 5.2-B – SCAQMD CEQA Regional Significance Thresholds. These regional thresholds were developed based on the SCAQMD’s treatment of a major stationary source.

<table>
<thead>
<tr>
<th>Emission Threshold</th>
<th>Units</th>
<th>VOC</th>
<th>NOₓ</th>
<th>CO</th>
<th>SOₓ</th>
<th>PM-10</th>
<th>PM-2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>lbs/day</td>
<td>75</td>
<td>100</td>
<td>550</td>
<td>150</td>
<td>150</td>
<td>55</td>
</tr>
<tr>
<td>Operations</td>
<td>lbs/day</td>
<td>55</td>
<td>55</td>
<td>550</td>
<td>150</td>
<td>150</td>
<td>55</td>
</tr>
</tbody>
</table>

Short-Term RST Analysis

Short-term emissions consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Short-term impacts will also include emissions generated during construction as a result of operation of personal vehicles by construction workers, asphalt degassing, and architectural coating (painting) operations.

Project-related short-term emissions were evaluated using the CalEEMod version 2011.1.1 computer program. The model evaluated emissions resulting from demolition and construction. The total construction period is expected to require approximately 14 months beginning no earlier than May 2012. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated...
construction emissions. In addition to the default values used, the following assumptions relevant to construction timing and phasing were used to model short-term construction emissions:

- Demolition of the Tire & Lube Express facility, the removal (and subsequent relocation) of the Garden Center, and removal of approximately 15,000 SF of general merchandise area, will occur for approximately one month.
- Site grading will last approximately one month following demolition. Grading activities will not be extensive since the site has been previously developed.
- To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the Project will utilize the mitigation option of watering the Project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions.
- Repaving of the parking lot is assumed to take approximately one month beginning during the last two weeks of site grading. Paving will include the grinding and overlay of the parking lot.
- Construction will begin after site grading is complete and will continue thereafter for 12 months.
- Painting/architectural coatings of the completed building will occur over approximately one month beginning during the last two weeks of building construction.

The construction equipment estimated to be used for each activity is identified in Appendix A of the AQIA. Table 5.2-C – Estimated Daily Construction Emissions summarizes the estimated construction emissions.

**Table 5.2-C – Estimated Daily Construction Emissions**

<table>
<thead>
<tr>
<th>Activity/Year</th>
<th>Peak Daily Emissions (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOC</td>
</tr>
<tr>
<td>SCAQMD Daily Thresholds</td>
<td>75</td>
</tr>
<tr>
<td><strong>Construction 2012</strong></td>
<td></td>
</tr>
<tr>
<td>Demolition</td>
<td>9.69</td>
</tr>
<tr>
<td>Site Grading</td>
<td>6.84</td>
</tr>
<tr>
<td>Asphalt</td>
<td>8.18</td>
</tr>
<tr>
<td>Building Construction</td>
<td>6.07</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>15.01</td>
</tr>
<tr>
<td><strong>Exceeds Threshold?</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Construction 2013</strong></td>
<td></td>
</tr>
<tr>
<td>Building Construction</td>
<td>5.56</td>
</tr>
<tr>
<td>Architectural Coatings</td>
<td>26.43</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>32.00</td>
</tr>
<tr>
<td><strong>Exceeds Threshold?</strong></td>
<td>No</td>
</tr>
</tbody>
</table>
Evaluation of Table 5.2-C indicates that criteria pollutant emissions from construction activities will not exceed the SCAQMD regional daily thresholds during Project construction.

Long-Term RST Analysis
Long-term emissions are evaluated for Project buildout. The Project is assumed to be operational in 2013. Mobile emissions refer to on-road motor vehicle emissions at Project buildout, which include passenger vehicles and delivery trucks. These emissions are estimated by using the trip generation rates provided in the Wal-Mart Expansion, Traffic Impact Analysis, City of Riverside, California, prepared by Urban Crossroads (the TIA) (Urban Crossroads, p.36). Area source emissions include stationary combustion emissions of natural gas used for space and water heating, yard and landscape maintenance (assumed to occur throughout the year in Southern California), consumer use of solvents and personal care products, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions.

Separate emissions were computed for both summer and winter and the results are presented below in Table 5.2-D – Estimated Daily Project Operation Emissions (Summer) and Table 5.2-E – Estimated Daily Project Operation Emissions (Winter).

Table 5.2-D – Estimated Daily Project Operation Emissions (Summer)

<table>
<thead>
<tr>
<th>Activity/Year</th>
<th>Peak Daily Emissions (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOC</td>
</tr>
<tr>
<td>SCAQMD Daily Thresholds</td>
<td>55</td>
</tr>
<tr>
<td>Mobile</td>
<td>14.93</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>0.00</td>
</tr>
<tr>
<td>Architectural Coatings</td>
<td>0.14</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>0.44</td>
</tr>
<tr>
<td>Landscaping</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>15.51</td>
</tr>
</tbody>
</table>

Exceeds Threshold? No No No No No No

3 The TIA is included as Appendix E to the DEIR.
Table 5.2-E – Estimated Daily Project Operation Emissions (Winter)

<table>
<thead>
<tr>
<th>Activity/Year</th>
<th>Peak Daily Emissions (lb/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOC</td>
</tr>
<tr>
<td>SCAQMD Daily Thresholds</td>
<td>55</td>
</tr>
<tr>
<td>Mobile</td>
<td>15.88</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>0.00</td>
</tr>
<tr>
<td>Architectural Coatings</td>
<td>0.14</td>
</tr>
<tr>
<td>Consumer Products</td>
<td>0.44</td>
</tr>
<tr>
<td>Landscaping</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16.46</strong></td>
</tr>
<tr>
<td><strong>Exceeds Threshold?</strong></td>
<td>No</td>
</tr>
</tbody>
</table>

Evaluation of the modeling results presented in the two above tables indicates that criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds during summer or winter.

**RST Analysis Conclusion**

Based on the RST for the proposed Project, the short-term construction and long-term operational emissions will not exceed the daily regional thresholds set by SCAQMD for any criteria pollutants.

**SCAQMD’s Localized Significance Threshold (LST) Analysis**

The pollutants analyzed under the localized significance threshold (LST) are CO, NO\textsubscript{x}, PM-10, and PM-2.5 (SCAQMD 2008, p. 1-2). Of these pollutants, the “attainment pollutants” (CO and NO\textsubscript{x}) are derived using an air quality dispersion model to back-calculate the daily emissions that would cause or contribute to a violation in ambient air quality for the SRA within which the Project is located (SRA 23). The non-attainment PM-10 and PM-2.5 pollutant measurements are derived using an air quality dispersion model to back-calculate the emissions that would be necessary to worsen the existing violation in SRA 23, using the allowable change in concentration thresholds approved by the SCAQMD.

**Short-Term LST Analysis**

According to the accepted LST methodology, only on-site emissions need to be analyzed. Emissions associated with hauling, vendor trips, and worker trips are mobile source emissions that occur off site and need not be considered according to LST methodology. SCAQMD has provided LST lookup tables and sample construction scenarios\textsuperscript{4} to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Although the Project site is larger than five acres, it is anticipated that only two acres will be disturbed in one day; thus it is appropriate to use the LSD lookup tables or this analysis.

\textsuperscript{4} Available on the internet at [www.aqmd.gov/ceqa/handbook/LST/LST.html](http://www.aqmd.gov/ceqa/handbook/LST/LST.html)
The sample construction scenario for the two acre site was modified using Project-specific information such as the demolition square footage, building square footage, and construction equipment usage information from the CalEEMod data found in Appendix A of the AQIA.

The LST thresholds are estimated for each SRA using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). Sensitive receptors in the Project vicinity primarily include existing residences to the north and west of the Project site with some residential, commercial and vacant land to the east and south (Figure 3-3 – Aerial Photograph). The closest sensitive receptors are the existing residences adjacent to the north and west of the Project site. The closest receptor distance on the LST look-up tables is 25 meters. According to the LST Methodology, projects with boundaries closer than 25 meters to the nearest receptor should use LSTs for receptors located at 25 meters. Therefore a receptor distance of 25 meters was used for this analysis. The results of the short-term LST analysis are summarized in Table 5.2-F – LST Results for Construction Emissions, below.

Table 5.2-F – LST Results for Construction Emissions

<table>
<thead>
<tr>
<th>Activitya</th>
<th>Peak Daily Emissions (lb/day)</th>
<th>NOx</th>
<th>CO</th>
<th>PM-10</th>
<th>PM-2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>LST Threshold for 2 acre</td>
<td>170</td>
<td>883</td>
<td>7</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Demolition</td>
<td>71.6</td>
<td>36.4</td>
<td>6.0</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Site Grading</td>
<td>54.1</td>
<td>28.6</td>
<td>4.3</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Building Construction</td>
<td>40.2</td>
<td>21.4</td>
<td>2.4</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Architectural Coating and Asphalt</td>
<td>54.6</td>
<td>30.8</td>
<td>3.8</td>
<td>3.5</td>
<td></td>
</tr>
</tbody>
</table>

Exceeds Threshold? | No | No | No | No |

Notes:
- a Each activity occurs separately within a given location

As indicated in the above table, Project-related short-term construction emissions do not exceed the SCAQMD-established LST.

Long-Term LST Analysis
The proposed Project involves the expansion of an existing retail use. The majority of operational emissions are in the form of mobile sources, without any stationary sources present. According to the LST methodology, LSTs would only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site, such as warehouse/transfer facilities. The proposed Project does not include such uses. Walmart limits truck idling to three minutes through use of electronic engine controls that automatically shut off the engine after the set timeframe which will limit idling on the Project site. Any emissions associated with idling or delivery trucks accessing the Project site would be minimal. Thus, due to the lack of stationary source emissions, no long-term LST analysis is needed. Therefore, no significant impacts would result from long-term operation of the Project.
LST Analysis Conclusion
Based on the LST analysis, the short-term construction of the Project will not exceed the LST at sensitive receptors within the Project vicinity for any criteria pollutants. Due to the lack of stationary source emissions, no long-term LST analysis is needed.

CO Hot Spots Analysis
CO is a localized problem requiring additional analysis beyond quantification of total Project-related emissions. The SCAQMD recommends that projects with sensitive receptors or projects that could negatively impact levels of service (LOS) of existing roads use the screening procedures outlined in the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993, Section 5.3) to determine the potential to create a CO “hot spot.” A CO hot spot is a localized concentration of CO that is above the State or federal 1-hour or 8-hour ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The proposed Project was evaluated to determine the potential of creating CO hot spots as a result of Project operations and the Project’s contribution to LOS on adjacent roadways according to the CO hot spots protocol developed by Caltrans (AQIA). The CO hot spot analysis is contained in its entirety in Appendix B of this DEIR and the results are summarized in Table 5.2-G – CO Hot Spot Analysis Results, below.

Table 5.2-G – CO Hot Spot Analysis Results

<table>
<thead>
<tr>
<th>Intersection</th>
<th>1-Hour CO Concentration (ppm)</th>
<th>8-Hour CO Concentration (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Standard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Standard</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Van Buren Boulevard/ Arlington Avenue</td>
<td>6.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Van Buren Boulevard/Cypress Avenue –</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Jackson Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Buren Boulevard/Wells Avenue –</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Colorado Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Buren Boulevard/ California Avenue</td>
<td>5.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Van Buren Boulevard/ Magnolia Avenue</td>
<td>5.7</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Notes:
\( ^a \) Includes existing traffic plus ambient growth plus traffic from completed Project
\( ^b \) Includes existing plus ambient growth plus Project traffic plus other approved projects in the area

Conclusion of CO Hot Spots Analysis
For the intersections modeled, the CO emissions from Project-generated traffic are below the State and federal standards; including the cumulative traffic conditions which factors in traffic generated by other area-wide development. Therefore, the Project will not contribute to an exceedance of either the CAAQS or NAAQS for CO emissions and will not form any CO hot spots in the Project area.
Conclusions
Based on the RST analysis for the proposed Project, the short-term construction and long-term operation emissions will not exceed any thresholds. Regional air quality impacts from short-term construction and long-term operation are considered less than significant.

Based on the LST analysis of the proposed Project, the short-term construction of the Project will not result in localized air quality impacts to sensitive receptors in the Project vicinity for NO\textsubscript{x}, CO, PM-10 or PM-2.5. No long-term LST analysis is needed due to the lack of stationary source emissions. Additionally, the proposed Project will not contribute to an exceedance of either the CAAQS or NAAQS for CO emissions and will not form any CO hot spots in the Project area. For these reasons, localized air quality impacts from short-term construction and long-term operation are considered less than significant.

Therefore, because implementation of the proposed Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation; impacts are considered to be less than significant.

Threshold: 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).

As previously stated in Section 5.2.4.2 (Related Regulations, Criteria Air Pollutants), the portion of the Basin within which the Project is located is designated as a non-attainment area for NO\textsubscript{2} under State standards, and for ozone, PM-10, and PM-2.5 under both State and federal standards.

In evaluating the cumulative effects of the Project, Section 21100(e) of CEQA states that “previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis.” In addressing cumulative effects for air quality, the AQMP utilizes approved general plans; therefore, it is the most appropriate document to use to evaluate cumulative impacts of the proposed Project. This is because the AQMP evaluated air quality emissions for the entire Basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the Project area, into compliance with all federal and State air quality standards. As discussed in the IS/NOP (available in Appendix A to this DEIR), the Project will not conflict with or obstruct the implementation of the AQMP. As discussed in the analysis under the threshold whether the proposed Project will “violate any air quality standard or contribute substantially to an existing or projected air quality violation,” the Project’s short-term and long-term emissions are below regional and localized thresholds. Thus, the proposed Project is not considered to have a cumulatively considerable net increase on non-attainment pollutants in the region under applicable State and federal standards and the impact is considered less than significant.
Threshold: Expose sensitive receptors to substantial pollutant concentrations.

The closest sensitive receptors are residents adjacent to the Project site. According to the analysis under the threshold whether the proposed Project will “violate any air quality standard or contribute substantially to an existing or projected air quality violation,” the short-term and long-term LST analysis and the CO hot spots analysis indicate that localized impacts to sensitive receptors in the immediate vicinity of the Project site will not be significant. Therefore, on a localized level, the Project will not result in the exposure of sensitive receptors to substantial pollutant concentrations during Project construction or operation, and impacts are considered less than significant.

Threshold: Create objectionable odors affecting a substantial number of people.

According to the CARB Air Quality and Land Use Handbook (CARB 2005), common sources of odor complaints include: sewage treatment plants, landfills, recycling facilities, petroleum refineries, and auto body shops (CARB 2005, p. 34). The proposed Project does not contain land uses typically associated with emitting objectionable odors and is therefore not anticipated to create any objectionable odors during Project operation. Potential odor sources associated with implementation of the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities. Recognizing the short-term duration and quantity of construction emissions in the Project area and the limited outdoor exposure of persons to outdoor odors, the Project will not expose substantial numbers of people to objectionable odors. The proposed Project will also be required to comply with SCAQMD Rule 402 to correct occurrences of public nuisances.

Therefore, the Project’s construction and operation will not create objectionable odors affecting a substantial number of people, and the impact is considered less than significant.

5.2.7 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Implementation of the proposed Project with adherence to SCAQMD Rule 403 as discussed in Section 5.2.4.1 (Related Regulations, Criteria Air Pollutants) will not result in any significant air quality impacts that will require mitigation. Specifically, impacts to air quality were found to be less than significant; therefore, no mitigation measures are necessary.

5.2.8 Summary of Environmental Effects after Mitigation Measures are Implemented

Based on the RST analysis for the proposed Project, the short-term construction and long-term operation emissions will not exceed any thresholds. Regional air quality impacts from short-term construction and long-term operation are considered less than significant with no mitigation required.

Based on the LST analysis of the proposed Project, the short-term construction of the Project will not result in localized air quality impacts to sensitive receptors in the Project vicinity for NOx, CO, PM-10 or
PM-2.5. Localized air quality impacts from short-term construction are considered less than significant without mitigation.

No long-term LST analysis is needed due to the lack of stationary source emissions. In addition, the Project will not contribute to an exceedance of either the CAAQS or NAAQS for CO emissions and will not form any CO hot spots in the Project area. Localized air quality impacts from long-term operation are considered less than significant without mitigation.

When considering the cumulative criteria pollutant impacts on air quality in the region, it is the long-term operational emissions that are of the most concern. Since the Project’s short-term and long-term emissions are below regional and localized thresholds, the Project is not considered to have a cumulatively considerable net increase on non-attainment pollutants in the region under applicable State and federal standards, and the impact is considered less than significant without mitigation.

The Project’s construction and operation will not create objectionable odors affecting a substantial number of people, and the impact is considered less than significant without mitigation required.

5.2.9 Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented

Due to the defining geographic and meteorological characteristics of the Basin, the cumulative area for air quality impacts is the Basin itself. As previously stated in Section 5.2.4.2 (Related Regulations, Criteria Air Pollutants), the portion of the Basin within which the City is located is designated as a non-attainment area for NO₂ under State standards, and for ozone, PM-10 and PM-2.5 under both State and federal standards.

Project emissions within the context of SCAQMD’s regional emissions thresholds provide an indicator of potential cumulative impacts within the Basin. Cumulative localized impacts for pollutants are also considered, and reflect Project air pollutant emissions in the context of ambient conditions in the Project vicinity.

As discussed in Section 5.2.6 (Environmental Impacts before Mitigation), Section 5.2.8 (Summary of Environmental Effects after Mitigation Measures are Implemented), and Appendix B (the Project’s AQIA), the Project’s short-term and long-term emissions are below regional and local SCAQMD thresholds.

The SCAQMD, through its Cumulative Impact Requirements Pursuant to the California Environmental Quality Act guidance (SCAQMD 2003, p. 3.), states that projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. Based on SCAQMD’s regulatory jurisdiction over regional air quality, it is reasonable to rely on its thresholds to determine whether there is a cumulative air quality impact. Additionally, as explained above, the proposed Project is consistent with the GP 2025 and thus, the AQMP; therefore, the proposed Project would not interfere with SCAQMD’s plan to bring the South Coast Air Basin into attainment with the NAAQS and CAAQS. On this
basis, Project-related generation of criteria air pollutants or their precursors is not considerable, and the cumulative effects of the Project are **less than significant**.

### 5.2.10 References

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Urban Crossroads, *Wal-Mart Expansion, Traffic Impact Analysis*, City of Riverside, California, October 18, 2010 (Revised). (Included as Appendix E.) [Cited as Urban Crossroads]
5.3 Biological Resources

Potential impacts related to:

- having a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- having a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; and/or
- conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A). The following discussion addresses potential impacts related to:
- having a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

As discussed below, the Project’s potential to have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service is considered to be less than significant with mitigation incorporated.

5.3.1 Setting

The Project is located in an urbanized area. More specifically, the site itself is substantially disturbed from prior development of the existing Walmart store. Currently, the Project site is nearly entirely covered with structures, pavement, or small, frequently maintained (i.e., mowed, weeded) landscaped areas. Located throughout the existing Walmart’s parking lot area are approximately 100 non-native, ornamental trees.

The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey Area as shown on the City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR) Figure 5.4-8 – MSHCP Burrowing Owl Survey Area. However, the existing Project site does not contain suitable burrowing owl habitat since nearly the
entire soil surface, required for the burrowing owls to burrow, is covered by pavement or structures and is thus inaccessible, or is frequently disturbed by routine maintenance activities (mainly mowing) of the landscaped areas. Further, the Project site is not within an MSHCP Criteria Cell. Criteria Cells are a division of Subunits, which are a division of Criteria Areas, which comprise an Area Plan. Criteria Cells are also divided into Cell Groups. Each of the cells has designated “criteria” for the purpose of targeting additional conservation lands for acquisition, and all projects within a Criteria Area must go through the Joint Project Review process (WRC MSHCP).

5.3.2 Comments Received in Response to the Initial Study/Notice of Preparation
No comments were received regarding biological resources in response to the IS/NOP.

5.3.3 Thresholds of Significance
The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the City of Riverside’s, “Environmental Checklist” for the proposed Project (see Appendix A of this document) indicates that impacts related to biological resources may be considered potentially significant if the proposed Project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

5.3.4 Related Regulations
5.3.4.1 Federal Endangered Species Act of 1973
The Federal Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531–1543) and subsequent amendments provide for the conservation of endangered and threatened species and the habitats on which they depend. A federally endangered species is one that is facing extinction throughout all or a significant portion of its geographical range. A federally-threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in a “take” of the species or its habitat. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history. The proposed Project however, is not expected to require such authorizations as it is not expected to result in “take” of a listed species.

5.3.4.2 California Endangered Species Act
California Endangered Species Act (Fish and Game Code 2050, et seq.) (CESA) establishes that it is the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies should not approve projects which would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are
available that would avoid jeopardy. CESA requires State lead agencies to consult with the California Department of Fish and Game (CDFG) during the CEQA process to avoid jeopardy to threatened or endangered species. CESA prohibits any person from taking or attempting to take a species listed as endangered or threatened (Fish and Game Code Section 2080). Section 2080 provides the permitting structure for CESA. The “take” of a State-listed Endangered or Threatened species or Candidate species will require incidental take permits as authorized by the CDFG. The proposed Project however, is not expected to require such authorizations as it is not expected to result in “take” of a listed species.

5.3.4.3 Migratory Bird Treaty Act
The Federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 3800 prohibit the take, possession, or destruction of any birds, their nests or eggs. Although no native habitat communities are present and the Project site is located in a predominately developed environment, certain common bird species may utilize the landscaped areas, especially the existing parking lot trees for breeding and/or seasonal foraging. The proposed Project will comply with the MTBA and California Fish and Game Code by limiting the period in which construction will take place or through the implementation mitigation as identified in Section 5.3.7, below.

5.3.4.4 MSHCP and Ordinance No. 6709 – MSHCP Fee Program Ordinance
The MSHCP serves as a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP), pursuant to Section (a)(1)(B) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the State NCCP Act of 2001. The plan “encompasses all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto” (GP 2025, p. I-39). The MSHCP, by extension, also covers cities that have since incorporated since the GP 2025 adoption in 2007, such as the cities of Eastvale, Jurupa Valley, Menifee, and Wildomar. The overall biological goal of the MSHCP is to conserve the 146 covered species and their habitats, as well as maintain biological diversity and ecological processes while allowing for future economic growth within a rapidly urbanizing region.

The City adopted the MSHCP on September 23, 2003 (Riverside Municipal Code, Chapter 16.72) and the federal and State wildlife agencies approved permits required to implement the MSHCP on June 22, 2004. Implementation of the MSHCP will conserve approximately 500,000 acres of habitat, including land already in public or quasi-public ownership and approximately 153,000 acres of land in private ownership that will be purchased or conserved through other means such as land acquisition and conservation easements. The money for purchasing private land will come from development mitigation fees imposed on new development within the boundaries of the MSHCP, as well as State and federal funds.

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1 Subsequent to adoption of the MSHCP, the cities of Menifee, Wildomar, and Eastvale have incorporated. Menifee and Wildomar are member agencies of the MSHCP and Eastvale is in the process of joining the plan.
The intent of the MSHCP is to ensure the survival of a range of plants and animals and avoid the cost and delays of mitigating biological impacts on a project-by-project basis. It would allow the incidental take (for development purposes) of currently listed species and their habitat from development. It would also allow the incidental take of species that might be listed in the future.

The MSHCP includes a program for the collection of development mitigation fees, policies for the review of projects in areas where habitat must be conserved (i.e., property within Criteria Cells) and policies for the protection of riparian areas, vernal pools, and narrow endemic plants. It also includes a program for performing plant, bird, reptile, and mammal surveys as well as policies for the protection of these species, if found.

As a signatory to the MSHCP, the City adopted Ordinance No. 6709 (which is codified as Chapter 16.72 of the Riverside Municipal Code) and established a Local Development Mitigation Fee (LDMF) to be used by the Western Regional Conservation Authority (RCA) to implement the MSHCP. The Project will participate in the MSHCP through the payment of the LDMF at the time building permits are issued pursuant to the provisions of Ordinance No. 6709.

5.3.5 Project Design Considerations
No specific design measures would be implemented that would avoid or reduce potentially significant impacts to biological resources. However, as discussed in Section 5.3.4.4 above, the Project will pay the LDMF in effect at the time building permits are issued. LDMF revenues will be used by the RCA to implement the MSHCP.

5.3.6 Environmental Impacts before Mitigation
Threshold: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

As discussed in Section 5.3.1, Setting, above, the Project site is located in an area identified by the MSHCP as requiring burrowing owl surveys; however, because the Project site is within an urbanized area and is highly disturbed as a result of the development and construction of the existing Walmart store, the Project site does not exhibit the characteristics of an area of biological significance, in particular regard to burrowing owls. Therefore, as discussed above, the Project site is nearly entirely covered with either structures or pavement, or filled in with small, frequently maintained landscaped areas and does not provide sustainable habitat for burrowing owls. Since the Project site does not contain suitable burrowing owl habitat, impacts to burrowing owl habitat will be less than significant.

The current parking areas will undergo improvements such as a reconfiguration, repaving, restriping and the removal and planting of trees, as part of the Project’s landscaping enhancements. Although the Project site has been disturbed and is nearly entirely covered with structures or pavement, the non-native trees that occur in the parking lot areas (planned to be removed and replaced as part of the Project) may support nests utilized by birds protected under MBTA of 1918 (Code of Federal Regulations
Section 10.13) or the California Fish and Game Code, as discussed under Related Regulations, above. Thus, the potential exists for direct and indirect construction-related disturbance to nesting birds.

All migratory non-game native bird species are protected by international treaty under the MBTA. Pursuant to the MBTA, it is unlawful to “take” (i.e., harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect) migratory birds or their nests. Many native bird species are covered under the MBTA. Impacts can be minimized or eliminated by avoiding impacts to potential nest sites present in the project area. While there is no established protocol for nest avoidance, when consulted, the CDFG generally recommends avoidance buffers of about 500 feet for birds-of-prey, and 100 to 300 feet for songbirds. Therefore, mitigation measure MM BIO 1 has been included to ensure potential impacts will be reduced to less than significant with mitigation incorporated.

5.3.7 Proposed Mitigation Measures

To comply with the MBTA compliance and reduce potential impacts to nesting birds during Project construction to less than significant, the following mitigation measure shall be implemented:

**MM BIO 1**: Potential impacts to nesting habitat (i.e., site grading or removal of trees) shall be limited to the times when birds are less likely to be nesting (i.e., the non-breeding season, approximately September to February). The period from approximately February 1 to August 31 covers the breeding season for most birds that may occur in the Project area. If construction work cannot be done in the non-breeding season, a qualified biologist shall check potential nesting sites no more than three (3) days prior to any tree removal activities. If nesting birds are present, the area shall be avoided until young have fledged (as determined by a qualified biologist). Avoidance will involve prescribed 500-foot buffer zone for birds of prey and 100- to 300-foot buffer zone for songbirds from sensitive locations.

5.3.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented

Impacts to migrating birds will be minimized or eliminated by avoiding potential nests in the Project area via mitigation measure MM BIO 1. Avoidance will involve prescribed 500-foot buffer zone for birds of prey and 100- to 300-foot buffer zone for songbirds from sensitive locations. In the event that avoidance is not possible, in instances such as site grading or the actual removal of trees, and impacts to the potentially sensitive habitat are unavoidable, construction work is limited to the non-breeding season months. In the event that either of the aforementioned conditions (i.e., avoidance through buffers or times of the year) cannot be employed, a third alternative is provided that allows a qualified biologist to survey and potentially clear individual trees for the Project’s work to continue in the absence of protected nesting birds. Therefore, with implementation of mitigation measure MM BIO 1, potential adverse impacts to nesting birds protected under the MBTA will be reduced to less than significant levels.
5.3.9 Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented

The geographic context, by which the Project’s cumulative impact on biological resources is measured, encompasses western Riverside County. As discussed in Section 5.3.6 (Biological Resources, Environmental Impacts before Mitigation), although the Project site has been disturbed and is nearly entirely covered with structures or pavement, the non-native trees that occur in the parking lot areas (planned to be removed and replaced as part of the Project) may support nests utilized by birds protected under the Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations Section 10.13) or the California Fish and Game Code. Potential impacts to nesting birds resulting from Project-related construction will be less than significant with the implementation of mitigation measure MM BIO 1, which requires site grading or tree removal during the non-breeding season or a pre-construction survey to check for nesting birds prior to any tree removal. If nesting birds are present, MM BIO 1 requires avoidance of the area until a qualified biologist has determined the young have fledged. The cumulative development project sites are also within urbanized areas and may contain habitat that supports nesting birds; thus, the potential exists for direct and indirect construction-related disturbance to nesting birds from the cumulative development projects. However, it is reasonable to assume that the cumulative development projects will implement mitigation measures in compliance with MBTA (Code of Federal Regulations Section 10.13) and California Fish and Game Code (Sections 3503, 3503.5, and 3800) that will reduce potential impacts to nesting birds; therefore, cumulative impacts to nesting birds are considered less than significant.

The Project site and four of the cumulative development projects (Cinnamon Creek Apartments, Snowberry Creek Apartments, Bruce Karish’s warehouse, and the William Fox Group’s warehouse) are located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey Area as shown on Figure 5.4-8 – MSHCP Burrowing Owl Survey Area of the City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR). The Project site and cumulative development project sites are not within a Criteria Cell.

As stated in Section 5.3.4.4 (Biological Resources, Related Regulations, MSHCP and Ordinance No. 6709 – MSHCP Fee Program Ordinance), the overall biological goal of the MSHCP is to conserve covered species and their habitats, as well as to maintain biological diversity and ecological processes while allowing for future economic growth within a rapidly urbanizing region. Because the City is a signatory to the MSHCP, all projects within the City are required to comply with the MSHCP and conduct biological habitat assessments/focused surveys as necessary and to pay the local development mitigation fee (LDMF). Compliance with the MSHCP provides mitigation for direct, indirect, and cumulative impacts to covered species. However, the existing Project site is disturbed with development of the existing Walmart, associated parking lot, and non-native buffer and ornamental landscaping. As such, there are no federally endangered or threatened species living or existing in their habitat on site and there is minimal opportunity for such occurrence on site.
Through adherence to mitigation measure **MM BIO 1** and the payment of the LDMF in support of the MSHCP, implementation of the proposed Project will comply with the MSHCP and will not result in any significant impacts. Therefore, cumulative impacts on biological resources will be **less than significant**.

### 5.3.10 References

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Riverside County Transportation & Land Management Agency, *Western Riverside County Multiple Species Habitat Conservation Plan*. (Available at Riverside County and at [http://www.rctlma.org/mshcp/index.html](http://www.rctlma.org/mshcp/index.html), accessed May 24, 2011.) [Cited as WRC MSHCP]
5.4 Greenhouse Gas Emissions

The following discussion addresses potential impacts related to the Project’s generation of greenhouse gas (GHG) emissions and consistency with applicable plans, policies, or regulations adopted for the reduction of GHG emissions. The analysis in this section is based on the Air Quality and Greenhouse Gas Impact Analysis (AQIA) prepared for this Project (included as Appendix B). The methodology is consistent with draft guidance prepared by the South Coast Air Quality Management District (SCAQMD) for quantification of emissions and evaluation of potential impacts related to GHG emissions. As recommended by SCAQMD staff, the California Emissions Estimator Model (CalEEMod™) version 2011.1.1 program was used to quantify project-related emissions. An individual project cannot generate enough GHG emissions to effect a discernible change in global climate. However, the proposed Project may participate in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs which, when taken together, may influence global climate change. Because these changes may have serious environmental consequences, this section will evaluate the potential for the proposed Project to have a significant effect upon California’s environment as a result of its potential contribution to the enhanced greenhouse effect.

Potential impacts related to:

- generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and
- conflicting with or obstructing the implementation of applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases were found to be potentially significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (included as Appendix A) and are discussed in this section of the DEIR.

As discussed below, the Project’s potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and conflict with or obstructing the implementation of applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases is considered to be less than significant.

5.4.1 Setting

Some gases in the atmosphere affect the Earth’s heat balance by absorbing infrared radiation. This layer of gases in the atmosphere functions much the same as glass in a greenhouse (i.e., both prevent the escape of heat). This is why global warming is also known as the “greenhouse effect.” Increased emissions of these gases due to combustion of fossil fuels and other activities increase the greenhouse effect, leading to global warming and other climate changes. Gases responsible for global climate change in the South Coast Air Basin (Basin) and their relative contribution to the overall warming effect are carbon dioxide (55 percent), chlorofluorocarbons (24 percent), methane (15 percent), and nitrous oxide (6 percent) (SCAQMD 2005, p. 1-8). It is widely accepted that continued increases in greenhouse gases (GHG) will contribute to global climate change although there is uncertainty concerning the magnitude and timing of future emissions and the resultant warming trend (SCAQMD 2005, p. 1-8).
Human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors contribute to these GHG (CEC 2006a, p.7). According to a recent report published by the California Energy Commission (CEC), transportation was responsible for 41 percent of the State’s GHG emissions, followed by electricity generation for the most recent reporting year, 2004 (CEC 2006a, p. 8). In November 2007, the California Air Resources Board (CARB) reported that transportation was 38 percent of the State’s GHG emissions, followed by electricity generation for 2004 (CARB 2007, p. 7).

Emissions of carbon dioxide (CO$_2$) and nitrous oxide (N$_2$O) are byproducts of fossil fuel combustion (CARB 2007, p. 15). Methane (CH$_4$), a highly potent GHG, results from off-gassing associated with agricultural practices, landfills, and wastewater treatment (CARB 2007, p. 19–22; IPCC 2007, p. 593).

“Stratospheric ozone depletion” refers to the slow destruction of naturally occurring ozone, which lies in the upper atmosphere (called the stratosphere) and which protects Earth from the damaging effects of solar ultraviolet radiation. Certain compounds, including chlorofluorocarbons (CFCs,) halons, carbon tetrachloride, methyl chloroform, and other halogenated compounds, accumulate in the lower atmosphere and then gradually migrate into the stratosphere. In the stratosphere, these compounds participate in complex chemical reactions to destroy the upper ozone layer. Destruction of the ozone layer increases the penetration of ultraviolet radiation to the Earth’s surface, a known risk factor that can increase the incidence of skin cancers and cataracts, contribute to crop and fish damage, and further degrade air quality (SCAQMD 2005, p. 1-8).

GHG and ozone-depleting gases include, but are not limited to, the following:

- **Carbon dioxide** (CO$_2$) results from fossil fuel combustion in stationary and mobile sources. It contributes to the greenhouse effect, but not to stratospheric ozone depletion. In 2004, CO$_2$ accounted for approximately 84 percent of total GHG emissions in the State (CEC 2006a, p. 5). In the Basin, approximately 48 percent of CO$_2$ emissions come from transportation, residential and utility sources which contribute approximately 13 percent each, 20 percent from industrial sources, and the remainder comes from a variety of other sources (SCAQMD 2005, p. 1-8).

- **Methane** (CH$_4$) is emitted from both non-biogenic and biogenic sources in the atmosphere. Non-biogenic sources include fossil fuel mining and burning, biomass burning, waste treatment, geologic sources, and leaks in natural gas pipelines. Biogenic sources include wetlands, rice agriculture, livestock, landfills, forest, oceans, and termites. Methane sources can also be divided into anthropogenic and natural. Anthropogenic sources include rice agriculture, livestock, landfills, and waste treatment, some biomass burning, and fossil fuel combustion. Natural sources are wetlands, oceans, forests, fire, termites, and geological sources. Anthropogenic sources currently account for more than 60 percent of the total global emissions. (IPCC 2007, p. 593)

Methane is a GHG that traps heat 40-70 times more effectively than CO$_2$. In the Basin, more than 50 percent of human-induced methane emissions come from natural gas pipelines, while landfills contribute 24 percent. Methane emissions from landfills are reduced by SCAQMD Rule 1150.1 – Control of Gaseous Emissions from Active Landfills. Methane emissions from petroleum sources are
reduced by a number of rules in SCAQMD Regulation XI that control fugitive emissions from petroleum production, refining, and distribution. (SCAQMD 2005, p. 1-9)

- **Other regulated greenhouse gases include Nitrous Oxide, Sulfur Hexafluoride, Hydrofluorocarbons, and Perfluorocarbons**, which all possess heat-trapping potentials which are hundreds to thousands of times more effective than CO₂. Emission sources of nitrous oxide gases include, but are not limited to, waste combustion, waste-water treatment, fossil fuel combustion, and fertilizer production. Because the volume of emissions is small, the net effect of nitrous oxide emissions relative to carbon dioxide or methane is relatively small. Sulfur hexafluoride, hydrofluorocarbon, and perfluorocarbon emissions occur at even lower rates than nitrous oxide.

- **Chlorofluorocarbons** (CFCs) are emitted from blowing agents used in producing foam insulation. They are also used in air conditioners and refrigerators and as solvents to clean electronic microcircuits. CFCs are primary contributors to stratospheric ozone depletion and to global climate change. Sixty-three percent of CFC emissions in the Basin come from the industrial sector. Federal regulations require service practices that maximize recycling of ozone-depleting compounds (both CFCs, hydro-chlorofluorocarbons, and their blends) during the servicing and disposal of air-conditioning and refrigeration equipment. SCAQMD Rule 1415 – Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems requires CFC refrigerants to be reclaimed or recycled from stationary refrigeration and air conditioning systems. SCAQMD Rule 1405 – Control of Ethylene Oxide and Chlorofluorocarbon Emissions from Sterilization or Fumigant Processes requires recovery of reclamation of CFCs at certain commercial facilities and eliminates the use of some CFCs in the sterilization processes. Some CFCs are classified as TACs and regulated by SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants and SCAQMD Rule 1402 Control of Toxic Air Contaminants from Existing Sources (SCAQMD 2005, p. 1-8 and 1-9).

- **Halon**s are compounds used in fire extinguishers that behave as both ozone-depleting and greenhouse gases. Halon production ended in the United States in 1993. SCAQMD Rule 1418 – Halon Emissions From Fire Extinguishing Equipment requires the recovery and recycling of halons used in fire extinguishing systems and prohibits the sale of halon in small fire extinguishers (SCAQMD 2005, p. 1-9).

- **Hydro-chlorofluorocarbons** (HCFCs) are solvents, similar in use and chemical composition to CFCs. The hydrogen component makes HCFCs more chemically reactive than CFCs, allowing them to break down more quickly in the atmosphere. These compounds deplete the stratospheric ozone layer, but to a much lesser extent than CFCs. HCFCs are regulated under the same SCAQMD rules as CFCs (SCAQMD 2005, p. 1-9).

- **1,1,1-trichloroethane** (TCA, methyl chloroform) is a solvent and cleaning agent commonly used by manufacturers. It is less destructive on the environment than CFCs or HCFCs, but its continued use will contribute to global climate change and ozone depletion. 1,1,1-trichloroethane is a synthetic chemical that does not occur naturally in the environment. No TCA is supposed to be manufactured for domestic use in the United States after January 1, 2002 because it affects the ozone layer. TCA had many industrial and household uses, including use as a solvent to dissolve other substances,
such as glues and paints; to remove oil or grease from manufactured metal parts; and as an ingredient of household products such as spot cleaners, glues, and aerosol sprays. SCAQMD regulates this compound as a toxic air contaminant under Rules 1401 and 1402 (SCAQMD 2005, p. 1-9).

### 5.4.1.1 Global Warming Potentials

Individual GHGs have varying global warming potential and atmospheric lifetimes. The Intergovernmental Panel on Climate Change (IPCC) developed the Global Warming Potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of individual GHGs is determined through a comparison with the GWP of CO₂. CO₂ has a GWP of one; CH₄ has a GWP of 21, meaning that on a molecule by molecule basis, CH₄ has 21 times the global warming potential of CO₂. CO₂-equivalents (CO₂E) are the emissions of a GHG multiplied by the GWP. The CalEEMod program calculates the CO₂E based on the GWPs reported in the IPCC Second Assessment Report (IPCC 1995, p. 22). Table 5.4-A – Global Warming Potentials and Atmospheric Lifetimes shows the GWP and atmospheric lifetimes of various GHGs with relatively long atmospheric lifetimes from the IPCC 1995 report.

<table>
<thead>
<tr>
<th>Gas</th>
<th>Atmospheric Lifetime (100-Year Time Horizon)</th>
<th>Global Warming Potential (CO₂E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Dioxide (CO₂)</td>
<td>50-200</td>
<td>1</td>
</tr>
<tr>
<td>Methane (CH₄)</td>
<td>12±3</td>
<td>21</td>
</tr>
<tr>
<td>Nitrous Oxide (N₂O)</td>
<td>120</td>
<td>310</td>
</tr>
<tr>
<td>Hydrofluorocarbons (HFCs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFC-23</td>
<td>264</td>
<td>11,700</td>
</tr>
<tr>
<td>HFC-32</td>
<td>5.6</td>
<td>650</td>
</tr>
<tr>
<td>HFC-125</td>
<td>32.6</td>
<td>2,800</td>
</tr>
<tr>
<td>HFC-134a</td>
<td>14.6</td>
<td>1,300</td>
</tr>
<tr>
<td>HFC-143a</td>
<td>48.3</td>
<td>3,800</td>
</tr>
<tr>
<td>Perfluoromethane (CF₄)</td>
<td>50,000</td>
<td>6,500</td>
</tr>
<tr>
<td>Perfluoroethane (C₂F₆)</td>
<td>10,000</td>
<td>9,200</td>
</tr>
<tr>
<td>Sulfur Hexafluoride (SF₆)</td>
<td>3,200</td>
<td>23,900</td>
</tr>
</tbody>
</table>

**Notes:**


### 5.4.1.2 GHG Effects

As emissions of GHGs increase, temperatures in California are projected to rise significantly over the twenty-first century. The modeled magnitudes of the warming vary because of uncertainties in future emissions and in the climate sensitivity. According to the California Climate Change Center (CEC 2005a, p. 7), there are three projected warming scenarios referred to as the low, medium, and high range.
These expected increases from 2000 to 2100 vary from approximately 1.7°C–3.0°C (3.0°F–5.4°F) in the lower range of projected warming, 3.1°C–4.3°C (5.5°F–7.8°F) in the medium range, and 4.4°C–5.8°C (8.0°F–10.4°F) in the higher range. To comprehend the magnitude of these projected temperature changes, over the next century the lower range of projected temperature rise is slightly larger than the difference in annual mean temperature between Monterey and Salinas which is 2.5°F, and the upper range of project warming is greater than the temperature difference between San Francisco and San Jose which is 7.4°F.

Other resource areas could be affected as a result of GHGs. For example, increased global average temperature will cause increases to ocean temperatures and the Pacific Ocean strongly influences the climate within California. As the temperature of the ocean warms, it is anticipated that rain will fall instead of snow in the Sierra Nevada during the wet season. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. According to a CEC report, the snowpack portion of the supply could potentially decline by 70–90 percent by the end of the 21st century (CEC 2006b, p. 6). This phenomenon could lead to significant challenges in securing an adequate water supply for a growing population.

Some models indicate that the increased ocean temperature could result in increased moisture into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential for flood events, placing more pressure on California’s levee/flood control system. Sea level has risen approximately 7 inches during the last century and, according to the CEC report, it is predicted to rise an additional 22–35 inches by 2100, depending on the future GHG emissions levels (CEC 2006b, p. 12), further straining the State’s water conveyance infrastructure.

Another impact of climate change is increased fire hazard. Fire is an important natural disturbance within many California ecosystems that promotes vegetation and wildlife diversity, releases nutrients, and eliminates heavy fuel accumulations that can lead to catastrophic burns. The changing climate could alter fire regimes in ways that could have social, economic, and ecological consequences. (CEC 2005a, p. 22) As the existing climate throughout California changes over time, mass migration of species, or worse, failure of species to migrate in time to adapt to the changes in climate, could also result.

Many factors contribute to an area being at risk of structural fire in terms of the local fire departments’ capabilities to control them, including the construction size and type, built-in protection, density of construction, street widths, and occupancy size. Sources of wildfire risk to the project site from surrounding areas include the open and natural state of the Santa Ana River. According to Figure PS-7 – Fire Hazard Areas of the City of Riverside General Plan 2025 (GP 2025), the Project site is not located within a wildfire zone.

Due to its weather, topography, and native vegetation, nearly all Southern California is at some risk from wildland fires also called wildfires. The extended droughts characteristic of California’s Mediterranean climate result in large areas of dry vegetation that provide fuel for wildland fires which can spread into
urban areas. Wildland-urban fires occur when a fire burning in wildland vegetation gets close enough to ignite urban structures. Areas of dense, dry vegetation, particularly in canyon areas and hillsides, pose the greatest wildland fire potential.

Conservative estimates indicate the risk of large statewide wildfires (defined as wildfires which consume 500 acres or more), would rise almost 35 percent by 2050 and 55 percent by 2100 under the medium temperature described previously. Under the low warming range, the increased risk of wildfires is nearly cut in half. (CEC 2005a, p. 22)

Wildfires affect public safety and have the potential to significantly impact public health through smoke inhalation. For example, a survey of 26 percent of all tribal households on the Hoopa Valley National Indian Reservation in northern California showed a 52 percent increase in medical visits for respiratory problems during a large fire in 1999, compared to the same period of 1998. More than 60 percent of those surveyed reported an increase in respiratory symptoms during the smoke episode, and 20 percent continued to report increased respiratory symptoms two weeks after the smoke cleared. The projected increases in fire season severity could lead to more “bad air” days. However, quantitative estimation of the impacts of future wildfire events is extremely difficult. The impacts of any fire are unique to that event, and are influenced not only by the magnitude, intensity, and duration of the fire, but also the proximity of the smoke plume to a population. (CEC 2005a, p. 30)

Climate change will affect the health of Californians by increasing the frequency, duration, and intensity of ambient conditions conducive to air pollution formation, oppressive heat, and wildfires. Not only are average temperatures expected to increase, but the projected increase in extreme temperatures is also expected to increase which can cause the most serious health impacts. The modeled warming scenarios indicate that the number of extremely hot and extremely cold days will increase by 2100. For Riverside/San Bernardino metropolitan areas, the number of extremely hot days will increase approximately 40 to 80 days per year under the lower and higher warming scenarios, respectively. Recent studies suggest that no capacity for future adaptation to extreme heat is seen in San Bernardino/Riverside metropolitan areas. The results for the San Bernardino/Riverside metropolitan areas actually indicate increased sensitivity during the hottest summers, which is counterintuitive to what might be expected in hot inland urban areas. Current investigations are underway seeking alternative explanations by taking greater account of socioeconomic factors (such as the availability of air conditioning, age structure of the population, and the housing stock) that might explain these non-intuitive results. If, for example, the San Bernardino/Riverside metropolitan area has a lesser proportion of air-conditioned residents than other hot inland urban areas, increased heat could create an indoor environment that is almost intolerable and could lead to greater numbers of deaths. It is clear that a thorough investigation of these socio-economic issues is necessary to understand the increased sensitivity of San Bernardino/Riverside metropolitan area residents to heat during the hottest summers. (CEC 2006c, p. 6)
5.4.1.3 GHG Inventory

Unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, global climate change is a global problem and GHGs are global pollutants. Impacts of GHG emissions are a function of their total atmospheric concentration and most GHGs are globally well mixed atmospheric constituents. This means that the location of a particular GHG emission, in contrast to the situation for criteria pollutants, does not change its environmental impact.

Globally, for the years 2000 through 2005, the annual average emissions of fossil fuel-related carbon dioxide was 26.4 gigatons of CO₂ (one gigaton equals one billion metric tonnes \(^1\) (MT)) per year (IPCC 2007, Summary for Policy Makers p. 2). It should also be noted that the annual total U.S. emissions of GHG dropped 1.5 percent in 2006 from 7,181 million MT to 7,075 million MT due to warmer weather and decreased energy demand, according to the Energy Information Administration (EIA, p. 1). During the same timeframe, the U.S. economic output increased 2.9 percent (EIA, p. 2). This decline results in a GHG intensity reduction of 4.2 percent as a measure of gross domestic product (EIA, p. 2).

Worldwide, California is the 12th to 16th largest emitter of CO₂, and is responsible for approximately two percent of the world’s CO₂ emissions (CEC 2006a, p. i). In 2004, the most recent year for which statewide data is available, the CEC reported that California produced 492 million gross MT of carbon dioxide-equivalent (CEC 2006a, p. 5). However, while California has a high amount of GHG emissions, it has low emissions per capita. California ranks the fourth lowest of the 50 states in carbon dioxide emissions per capita (CEC 2006a, p. 13). The major source of GHG in California is transportation, contributing approximately 41 percent of the State’s total GHG emissions. Electricity generation is the second largest generator, contributing approximately 22 percent of the State’s GHG emissions. (CEC 2006a, p. 8) Emissions from fuel use in the commercial and residential sectors in California decreased approximately 9.7 percent over the 1990–2004 period. The decrease in GHGs demonstrates the effectiveness of energy conservation in buildings (Title 24 requirements) and appliances. The decrease in GHGs attributed to these sources is even more substantial when the population increase in California is considered. (CEC 2006a, pp. 10-13).

Regarding transportation fuel consumption, in a low-demand case scenario, it is estimated that total annual gasoline consumption in California will decline between 2007 and 2030 from 20 billion gallons per year to 13.57 billion gallons, respectively, as a result of high fuel prices, efficiency gains, and competing fuel technologies (TEFA, p. 2). Under a high-demand case scenario, a recovering economy and lower relative prices will lead to a gasoline demand peak in 2014 of 16.40 billion gallons per year, before consumption falls to a 2030 level of 14.32 billion gallons, 8.5 percent below 2007 levels (TEFA, p. 2). Further evidenced by trends in transportation, between 2001 and 2008, the number of all alternative-fueled vehicle types has increased in California at rates substantially greater than for gasoline vehicles (TEFA, p. 11). This growth is particularly pronounced for hybrid electric vehicles, which grew at 75 percent between 2001 and 2008 (TEFA, p. 11). Also, among 45 California transit agencies for which data was available from the American Public Transportation Association, public transit ridership

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\(^1\) One metric tonne (MT) = 2,025 pounds
increased by 2.2 percent, to 1.34 billion trips, between 2007 and 2008 (TEFA, p. 12). (Please see Section
5.10 Energy Conservation, in this DEIR, for an additional discussion of transportation fuel consumption.)

In January 2007, Assembly Bill 1803 transferred responsibility for developing and maintaining the State’s
GHG inventory from the California Energy Commission (CEC) to CARB. Using the CEC GHG inventory as a
starting point, CARB staff determined the State’s 1990 GHG emissions level by conducting a
comprehensive review of all GHG emitting sectors. The seven sectors are: Transportation, Electricity
Generation, Industrial, Residential, Agriculture, Commercial, and Forestry.

In November 2007, the CARB released its staff report establishing a statewide 1990 GHG emission level
and a 2020 emission limit (CARB 2007). As part of this staff report, CARB staff recommended an amount
of 427 million metric tonnes of carbon dioxide equivalent (MMTCO\textsubscript{2}E) as the total statewide GHG 1990
emissions level and 2020 emissions limit (CARB 2007, p. 2). The CARB approved the 2020 limit on
December 6, 2007. This limit is an aggregated statewide limit, rather than sector- or facility-specific. The
staff report also included the statewide GHG emissions for 2004, which was 480 MMTCO\textsubscript{2}E (CARB 2007,
p. 7).

While the inventory data numbers from the CEC and CARB are similar for 2004, these estimates have
important differences. Emissions from individual sectors differ between CEC and CARB estimates by up
to 30 percent due to updated data, methodologies, and differences in included and excluded emissions. Staff at CARB treated carbon stored in landfills differently than CEC by separately tracking stored carbon
instead of considering it an emission sink within a landfill. In addition, the CARB estimate only includes
intrastate aviation, whereas the CEC estimates include both interstate and intrastate flights. Staff also
included emissions from international shipping and related port activities in California waters, whereas
the CEC excluded all emissions from international ships. (CARB 2007, p. 9)

5.4.2 Comments Received in Response to the Initial Study/Notice of Preparation
No comments were received regarding GHG emissions in response to the IS/NOP.

5.4.3 Thresholds of Significance
The City of Riverside has not established local CEQA significance thresholds as described in Section
15064.7 of the State CEQA Guidelines. However, the City of Riverside’s, “Environmental Checklist” for
the proposed Project (included as Appendix A) indicates that impacts related to GHG emissions may be
considered potentially significant if the proposed Project would:

- generate greenhouse gas emissions, either directly or indirectly, that may have a significant
  impact on the environment; and/or

- conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the
  emissions of greenhouse gases.
5.4.4 Related Regulations

5.4.4.1 International Regulation: the Kyoto Protocol and Copenhagen

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations’ Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling greenhouse gas emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The Plan currently consists of more than 50 voluntary programs.

The Kyoto protocol is a treaty made under the UNFCCC and was the first international agreement to regulate GHG emissions. Some have estimated that if the commitments outlined in the Kyoto protocol are met, global GHG emissions could be reduced an estimated five percent from 1990 levels during the first commitment period of 2008–2012. Notably, while the United States is a signatory to the Kyoto protocol, Congress has not ratified the Protocol and the United States is not bound by the Protocol’s commitments.

In December 2009, international leaders from 192 nations met in Copenhagen to address the future of international climate change commitments post-Kyoto.

5.4.4.2 Federal

Previously the U.S. EPA (USEPA) had not regulated GHGs under the Clean Air Act because it asserted that the Act did not authorize it to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In Massachusetts v. Environmental Protection Agency et al. (127 S. Ct. 1438 (2007)), however, the U.S. Supreme Court held that GHGs are pollutants under the Clean Air Act and directed the USEPA to decide whether the gases endangered public health or welfare. On December 7, 2009, the USEPA issued an Endangerment Finding under Section 202(a) of the Clean Air Act, opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the USEPA has not promulgated major regulations on GHG emissions, but it has begun to develop them.

The USEPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before Congress adopts major climate change legislation. The USEPA’s Endangerment Finding paves the way for federal regulation of GHGs with or without Congress. To date, Congress, under the Consolidated Appropriations Act of 2008 (HR 2764), has established mandatory GHG reporting requirements for some emitters of GHGs. On September 22, 2009, the USEPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the USEPA of GHG emissions from large sources and suppliers of GHGs, including facilities that emit 25,000 MT or more a year of GHGs.
5.4.4.3 State

Executive Order S-3-05
Notwithstanding the current lack of Federal regulation of GHG emissions, Executive Order S-3-05, signed by Governor Arnold Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80-percent reduction in GHG emissions below 1990 levels by 2050 in California. The Secretary of the California Environmental Protection Agency (CalEPA) has been charged with coordination of efforts to meet these targets and formed the Climate Action Team to implement the Order. The Climate Action Team also provided strategies and input to the CARB Scoping Plan discussed below.

Assembly Bill 32
In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. In adopting this legislation (commonly known as “AB 32”), the State Legislature declared that “global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” Further, the Legislature found that “the potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the State from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious disease, asthma, and other human health-related problems.” The Legislature added that “[g]lobal warming will have detrimental effects on some of California’s largest industries” and “increase the strain on electricity supplies necessary to meet the demand for summer air-conditioning in the hottest parts of the state.”

AB 32 initiated a long-term program for “the development of GHG emissions reduction measures.” It “creates a comprehensive, multi-year program to reduce greenhouse gas (GHG) emissions in California, with the overall goal of restoring emissions to 1990 levels by the year 2020.” AB 32 recognizes that such an ambitious effort requires careful planning and a well thought out set of strategies. Accordingly, AB 32 delegated the authority for its implementation to the CARB and directs CARB to enforce the statewide cap that would begin phasing in by 2012. Among other requirements, AB 32 required CARB to (1) identify the statewide level of greenhouse gas emissions in 1990 to serve as the emissions limit to be achieved by 2020, and (2) develop and implement a Scoping Plan to be implemented by January 1, 2012.

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission 1990 levels were estimated at 427 MMTCO$_2$E (emission sources by sector were: transportation – 35 percent; electricity generation – 26 percent; industrial – 24 percent; residential – 7 percent; agriculture – 5 percent; and

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2 As defined under AB 32, greenhouse gas emissions include the following: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride.
3 Written on a public notice prepared by the staff at CARB in connection with a meeting to consider “early discrete actions” related to AB 32 on October 25, 2007.
commercial – 3 percent)\(^4\). Accordingly, 427 MMTCO\(_2\)E was established as the emissions limit for 2020. For comparison, CARB’s estimate for 2000 baseline GHG emissions was 473 MMTCO\(_2\)E for 2000 and 532 MMTCO\(_2\)E for 2010. “Business as usual” conditions for 2020 were projected to be 596 MMTCO\(_2\)E. Therefore to comply with AB 32’s mandate, GHG emission would need to be reduced from 596 MMTCO\(_2\)E (i.e., 2020 “business as usual”) to 427 MMTCO\(_2\)E (the 1990 level), which is a reduction of 30 percent. This latter forecast did not take any credit for reductions from measured included in the AB 32 Scoping Plan, including the Pavley GHG emissions standards for vehicles, full implementation of the Renewables Portfolio Standard beyond current levels of renewable energy, or the solar measures. Under AB 32, CARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. CARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of these early action measures, nine are deemed discrete early action measures in that they are regulatory and enforceable by January 1, 2010. CARB estimates that the 44 recommendations will result in reductions of at least 42 MMTCO\(_2\)E by 2020, representing approximately 25 percent of the 2020 target.

AB 32 requirements and milestones are as follows:

- **June 30, 2007** – Identification of discrete early action greenhouse gas emissions reduction measures. Three early action measures were approved by CARB on June 21, 2007. Six other discrete early action measures were subsequently approved.
- **January 1, 2008** – Establish a 1990 baseline GHG emissions level and approval of a statewide limit equivalent to that level. Adoption of mandatory reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline.
- **January 1, 2009** – Adoption of a scoping plan for achieving GHG emission reductions. On December 11, 2008, the CARB Board adopted the *Climate Change Scoping Plan* (Scoping Plan) at its meeting.
- **January 1, 2010** – Adoption and enforcement of regulations to implement the “discrete” actions. The CARB identified nine discrete early action measures including regulations affecting landfills, motor vehicle fuels, refrigerants in cars, tire pressure, port operations and other sources in 2007 that included ship electrification at ports and reduction of high global warming potential (GWP) gases in consumer products. Regulatory development for the remaining measures is ongoing.
- **January 1, 2011** – Adoption of GHG emissions limits and reduction measures by regulation.
- **January 1, 2012** – GHG emissions limits and reduction measures adopted in 2011 become enforceable.

\(^4\) On a national level, the USEPA’s Endangerment Finding stated that electricity generation is the largest emitting sector (34%), followed by transportation (28%), and industry (19%).
AB 32 codifies S-3-05’s year 2020 goal by requiring that statewide GHG emissions be reduced to 1990 levels by the year 2020.

In December 2007, CARB approved a regulation for mandatory reporting and verification of GHG emissions for major sources. This regulation covered major stationary sources such as cement plants, oil refineries, electric generating facilities/providers, and co-generation facilities, which comprise 94 percent of the point source CO₂ emissions in the State.

On December 11, 2008, CARB adopted a scoping plan to reduce GHG emissions to 1990 levels. The Scoping Plan’s recommendations for reducing GHG emissions to 1990 levels by 2020 include emission reduction measures, including a cap-and-trade program linked to Western Climate Initiative partner jurisdictions, green building strategies, recycling and waste-related measures, as well as Voluntary Early Actions and Reductions. CARB had until January 1, 2011, to adopt the necessary regulations to implement that plan. Implementation of individual measures must begin no later than January 1, 2012, so that the emissions reduction target can be fully achieved by 2020. CARB is currently drafting regulations to implement the plan.

Renewable Portfolio Standard (RPS)
In 2002, SB 1078 required electric utilities to increase procurement of power generated by eligible renewable energy sources to 20 percent of total generation by 2017. In 2006, SB 107 accelerated the timetable to require 20 percent renewable energy by 2010. Then, in 2008, the Governor signed Executive Order S-14-08, which increased the required renewables content to 33 percent by 2020. In September 2009, the Governor signed Executive Order S-21-09 which directed the CARB to adopt regulations consistent with the 33 percent renewable energy target in Executive Order S-14-08 by July 31, 2010.

Title 24
For decades, California’s Building Codes have mandated energy efficiency. Since the production of energy uses large quantities of fossil fuels, efficient use of energy reduces GHGs. Although not originally intended to reduce GHG, California Code of Regulations (CCR) 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. Since then, Title 24 has been amended with a recognition that energy-efficient buildings that require less electricity and reduce fuel consumption, in turn decrease GHG emissions. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The amendments made in October 2005 require new homes to use half the energy they used only a decade ago. In September 2008, the new 2008 standards were adopted to update the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1. The amended 2008 standards went into effect in January 2010. The California Building Standards Commission adopted the nation’s first green building standards on July 17, 2008. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR.
Part 11 establishes voluntary standards, which become mandatory in the 2010 edition of the Code (January 2011), on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

**SB 1368**
Passed in 2006, SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 reduces carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as combined cycle natural gas plants. Overall, SB 1368 will dramatically lower GHG emissions associated with California’s energy demand as it will effectively prohibit California utilities from purchasing power from out-of-State producers that cannot satisfy the required performance standard.

**CEQA Guideline Amendments on Greenhouse Gases**
Because AB 32 did not amend CEQA or establish regulatory standards to be applied to new development or environmental review of projects within the State, the Legislature adopted Senate Bill 97 (SB 97) in August 2007. SB 97 directed the Office of Planning and Research (OPR) and the Natural Resources Agency to amend the State CEQA Guidelines in order to explicitly address greenhouse gas emissions. The amendments to the State CEQA Guidelines became effective in 2010 and state that a lead agency shall have discretion to determine whether to use a quantitative model or methodology and/or rely on a qualitative analysis or performance-based standards when assessing the impact of greenhouse gas emissions. CEQA Guideline Section 15064.4(a) (“A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which methodology to use; and/or (2) Rely on a qualitative analysis or performance-based standards.”).

The State CEQA Guidelines amendments did not identify a threshold of significance for greenhouse gas emissions, nor did they prescribe assessment methodologies or specific mitigation measures. Instead, they called for a “good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project.” The amendments encouraged lead agencies to consider many factors in performing a CEQA analysis and preserved lead agencies’ discretion to make their own determinations based upon substantial evidence. The amendments also encouraged public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

**CARB’s Preliminary Draft Staff Proposal for Interim Significance Thresholds**
Although OPR was tasked with updating the State CEQA Guidelines for GHGs, OPR asked CARB in its Technical Advisory to recommend GHG-related significance thresholds to assist lead agencies in their significance determination. CARB Staff released a draft proposal on October 24th, 2008, with interim
guidance on significance thresholds. In its proposal, Staff noted that non-zero thresholds can be supported by substantial evidence, but thresholds should nonetheless be sufficiently stringent to meet the State’s interim (2020) and long-term (2050) emissions reduction targets. The proposal takes different approaches for different sectors – (1) industrial projects and (2) residential and commercial projects. Although CARB Staff proposed a numerical threshold for the GHG emissions of industrial projects, none were proposed for commercial (and residential) projects. At present, CARB Staff does not have plans to move forward with any final thresholds. A key preliminary conclusion from the draft thresholds, however, was that CARB Staff, in setting a numerical threshold for industrial projects and suggesting performance standards, does not believe a “zero threshold” is mandated by CEQA. (CARB 2008)

**Senate Bill 375**

In September of 2008, the California legislature adopted SB 375, legislation which: (1) relaxes CEQA requirements for some housing projects that meet goals for reducing GHG emissions and (2) requires the regional governing bodies in each of the State’s major metropolitan areas to adopt, as part of their regional transportation plan, “sustainable community strategies” that will meet the region’s target for reducing GHG emissions. SB 375 creates incentives for implementing the sustainable community strategies by allocating federal transportation funds only to projects that are consistent with the emissions reductions.

SB 375 also directs CARB to develop regional GHG emission reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035. CARB will determine the level of emissions produced by cars and light trucks, including S.U.V.s, in each of California’s 17 metropolitan planning areas. Emissions-reduction goals for 2020 and 2035 would be assigned to each area. CARB appointed a Regional Targets Advisory Committee (RTAC) on January 23, 2009 to provide recommendations on factors to consider and methodologies to use in this target setting process and CARB must propose draft targets by June 10, 2010 and adopt final targets by September 30, 2010.

Local governments would then devise strategies for housing development, road-building, and other land uses to shorten travel distances, reduce vehicular travel time, and meet the new targets. If regions develop these integrated land use, housing, and transportation plans, residential projects that conform to the sustainable community strategy (and therefore contribute to GHG reduction) can have a more streamlined environmental review process.

**5.4.4.4 Regional**

In addition to current rules and regulations which also address GHG, SCAQMD plans to provide guidance to local lead agencies on determining GHG significance thresholds in their CEQA documents by convening a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds. The SCAQMD began hosting monthly working group meetings in April 2008. The result of the October 2008 working group meeting was a, Draft AQMD Staff CEQA Greenhouse Gas Significance Threshold (SCAQMD 2008a) and the Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008b). The Draft Threshold is
intended to be interim guidance until statewide significance thresholds or guidance are established. The proposed significance threshold is a tiered approach which allows for flexibility by establishing multiple thresholds to cover a broad range of projects.

SCAQMD proposes three tiers of compliance that may lead to a determination that impacts are less than significant, including: (1) projects with greenhouse gas emissions within budgets set out in approved regional plans, to be developed under the SB 375 process; (2) projects with GHG emissions that are below designated quantitative thresholds: (i) industrial projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 10,000 MTCO₂E/yr; or (ii) commercial and residential projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 3,000 MTCO₂E/yr, provided that such projects also meet energy efficiency and water conservation performance targets that have yet to be developed; (3) projects that purchase GHG offsets which, either alone or in combination with one of the three tiers mentioned above, achieve the target significance screening level.

On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency. Currently, the Board has only adopted thresholds relevant to industrial (stationary source) projects.

Since December of 2008, the SCAQMD continued hosting the working group meetings and revised the draft threshold proposal several times although it did not officially provide these proposals in a subsequent document. The most recent working group meeting on September 28, 2010 proposed two options lead agencies can select from to screen thresholds of significance for GHG emissions in residential and commercial projects, and proposes to expand the industrial threshold to other lead agency industrial projects. Option 1 proposes a threshold of 3,000 MTCO₂E/year for all residential and commercial projects; Option 2 proposes a threshold value by land use type where the numeric threshold is 3,500 MTCO₂E/year for residential projects; 1,400 MTCO₂E/year for commercial projects; and 3,000 MTCO₂E/year for mixed use projects. Although both Options are recommended, a lead agency is advised to use only one Option and to use it consistently. The approach used in this analysis is to disclose the most recent regulatory activity. The Project’s GHG emissions will be compared according to Option 1 of SCAQMD recommendations.

5.4.4.5 Local

The City of Riverside is committed to becoming a clean, green and sustainable community. The City Council approved the Sustainable Riverside Policy Statement (SRPS). The Clean and Green Task Force framed the SRPS with a practical emphasis on how the City could implement cleaner, greener and more sustainable programs. Riverside’s first Green Action Plan, a 38 point plan, identified seven focus areas: Energy, Greenhouse Gas Emissions, Waste Reduction, Urban Design, Urban Nature, Transportation, and Water. The Green Action Plan was essentially completed in 2009 when the State Department of

Conservation chose Riverside as the first “Emerald City.” From these focus areas and an eighth dedicated to creating a “Healthy Community,” 18 new goals were created. (Green Action Plan)

While the goals in the Green Action Plan are actions to be taken by the City, the Project has implemented numerous measures that increase energy efficiency, reduce water consumption, and waste as discussed in Section 3 (Project Description) and Section 5.4.5 (Project Design Considerations) of this DEIR.

5.4.5 Project Design Considerations

The proposed Project will incorporate a number of Project design considerations that will significantly reduce GHG emissions, many of which are consistent with GHG reduction strategies developed by groups and public agencies, such as CARB, the California Air Pollution Control Officer’s Association (CAPCOA) and the California Attorney General’s Office. To ensure that the latest, most advanced technology can be used, the proposed Project may substitute design considerations so long as they are proven to be equally effective or more effective at reducing GHG emissions.

As described in DEIR Section 3.2.1.6 (Project Characteristics, Sustainability Features), following the completion of the Project, the entire store will exceed the energy efficiency standards of Title 24. This will be accomplished by designing the expansion area of the building to an efficiency rating that is greater than the Title 24 requirement, and also by retrofitting certain features of the existing store in order to meet Title 24 requirements. To achieve this reduction in energy consumption, the expanded Walmart will incorporate, at a minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Lighting
  - The entire store will include occupancy sensors in most non-sales areas, including restrooms, break rooms, and offices. The sensors automatically turn the lights off when the space is unoccupied.
  - Interior Lighting Retrofit Program: All lighting in the store, including the expansion area, will utilize T-8 fluorescent lamps and electronic ballasts, which are the most efficient lighting on the market.
  - All internally illuminated exterior building signage and many refrigerated food cases will use light emitting diodes (LEDs). In refrigerated food cases, LEDs perform well in the cold and produce less heat than fluorescent bulbs—heat which must be compensated for by the refrigeration equipment. LEDs also contain no mercury or lead.
  - LED technology is up to 52 percent more energy efficient than fluorescent lights.
  - Total estimated energy savings for LED lighting in the store’s grocery section is approximately 59,000 kWh per year, enough energy to power five single-family homes.
- **Central Energy Management System**
  - Walmart employs a centralized energy management system (EMS) to monitor and control the heating, air conditioning, refrigeration, and lighting systems for all stores from Walmart’s corporate headquarters in Bentonville, Arkansas. The EMS enables Walmart to constantly monitor and control the expanded store’s energy usage, analyze refrigeration temperatures, observe HVAC and lighting performance, and adjust system levels from a central location 24 hours per day, seven days per week. Energy usage for the entire store will be monitored and controlled in this manner.

- **Heating, Ventilation and Air Conditioning (HVAC)**
  - The store will employ one of the industry’s most efficient HVAC units available. The new HVAC units have EER (Energy Efficiency Ratio) ratings of approximately 12.1 to 14.3 which exceed the requirements of California Title 24.

- **Dehumidification**
  - The building will include a dehumidifying system that allows Walmart to operate the store at a higher temperature, use less energy, and allow the refrigeration system to operate more efficiently.

- **Food Displays**
  - The building will include a film on the freezer doors that combats condensation and requires no energy, unlike heating systems that are typically used to combat condensation.

- **White Roofs**
  - The existing store currently utilizes a white roof. After the expansion, the entire store will feature a white membrane roof instead of the typical darker colored roof materials employed in commercial construction. The white membrane roof’s higher reflectivity helps reduce building energy consumption and reduces the heat island effect, as compared to buildings utilizing darker roofing colors. The high solar reflectivity of this membrane results in lowering the "cooling" load by about 10 percent as compared to comparable stores with darker colored membranes.

- **Refrigeration**
  - Walmart uses non ozone-depleting refrigerants, such as R407a for refrigeration equipment and R410a refrigerant for air conditioning. The existing store currently utilizes this technology and the expansion area will also incorporate it.
  - The store’s refrigeration equipment will be roof-mounted in close proximity to the refrigerated cases. This reduces the amount of copper refrigerant piping, insulation, and refrigerant charge needed, as well as the potential for leaks.

- **Heat Reclamation**
  - The store will reclaim waste heat from on-site refrigeration equipment to supply approximately 70 percent of the hot water needs for the store.
Water Conservation

It is estimated that Walmart’s water conservation measures could save up to 530,000 gallons of water annually at this store location.

- Walmart will install high-efficiency urinals that use only 1/8 gallon (one pint) of water per flush.
  - This fixture reduces water use by 87 percent compared to the conventional one gallon per flush urinal.
- All restroom sinks will use sensor-activated, 1/2 gallon per minute, high-efficiency faucets.
  - These faucets reduce water usage by approximately 75 percent compared to mandated 1992 Environmental Protection Agency (USEPA) Standards.
  - During use, water flows through turbines built into the faucets to generate the electricity needed to operate the motion sensors.
- All restroom toilets will be highly efficient and reduce water use.
  - The fixture uses 20 percent less water compared to mandated EPA Standards of 1.6 gallon per flush fixtures.
  - The toilets utilize built-in water turbines to generate the power required to activate the flush mechanism. These turbines save energy and material by eliminating electrical conduits required to power automatic flush valve sensors.

Walmart will also incorporate the following measures to reduce outdoor water use in compliance with Chapter 19.570 of the Riverside Municipal Code, Water Efficient Landscaping and Irrigation (RMC, Ch. 19.570):

- Limit or eliminate the use of high water use plant materials such as lawn.
- Prepare a soils/agronomic management report to determine on-site soil texture, pH, infiltration rates.
- Hydrozone plant materials prior to designing the irrigation system to minimize water usage.
- Incorporate separate valve systems for trees in the event of severe drought.
- Specify high efficiency irrigation systems (drip, micro spray, bubbler irrigation), where feasible, to irrigate plant material.
- Specify dual or multiple program automatic controllers to operate the irrigation valves.
- Specify master control valve/flow sensor and rain sensing assembly as part of a complete irrigation system.
- Prepare an irrigation audit following installation of the system to review operational characteristics.
Materials and Finishes

- The newly-constructed expansion area will be built using cement mixes that include up to 15–20 percent fly ash, a waste product of coal-fired electrical generation, or 25–30 percent slag, a by-product of the steel manufacturing process. By incorporating these waste product materials into its cement mixes, Walmart offsets the greenhouse gases emitted in the cement manufacturing process.

- The expansion area will use Non-Reinforced Thermoplastic Panel (NRP) in lieu of Fiber Reinforced Plastic (FRP) sheets on the walls in areas where plastic sheeting is appropriate, including food preparation areas, utility and janitorial areas, and associate break rooms. NRP can be recycled, has better impact resistance and, like FRP, is easy to keep clean.

- The expansion area will use plant-based oil extracted from a renewable resource as a concrete form release agent (a product sprayed on concrete forms to allow ease of removal after the concrete has set). This release agent is non-petroleum based, non-toxic, and a biodegradable agent.

- For the store’s exterior and interior field paint coatings, Walmart will use low volatile organic compound (VOC) paint.

- Paint products required for the Project will be primarily purchased in 55 gallon drums and 275 gallon totes, reducing the number of one gallon and five gallon buckets needed. These plastic buckets are filled from the drums and totes and then returned to the paint supplier for cleaning and reuse once construction is complete.

- Recycled Building Materials:
  - Construction of the expansion area will use steel containing approximately 85–90 percent recycled structural steel, which utilizes less energy in the mining and manufacturing process than does new steel.
  - All of the plastic baseboards and much of the plastic shelving included in the expansion area will be composed of recycled plastic.

- With regard to construction and demolition (C&D) recycling, Walmart will employ a C&D program during Project construction in order to capture and recycle as much of the metals, woods, floor and ceiling tiles, concretes, asphalts, and other materials generated as part of Walmart’s demolition and construction process as possible. Walmart will work with a waste management company to fully research all available C&D recycling facilities in the area, and its C&D program will seek to include the widest possible range of materials recovery options.
5.4.6 Environmental Impacts before Mitigation

Global Climate Change and CEQA
There are several unique challenges to analyzing climate change under CEQA, largely because of climate change’s “global” nature. Typical CEQA analyses address local actions that have local—or, at most, regional—impacts, whereas climate change presents the considerable challenge of analyzing the relationship between local activities and the resulting potential, if any, for global environmental impacts. Most environmental analyses examine the “project-specific” impacts that a particular project is likely to generate. With regard to global warming, however, it is generally accepted that while the magnitude of global warming effects is substantial, the contribution of an individual project is so small that direct project-specific significant impacts (albeit not cumulative significant impacts) are highly unlikely.

Global climate change is also fundamentally different from other types of air quality analysis under CEQA in which the impacts are all measured within, and are linked to, a discrete region or area. Instead, a global climate change analysis must be conducted on a global level, rather than the typical local or regional setting, and requires consideration of not only emissions from the project under consideration, but also the extent of the displacement, translocation, and redistribution of emissions. In the usual context, where air quality is linked to a particular location or area, it is appropriate to consider the creation of new emissions in that specific area to be an environmental impact whether or not the emissions are truly “new” emissions to the overall globe. When the impact is a global one, however, it makes more sense to consider whether the emissions really are new emissions, or are merely being moved from one place to another. For example, the approval of a new developmental plan or project does not necessarily create new automobile drivers - the primary source of a land use project’s emissions. Rather, due to the “relocation” factor, new land use projects sometimes merely redistribute existing mobile emissions; accordingly, the use of models that measure overall emissions increases without accounting for existing emissions will substantially overstate the impact of the development project on global warming. This makes an accurate analysis of GHG emissions substantially different from other air quality impacts, where the “addition” of redistributed emissions to a new locale can make a substantial difference to overall air quality.

Methodology and Establishment of Significance Thresholds
Generally, the evaluation of an impact under CEQA requires measuring data from a project against a “threshold of significance” (see State CEQA Guidelines Section 15064.7). Furthermore, “[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead

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6 For example, a subdivision of 500 homes generates 3,000 new trips per day and those trips would be added to the local streets and intersections. In the case of climate change, the trips that are associated with those same 500 homes, presumably would emit roughly the same volume of GHGs in Riverside, California, as they would if they were traveling the same number of miles in Cleveland, Ohio. As a result, while raw vehicle trip counts occurring within a project area will accurately predict changes in congestion at intersections, the same certainty cannot be provided for climate change. The trips would certainly increase the number of vehicles passing through local intersections, but they will not increase the amount of GHG emissions into the world’s atmosphere if those trips simply have been relocated from another location on the planet.
agency to adopt such thresholds is supported by substantial evidence.” (See State CEQA Guidelines Section 15064.7(c)). For global warming, there is not, at this time, one established, universally agreed-upon “threshold of significance” by which to measure an impact.

CEQA also requires projects to be evaluated for consistency with “applicable general plans, specific plans and regional plans” (see State CEQA Guidelines Section 15125(d)). Such plans would include, for example, the applicable air quality attainment or maintenance plan, regional blueprint plans, sustainable community strategies, and climate action plans. These plans involve legislative or regulatory programs applicable to all projects within the region and establish standards that are independent of the impact analysis described in the State CEQA Guidelines (see provisions beginning with Section 15126). As discussed above, the Project’s GHG emissions will be measured against “Option 1” of the draft SCAQMD CEQA thresholds.

Notwithstanding the analytical challenges posed by climate change, State CEQA Guidelines Section 15002(a)(1) states that one of the basic purposes of CEQA is to “[i]nform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.” Therefore, this evaluation of the proposed Project’s potential for contribution to global climate change will analyze that potential in a manner and to an extent reasonably consistent with the policy underpinnings of CEQA.

This analysis is the result of the City’s thorough investigation of the proposed Project’s impact on global climate change, including a review of Executive Order S-3-05, AB 32 and the legislative intent behind AB 32, as well as extensive review of scientific literature regarding global climate change. Every effort will be made to maximize the disclosure of information to the public, fairly present the proposed Project’s potential for significant adverse effects on global climate change, and identify techniques to minimize any such effects.

As noted above, there is no consensus within the scientific community on any given approach. As CAPCOA observes, “[m]any legal and policy questions remain unsettled, including the requirements of CEQA in the context of greenhouse gas emissions.” Given this uncertainty, many organizations, both public, private and civic, have released advisories or guidelines with recommendations to assist decision makers on how to best evaluate GHG emissions. The City cannot, and need not, under CEQA, review every report from an expert or agency, as new reports are released on an almost daily basis. The City has, however, reviewed multiple key advisories, comment letters, and white papers from experts, agencies, and groups such as the Climate Action Team, the California Attorney General, CAPCOA, CARB, the Center for Biological Diversity, the League of California Cities, the Sierra Club, the California State Association of Counties, the Association of Environmental Professionals, and the California Chapter of the American Planning Association. Some of these reports urge “zero emission” thresholds, while others advocate against them. Others evaluate multiple thresholds, such as CAPCOA’s January, 2008 white paper, which analyzes: (1) CEQA with no GHG thresholds; (2) CEQA with a GHG threshold of zero; and (3) CEQA with non-zero thresholds. In short, there is no consensus on how to analyze climate change in CEQA documents, and no specific methodology that is universally accepted.
CEQA defines a “significant effect on the environment” as a substantial, or potentially substantial, adverse change in the environment (Public Resources Code Section 21068). With respect to global climate change, no one project can individually create a direct impact on what is a global problem (i.e., no project will, by itself, raise the temperature of the planet).

However, a project may be “cumulatively considerable,” meaning “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” (State CEQA Guidelines Section 15065(a)(3).) The State CEQA Guidelines add that a lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of greenhouse gas emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. (See State CEQA Guidelines Section 15064(h)(3).)

As stated above, the proposed Project does not have the potential to significantly impact climate change at the project-specific level. However, an analysis of GHG impacts is provided below.

**Threshold:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Regarding GHG emissions, a project that shifts the location of where someone lives or works, by itself, may or may not contribute new GHG emissions. For example, someone may move from Northern California to western Riverside County, and while this would likely increase emissions within the Basin, it would not necessarily result in the generation of more GHG emissions globally. However, if a person moves from one location, with long commutes and a land use pattern that requires substantial energy use, to a project location that promotes shorter and fewer vehicle trips, more walking and less energy use, the new project could potentially result in a reduction in generation of global GHG emissions.

It should be noted that the release of GHG and CO₂ into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of GHG including CO₂ in the atmosphere has upon the Earth’s climate (i.e., climate change) and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although air quality modeling can estimate a project’s incremental contribution of CO₂ into the atmosphere, it is not feasible to determine whether or how an individual project’s relatively small incremental contribution (on a global scale) might translate into physical effects on the environment. Since the Earth’s climate is determined by the complex interaction of different components of the Earth and its atmosphere, it is not possible to discern whether the presence or absence of GHG emitted by the Project would result in any measurable impact that would cause climate change.
The following Project activities were analyzed below for their contribution to global GHG emissions:

**Short-Term Analysis**

**Construction-Related Activities**
The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like worker trips, for the project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. Life-cycle emissions associated with the manufacture of building materials are also not quantified in this analysis although they undoubtedly exist. Quantification was not attempted because of the large spatio-temporal variation in sources for building products used to construct the project and the consequent large uncertainty associated with the resulting emissions. For this reason, to attempt to quantify life-cycle emissions of materials would be speculative. This conclusion is consistent with recent guidance on quantification of emissions for commercial projects presented by the California Air Pollution Control Officer’s Association guidance on CEQA and Climate Change (CAPCOA, p. 65).

The following table summarizes the output results and presents the GHG emissions estimates for the Project in metric tonnes per year (MT/yr).

<table>
<thead>
<tr>
<th>Year</th>
<th>CO₂ (MT/yr)</th>
<th>CH₄</th>
<th>N₂O</th>
<th>Total CO₂E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>425.17</td>
<td>0.05</td>
<td>0.00</td>
<td>426.25</td>
</tr>
<tr>
<td>2013</td>
<td>265.76</td>
<td>0.03</td>
<td>0.00</td>
<td>266.39</td>
</tr>
<tr>
<td>Total</td>
<td>690.93</td>
<td>0.08</td>
<td>0.00</td>
<td>692.64</td>
</tr>
<tr>
<td>Amortized Total</td>
<td>23.09</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation of the table above indicates that an estimated 692.64 MTCO₂E emissions from project construction equipment will occur during the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008 (SCAQMD 2008b, p. 3-8) recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the Project’s total construction emissions were spread evenly over 30 years to yield an average of 23.09 MTCO₂E per year and were included in the analysis of the project’s total operational emissions below in **Table 5.4-D – Total Annual Project-Related GHG Emissions.**
Long-Term Analysis

Energy-Related Activities

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically generated at an off-site power plant which indirectly generates GHG emissions. The default values used in CalEEMod are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect current 2008 Title 24 improvements (AQIA, p. 36). The following table summarizes the GHG emissions estimates for the Project.

<table>
<thead>
<tr>
<th>Source</th>
<th>Metric Tons per year (MT/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CO₂</td>
</tr>
<tr>
<td>Electricity</td>
<td>212.95</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>2.76</td>
</tr>
<tr>
<td>Total</td>
<td>215.71</td>
</tr>
</tbody>
</table>

Evaluation of the table above indicates that the proposed Project will generate an estimated 216.35 MTCO₂E per year.

Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in project-specific traffic analyses. Trip generation data from the Wal-Mart Expansion, Traffic Impact Analysis, City of Riverside, California (Urban Crossroads) was used in this analysis. Trip length data was based on CalEEMod defaults. Table 5.4-D – Total Annual Project-Related GHG Emissions, below, indicates that total Project-related GHG emissions from mobile sources are estimated to be approximately 1,278.29 MTCO₂E annually.

Solid Waste-Related Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the State. Table 5.4-D, below, indicates that the Project’s GHG emissions from solid waste disposal total 43.57 MTCO₂E annually.

Water-Related Energy Usage

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in southern California and plays a large role in GHG production.

There are three processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial): (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment.
(CEC 2005b, p. 21). CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project’s location.

**Table 5.4-D**, below, indicates that the Project’s GHG emissions from water-related energy usage total 21.50 MTCO₂E annually.

**Total Project GHG Emissions**

As shown in **Table 5.4-D**, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 1,583 MTCO₂E per year which includes construction-related emissions amortized over a typical project life of 30 years. The table below indicates that the majority of GHG emissions are from vehicle use (mobile sources) followed by energy consumption.

<table>
<thead>
<tr>
<th>Source</th>
<th>Metric Tons per year (MT/yr)</th>
<th>CO₂</th>
<th>CH₄</th>
<th>N₂O</th>
<th>Total CO₂E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amortized Construction</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>23.09</td>
</tr>
<tr>
<td>Energy</td>
<td>215.71</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>216.35</td>
</tr>
<tr>
<td>Mobile</td>
<td>1,277.01</td>
<td>0.06</td>
<td>0.00</td>
<td>0.00</td>
<td>1,278.29</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>19.44</td>
<td>1.15</td>
<td>0.00</td>
<td>0.00</td>
<td>43.57</td>
</tr>
<tr>
<td>Water-Related Energy</td>
<td>19.99</td>
<td>0.05</td>
<td>0.00</td>
<td>0.00</td>
<td>21.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,532.15</strong></td>
<td><strong>1.26</strong></td>
<td><strong>0.00</strong></td>
<td><strong>1,582.80</strong></td>
<td></td>
</tr>
</tbody>
</table>

The Project’s emissions of 1,583 MTCO₂E/year are less than the SCAQMD draft threshold for commercial projects of 3,000 MTCO₂E/year.

In addition, the Project is implementing numerous design features to increase energy efficiency, reduce water consumption, and reduce waste as described above in Section 5.4.5. These features will further reduce GHG emissions and are consistent with mitigation strategies developed by groups and public agencies such as the State Climate Action Team, CAPCOA, and the State Attorney General.

On this basis, the Project does not generate GHG emissions that would cause a significant impact on the environment and the impacts are **considered less than significant without mitigation**.

**Threshold:** *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

The City has adopted policies and programs in the GP 2025 to promote the use of clean and renewable energy sources, facilitate alternative modes of transportation and reduction in vehicle miles traveled, waste reduction, water conservation, and for the efficient and sustainable use of energy. Additionally, the City recently updated its Green Action Plan as described in Section 5.4.4.5 (Related Regulations, Local). Although the goals contained in the updated Green Action Plan are actions to be taken by the City, the Project has implemented numerous measures that support the goals identified in the Green
Section 5 Environmental Impact Analysis

5.4 Greenhouse Gas Emissions

City of Riverside

Walmart Expansion DEIR

Action Plan related to energy efficiency, waste reduction, and water conservation. However, there are no local or regional plans (Climate Action Plan or GHG Reduction Plan) specifically adopted for the purpose of reducing GHG emissions. Statewide, the CARB Scoping Plan calls for a reduction in California’s GHG emissions of approximately 30 percent from business-as-usual emission levels projected for 2020.

Since the proposed Project involves the expansion of an existing building that in and of itself will not result in any changes to the existing land use patterns in the Project area, incorporates many design features to reduce water and energy consumption, and does not generate significant amounts of GHG, it will not conflict with any applicable plan, policy, or regulation for the reduction in GHG emissions. Therefore, the impacts are considered less than significant without mitigation.

5.4.7 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). Implementation of the proposed Project will not result in any significant GHG impacts that will require mitigation. Specifically, impacts to GHG emissions were found to be less than significant; therefore, no mitigation measures are necessary.

5.4.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented

Implementation of the proposed Project with incorporation of the Project design considerations discussed previously under 5.4.5, Project Design Considerations related to GHG emissions, will not result in any significant impacts that will require mitigation. Specifically, impacts were found to be less than significant; therefore, no mitigation measures are necessary.

5.4.9 Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented

The GP 2025 FPEIR found that GHG emissions from General Plan build-out were cumulatively considerable because traffic is anticipated to increase by 50 percent and that GHG emission reductions could not be quantified from the numerous General Plan policies and programs aimed at reducing vehicle trips and increase energy efficiency City-wide.

The Project’s annual GHG emissions are below the applicable draft threshold developed by SCAQMD for commercial projects, and do not generate a significant amount of GHG emissions. To further lessen the impacts related to global climate change and GHG production, the Project has been designed to increase energy efficiency and reduce water consumption which also reduces energy. Considering the Project’s small contribution to GHG emissions and Project design features which reduce energy usage from GHG emissions, the Project does not incrementally contribute to a cumulatively significant effect and cumulative impacts related to GHG emissions are considered less than significant.
5.4.10 References

In addition to other documents, the following references were used in the preparation of this section of the DEIR:


- California Air Resources Board, *Assembly Bill 32 Global Warming Solutions Act* webpage. (Available at [http://www.arb.ca.gov/cc/ab32/ab32.htm](http://www.arb.ca.gov/cc/ab32/ab32.htm), accessed May 24, 2011.)


accessed May 23, 2011.) [Cited as CEC 2006c]


Urban Crossroads, *Wal-Mart Expansion, Traffic Impact Analysis, City of Riverside, California*, October 18, 2010 (Revised). (Included as Appendix E.) [Cited as Urban Crossroads]
5.5 Hazards and Hazardous Materials

This section describes existing and potentially occurring hazards and hazardous materials that may result from implementation of the Project and discusses potential impacts posed by these hazards to the environment as well as to employees and patrons within, and adjacent to, the Project site.

Potential impacts related to:

- creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- emitting hazardous emissions or handling acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, creating a significant hazard to the public or the environment; and
- being located within the vicinity of a private airstrip that would result in a safety hazard for people residing or working in the project area;
- impairing implementation of, or physically interfering with, an adopted emergency response plan or emergency evacuation plan; and
- exposing 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

were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A) and will not be discussed further in this DEIR. Potential impacts related to:

- being 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, resulting in a safety hazard for people residing or working in the project area

were found to be less than significant in the IS/NOP. However, as discussed further in Section 5.5.2, below, the City received a comment letter from the Riverside County Airport Land Use Commission indicating that the analysis contained in the Project’s Initial Study regarding this impact area misinterpreted the Airport Land Use Compatibility Plan (ALUCP) Policy Document in determining a less than significant impact. Riverside County Airport Land Use Commission (ALUC) requested the DEIR include a revised analysis. The revised analysis is included in this section. This section also contains a discussion of potential impacts related to:

- creating a significant hazard to the public or the environment through a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
As discussed below, the Project’s potential to result in a safety hazard for people residing or working in the project area 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; or to create a significant hazard to the public or the environment through a reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment is considered to be **less than significant**.

### 5.5.1 Setting

#### 5.5.1.1 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment was conducted for the Project site prepared by Alaska Petroleum Environmental Engineering, Inc., titled *Phase I Environmental Site Assessment Wal-Mart Store #2028, 5200 Van Buren Boulevard, Riverside, CA* (the Phase I), which is available in Appendix C.1 to this DEIR. The Phase I was conducted to identify whether the Project site is being, or was used, for purposes that have resulted in potential adverse environmental impacts, or has been adversely impacted from vicinity usage. The purpose for conducting the Phase I was to assess *recognized environmental conditions* concerning a given property. Conditions determined to be *de minimis* are not recognized environmental conditions.” (Phase I, Appendix A, p. 1)

The Phase I used the following information to determine historical use of the Project site and adjoining properties: chain-of-title documentation; zoning/land use records (e.g., environmental liens or use limitations); property tax files (County Assessor’s office); local government agency records (including landfills); government databases; personal interviews; historical aerial photographs; city directory abstract; geologic, hydrologic, and topographic condition (general description); and crude oil exploration and production activity (Phase I, Executive Summary, p. 2). In assessing the Project site’s history, reconnaissance, vicinity usage, and physical setting, the Phase I was prepared using the Site Assessment Parameters Evaluation Criteria prepared by the American Society for Testing and Materials, now known only as ASTM International. Specifically, for Project site history, chain-of-title documentation was used in an attempt to determine the first development use and any potential adverse environmental impacts that may have occurred from land use activities. Interviews were conducted to obtain information about *recognized environmental conditions* in connection with the Project site. A reconnaissance of the Project site reconnaissance was conducted on November 19, 2008 (Phase I, p. 3).

The Project site and vicinity usage was evaluated using government database lists and available public records. The radial review of the immediately adjacent properties and vicinity allows for assessment of potential adverse environmental impact(s) from nearby activities. The review radius used in evaluating

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1. As defined by ASTM International the term “recognized environmental conditions”, refers to the presence or likely presence of any hazardous substances or petroleum product on a property. Specifically, under the conditions that indicates an existing or past release, or a material threat of a release into structures, into the ground, groundwater or surface waters of the property. (Phase I, Executive Summary, p. 1)

2. A *de minimis* condition is one that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies (Phase I, Executive Summary, p. 1).

3. ASTM International, formerly known as the American Society for Testing and Materials, is a globally recognized leader in the development and delivery of international voluntary consensus standards (ASTM Overview).
each area of concern complies with ASTM International and/or government standards. Further, in order to assess the physical setting, several sources were utilized to provide background information on conditions at the Project site as related to recognized environmental conditions. The area’s general topography, geology and hydrology were researched in an attempt to identify the physical setting with respect to the migration of hazardous substances to the Project site, or from an adjacent property, into the soil or groundwater.

The Phase I also analyzed issues beyond the traditional scope of an environmental site assessment. The intent of analyzing these non-scope considerations (also referred to as business environmental risks) is to consider whether there is a risk of exposure and whether such risks are likely to have an adverse human health impact and create a risk of regulatory or third-party liability, and/or what impact or relevance, if any, the risks may have on the intended use of the Project site. Non-scope considerations include, but are not limited to: radon; indoor air quality; lead in drinking water; environmental regulatory compliance; high voltage power lines; cultural, historic, and archeological resources; wetlands and surfaces waters; threatened, endangered, and other protected species; wildlife sanctuaries and other natural resources species; biological agents; mold; and potential impacts/implications of environmental off-site issues for site development and construction. Further, additional non-scope considerations beyond those listed previously, include the following: public utilities, polychlorinated biphenyls (PCBs), mercury, lead, formaldehyde, chlorofluorocarbons (CFCs), potential asbestos-containing building materials, universal wastes, and worker health and safety.

5.5.1.2 Existing Conditions
The Project site includes the existing, freestanding Walmart store located at 5200 Van Buren Boulevard (Assessor's Parcel Numbers 151-290-020 and 151-380-048) in the City of Riverside (City), and encompasses approximately 13.73 acres. The Project site is nearly completely developed with the existing 125,827-square-foot (SF) Walmart store, Tire & Lube Express facility, a 5,300 SF exterior Garden Center, and surface parking lot. The existing Tire & Lube Express facility and Garden Center are located on the eastern portion of the Walmart store, adjacent to Van Buren Boulevard (Figure 3-4 – Site Plan). The current store also includes two depressed (i.e., below grade) loading docks located on the north side of the existing structure, which are blocked from views from the north of the Project site by a 10-foot high masonry wall.

The existing landscaping at the Project site is common for a large retail store, and includes parking lot area bushes and shade trees in small, concrete-curbed islands. Along the south edge of the Project site, there is a grassy open space area, and along the eastern side, running parallel to Van Buren Boulevard, is a landscaped area that is approximately 30 feet wide (varies marginally in width). A grassy, landscaped buffer is also located on the northern and western side of the Project site. A summary of the existing use and ownership is presented in Table 5.5-A – Site Profile Assessment Summary, below.

---

4 The existing Walmart store and Garden center encompass a total of 131,127 SF.
Table 5.5-A – Site Profile Assessment Summary

<table>
<thead>
<tr>
<th>Site Identification and Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel Numbers</td>
<td>151-290-020 and 151-380-048</td>
</tr>
</tbody>
</table>
| Site Location                      | 5200 Van Buren Boulevard  
                                          Riverside, CA 92503 |
| Construction Date                  | Commenced in 1993, occupancy in 1994 |
| Structure Size                     | 125,827 SF |
| Acreage                            | 13.73 |
| Site Owner                         | Walmart Stores, Inc. |
| Owner’s Address                    | 2001 SE 10th Street  
                                          Bentonville, AR 72712 |
| Duration of Ownership              | 20 years |

Notes:
*a* Source: Alaska Petroleum Environmental Engineering, Inc., *Phase I Environmental Site Assessment Wal-
Mart Store # 2028, 5200 Van Buren Boulevard, Riverside, CA.*

In assessing the physical setting of the Project site, the Phase I considered factors such as topography, geology, groundwater, oil and gas activity, landfills, and ASTM non-scope considerations and business environmental risks. There were no data gaps that affected the ability to identify *recognized environmental conditions* or otherwise significantly or materially affect the findings of the Phase I. The Phase I concluded that no *recognized environmental conditions* exist on the Project site; however, certain ASTM non-scope considerations/business environmental risks were identified. (Phase I, p. 32) The findings of the physical setting assessment are summarized in **Table 5.5-B – Physical Setting Assessment Summary**, below.

Table 5.5-B – Physical Setting Assessment Summary

<table>
<thead>
<tr>
<th>Assessment Parameter</th>
<th>Source</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topography and Geology</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Elevation            | • United States Department of the Interior – Geologic Survey, Los Angeles Quadrangle  
                                   • Environmental Data Resources (EDR) | The elevation of the Project site is approximately 740 feet above mean sea level (AMSL) |
| Lithology            | • United States Department of Agriculture, Soil Conservation Service, Soil Survey, Western Riverside Area, California  
                                   • EDR | • BhA, Buchenau series, Buchenau loam, slightly saline-alkali, 0 to 2 percent slopes  
                                   • Silty-clay loam |
<table>
<thead>
<tr>
<th>Assessment Parameter</th>
<th>Source</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Groundwater</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow Direction</td>
<td>● Topography</td>
<td>● Assume to follow topography to the northwest&lt;br&gt;● Groundwater flow direction reported in the immediate vicinity (i.e., within 1/8th mile) of the Project site is purported to vary between flat, southeast and west</td>
</tr>
<tr>
<td></td>
<td>● EDR</td>
<td></td>
</tr>
<tr>
<td>Monitoring Wells</td>
<td>● Site reconnaissance b</td>
<td>Groundwater monitoring wells were noted at the gas stations located at the northwest, northeast, and southwest corners of the intersection of Van Buren Boulevard/Colorado Avenue.</td>
</tr>
<tr>
<td>Depth Measurements</td>
<td>● EDR</td>
<td>Groundwater depth reported in the immediate vicinity (i.e., within 1/8th mile) of the Project site is purported to be less than 15 feet below ground surface.</td>
</tr>
<tr>
<td>Contaminant Sources</td>
<td>● EDR&lt;br&gt;● Site reconnaissance b</td>
<td>G and K Petro at 4975 Van Buren Boulevard is less than 1/8th mile upgradient and south/southeast from the Project site. Groundwater is affected and this is still an active case.</td>
</tr>
<tr>
<td><strong>Oil and Gas Activity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Wells</td>
<td>● California Department of Conservation, Division of Oil, Gas and Geothermal Resources</td>
<td>None</td>
</tr>
<tr>
<td>Abandoned Wells</td>
<td>● EDR</td>
<td>None</td>
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<tr>
<td>Methane Producing Zones</td>
<td>Munger Map Book, 1999</td>
<td>None</td>
</tr>
<tr>
<td>Oil and Gas Seeps</td>
<td>Onshore Oil and Gas Seeps in California, TR26, 1987</td>
<td>None</td>
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<tr>
<td><strong>Landfills</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abandoned</td>
<td>California Integrated Waste Management Board</td>
<td>None</td>
</tr>
<tr>
<td><strong>ASTM Non-Scope Considerations/Business Environmental Risks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural and Historic Landmarks</td>
<td>City Planning Department</td>
<td>None</td>
</tr>
<tr>
<td>Wetlands</td>
<td>City Planning Department</td>
<td>None</td>
</tr>
<tr>
<td>Archaeological and/or Ecological Resources</td>
<td>City Planning Department</td>
<td>None</td>
</tr>
<tr>
<td>Agricultural Preserve</td>
<td>Riverside County Transportation and Land Management Agency (RCTLMA)</td>
<td>None</td>
</tr>
<tr>
<td>Assessment Parameter</td>
<td>Source</td>
<td>Findings</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
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</tr>
<tr>
<td>Tribal Land</td>
<td>RCTLMA</td>
<td>None</td>
</tr>
</tbody>
</table>
| Endangered Species and/or Wildlife Sanctuaries           | • RCTLMA as noted in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)
• City Planning Department                              | Amphibia species – None
Burrowing owl – Yes/No \(^d\)
Criteria area species – None
Mammalian species – None
Narrow endemic plant species – None
Special linkage area – None                                |
| Paleontological Sensitivity                             | RCTLMA                                                                 | High level of sensitivity based on geologic formations for mappable rock units\(^e\). |
| Earthquake, Landslide, Liquefaction Zones                | • EDR                                                                  | Not in a fault zone, no faults within a 1/2 mile of the Project site. High liquefaction potential. |
| • RCTLMA                                                 |                                                                        |                                                                          |
| Radon                                                    | • EDR                                                                  | Within the zip code in where the Project site is located, 13 tests were performed and all were less than the action limit of 4 picocuries per liter. |
| • California Department of Health Services, California Statewide Radon Survey Interim Results, October 2002 |                                                                        |                                                                          |
| Flood Zones                                              | • ESRI                                                                 | Not in a flood zone.                                                     |
| • Federal Emergency Management Agency Mapping Information Platform (www.hazard.fema.gov)
• EDR                                                    |                                                                        |                                                                          |

Notes:

\(^b\) Site reconnaissance conducted by Alaska Petroleum Environmental Engineering, Inc. as part of preparation of the Phase I.

\(^c\) Many of the ASTM non-scope considerations/business environmental risks are not germane to hazards and hazards materials; however, these items are included in this table to be consistent with the data presented in the Phase I.

\(^d\) According to RCTLMA (as noted in the MSHCP), burrowing owl may be present on the Project site. However, due to the developed nature of the Project site and surrounding environs, and according to the City Planning Department staff, a burrowing owl study is not necessary. Potential impacts to biological resources and a discussion of the MSHCP are included in Section 5.3, Biological Resources of this DEIR.

\(^e\) According to RCTLMA, the Project site is located in an area with a high level of paleontological sensitivity. However, the Project site has been previously graded and subsequently developed with a commercial structure and associated parking areas. Project implementation will not disturb any areas on the Project site not previously graded as part of the construction for the original Walmart structure (see the cultural resources discussion [Section 4.1.5] in Section 4 of this DEIR).
5.5.1.3 Historic Uses and Ownership of the Project Site

Historic uses of the Project site were researched to determine if any past releases of hazardous materials have taken place that may affect the existing conditions. Historic uses of the Project site can only be determined from user provided information, reasonable ascertainable historic local public records, attempted interviews, and/or from review of previously prepared environmental reports.

Data gaps in the Project site development history were identified. According to a 1993 City Building Department record, a 3,000-SF building, purportedly 60 years old, was demolished on the Project site. According to City Building Department staff, the only records retained by the City are those reflected on the City’s website. Additionally, the County of Riverside Building Department provided no additional information. Pursuant to County of Riverside’s Building Department staff, the Project site parcel numbers and corresponding addresses have always been under the City’s jurisdiction, and as such, the County of Riverside’s Building Department does not have any records. However; it is important to note that the data gap regarding the purportedly 60-year-old demolished structure did not impact the ability to identify recognized environmental conditions concerning the Project site, or any other conditions that may otherwise significantly or materially affect the Phase I findings. (Phase I, pp. 31–32)

An evaluation of title documents was conducted as part of the Phase I. There are currently no apparent environmental liens or activity or use limitations affecting the Project site. Assessor’s Parcel Number 151-380-048 was primarily owned by individuals from 1950 to 1982, where after, the parcel was grant deeded to the City, and then to its current owner in 1992. Assessor’s Parcel Number 151-290-020 in its existing condition was the result of assimilating older multiple parcels 151-290-008, -010, and -011. Former parcel 151-290-008 was held by individuals until 1992, when its current owner acquired the property. Former parcel 151-290-010 was commercially-held until 1992, when its current owner acquired the property. The prior commercial uses included realty, investment, and land companies, and Southern California Edison. Old parcel 151-290-011 was held by individuals until 1992, when its current owner acquired the property. (Phase I, p. 10)

Historical topographic maps of the Project site area from 1901 to 1980 indicate that the Project site elevation is approximately 740 feet AMSL. No evidence of wells or water tanks is depicted on any of the historical maps. However, unknown structures either on site or in the immediate vicinity adjacent to Van Buren Boulevard appear in the 1947 through 1967 maps. Further, an attempt to review the Sanborn Fire Insurance Maps was made; however, the Project site is unmapped property.

Remaining of page intentionally left blank.
Historic uses of the Project site, based on a review of historic aerial photographs, are summarized in Table 5.5-C – Summary of Historic Uses of the Project Site, below.

### Table 5.5-C – Summary of Historic Uses of the Project Site

<table>
<thead>
<tr>
<th>Year</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1931</td>
<td>The Project site is vacant.</td>
</tr>
<tr>
<td>1938</td>
<td>There is a cleared section of land adjacent to Van Buren Boulevard, south of Audrey Avenue, with no apparent structures. The adjacent properties are vacant.</td>
</tr>
<tr>
<td>1953</td>
<td>First Project site development distinguishable. Two rectangular structures exist in the current surface parking lot area, adjacent properties are vacant.</td>
</tr>
<tr>
<td>1963</td>
<td>The residential development to the west of the Project site has been constructed.</td>
</tr>
<tr>
<td>1977</td>
<td>The Project site appears to be primarily vacant with may be a residence and several additional structures at the northeast corner, one of which may have been located on site.</td>
</tr>
<tr>
<td>1990</td>
<td>The Project site appears to have been cleared of all structures and appears to be vacant land. The land to the north of the Project site has been developed with multi-family residential uses. The land at the southern most point has been developed with residential or possibly commercial uses. The land near the southeast portion of the Project site is vacant with the exception of two small structures at the northwest corner of Wells Avenue and Van Buren Boulevard.</td>
</tr>
<tr>
<td>1994</td>
<td>The Project site has been developed with its existing use and surrounding parcels have experienced little to no change with the exception of an additional structure near the northwest corner of Wells Avenue and Van Buren Boulevard.</td>
</tr>
<tr>
<td>2002</td>
<td>The Project site has not changed, and there is now a rectangular structure located on one of the southeast lot adjacent to the Project site.</td>
</tr>
<tr>
<td>2005</td>
<td>The Project site has not changed and surrounding parcels have also experienced little to no change.</td>
</tr>
</tbody>
</table>

Notes:

- Source: Table compiled by Albert A. Webb Associates using aerial photographs contained in Alaska Petroleum Environmental Engineering, Inc., *Phase I Environmental Site Assessment Wal-Mart Store #2028, 5200 Van Buren Boulevard, Riverside, CA*, March 24, 2009, Appendix H, included as Appendix C.1 of this DEIR.
Interviews were conducted to obtain information about recognized environmental conditions and ASTM non-scope considerations/business environmental risks, as summarized below in Table 5.5-D – Past and Present Site Use and Site History Assessment Summary.

### Table 5.5-D – Past and Present Use and Site History Assessment Summary

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Source</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviews</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future Use of the Project Site</td>
<td>Mr. Steve Reiner, P.E. Vice President Development Resource Consultants, Inc</td>
<td>• The proposed Project will provide space for a grocery sales area of the existing Walmart store.</td>
</tr>
</tbody>
</table>
| Past and Present Site Use | Mr. Goran Andelkovich Assistant Manager Walmart Store No. 2028 | • Around September 2008, there was a sewage spill/overflow from a grease interceptor located west from the building at the property line. City Fire Department was called to ensure that the spill did not enter the nearby storm drain. Walmart Corporation retained a private company to clean-out the sewer.  
  • Approximately four years ago, the sewage lift station located south from the Tire & Lube Express facility at the northeast corner of the Walmart store structure was replaced.  
  • Unaware of any other environmental issues associated with the Project site.  
  • Could not confirm if any of the thermostats in the store contain mercury. |
| **Local Government Agencies** | | |
| Building Department | City | • In 1993, memorandum indicating it is “OK” to demolish the structures at 5160 and 5054 Van Buren Boulevard (known at that time as Van Buren Avenue).  
  • In 1993, South Coast Air Quality Management District Demolition Notification Form indicated a 3,000 SF residential structure with four units about 60 years old.  
  • In 1993, a 200 SF of floor tile and 2,000 SF of roofing material was removed and disposed of off site. |
### Table 5.5-10

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Source</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• In 1993, a building permit was issued for the construction of the Walmart store.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In 1995, a Demolition Disclosure Form indicated a McDonald’s restaurant to be added inside Walmart store.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In 1999, a permit indicated the installation of two 400-gallon storage tanks inside of the Tire &amp; Lube Express facility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In 2001, a general remodel of the photo lab and pharmacy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In 2004, a remodel to the existing bathrooms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In 2006 and 2007, a tenant improvement in the Vision Center and bathrooms.</td>
</tr>
<tr>
<td>Fire Department</td>
<td>City</td>
<td>• No hazardous materials responses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No record of soil contamination.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No pending inspections or violations (last inspected October 26, 2007)</td>
</tr>
<tr>
<td>Air Quality Management District</td>
<td>South Coast Air Quality Management District</td>
<td>• At 5200 Van Buren Boulevard records are listed, no details or equipment listed or violations noted.</td>
</tr>
</tbody>
</table>

**Notes:**

a Source: Alaska Petroleum Environmental Engineering, Inc., *Phase I Environmental Site Assessment Wal-Mart Store #2028, 5200 Van Buren Boulevard, Riverside, CA*, March 24, 2009, Table 3.0, pp. 11–12.

5.5.1.4 **On-Site Presence of Potentially Hazardous Materials**

To ascertain the existing Project site conditions relative to the presence of *recognized environmental conditions*, a reconnaissance of the Project site was performed as part of the Phase I. This reconnaissance included observation the general area, surface area, exterior, interior, and ASTM non-scope considerations/business environmental risks. (Phase I, p. 13)

*Recognized environmental conditions* were not identified. Hazardous materials/wastes were identified in:

- Tire & Lube Express facility with used automobile batteries, tires, virgin and waste motor oil, virgin and waste antifreeze, grease, and over-pack poly drums (85-gallon capacity) for hazardous material/waste; and

- Walmart store with leaking or spilled retail products that contain hazardous materials (northern interior storage area);

however, no apparent *recognized environmental conditions* within either of the above areas were noted (Phase I, p. 13).

Potential universal wastes were identified as present on the Project site. A “universal waste” is defined as common household or business waste items that require special handling in disposal. Generally, universal wastes may not be disposed of as municipal trash; rather they must be recycled or disposed in an approved landfill. When decommissioned or discarded, certain items located on the Project site would be considered universal wastes (e.g., several beverage chillers located within the northern exterior refrigeration unit enclosure). (Phase I, p. 14)

Hazardous building materials were not identified as being present on the Project site; however, the following items, when decommissioned and/or disposed of, are considered a hazardous waste product:

- Fluorescent lights and/or high-intensity discharge (HID) lights are used to illuminate the Project site’s interior and parking lot, respectively. Under current California law, these bulbs are regulated as a universal waste, and must be properly disposed of and/or recycled when removed. As of February 8, 2006, all universal wastes must be shipped to another handler, a universal waste transfer station, a recycling facility, or a disposal facility;

- The Project site contains heating, ventilating, and air conditioning (HVAC) and refrigeration units, etc. Pursuant to requirements in the Federal Clean Air Act, companies and individuals who service or dispose of equipment (e.g., air conditioners, appliances, motor vehicles) containing ozone-depleting refrigerants (e.g., Freon) must be properly trained and equipped to prevent release of this material to the atmosphere; and

- Lead-acid batteries, waste oil, and antifreeze.
Improper storage of hazardous materials was identified:

- Propane bottles in the northern exterior, refrigeration unit enclosure;
- Five-gallon, plastic, diesel fuel can that contains about one gallon of fuel located within the same enclosure as identified above.

Subsequent to an Assistant Manager of the Walmart store being made aware of the two items above, as well as, the beverage chillers; these items were properly stored or removed from the Project site (Phase I, p. 14).

The results of Project site reconnaissance assessment is summarized below in **Table 5.5-E – Project Site Reconnaissance Assessment Summary**:

<table>
<thead>
<tr>
<th>Assessment Parameter</th>
<th>Presence</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature of current and past site usage</td>
<td>✓</td>
<td>Current use as retail store</td>
</tr>
<tr>
<td>Topographic features</td>
<td>✓</td>
<td>Eastern ¾ of Project site slopes to Van Buren Boulevard with remainder to western property line’s storm drain</td>
</tr>
<tr>
<td>Improved or unimproved Roads</td>
<td>✓</td>
<td>Improved roads surrounding Project site</td>
</tr>
<tr>
<td>Surface water bodies</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Regulatory protected habitats</td>
<td>✓</td>
<td>Not posted on the Project site</td>
</tr>
<tr>
<td>Hazardous materials/wastes</td>
<td>✓</td>
<td>Tire &amp; Lube Express virgin and waste oil and antifreeze</td>
</tr>
<tr>
<td><strong>Surface Area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence of spills</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Noxious odors</td>
<td>✓</td>
<td>Odors from sulfuric acid from automobile batteries in the Tire &amp; Lube Express exterior storage area</td>
</tr>
<tr>
<td>Building and surface grade integrity</td>
<td>✓</td>
<td>Good</td>
</tr>
<tr>
<td>Water bodies</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Vegetation</td>
<td>✓</td>
<td>Project site’s greenbelts</td>
</tr>
<tr>
<td><strong>Exterior (location, condition of areas, size(s) and content(s) of containers [labels or MSDS], signs of leakage, spill prevention mitigation measures, proximity to drains, etc.)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure construction type</td>
<td>✓</td>
<td>Concrete block with Glulam roof beams, plywood roof decking with rolled-on asphalt-impregnated roofing material</td>
</tr>
<tr>
<td>Waste and raw material storage</td>
<td>✓</td>
<td>Odors from sulfuric acid from automobile batteries in the Tire &amp; Lube Express exterior storage area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Odors from sulfuric acid from automobile batteries in the Tire &amp; Lube Express exterior storage area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sewage odors from manhole located at the central western property line</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 5.5 Hazards and Hazardous Materials

<table>
<thead>
<tr>
<th>Assessment Parameter</th>
<th>Presence</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>antifreeze, automobile batteries</td>
<td>✓</td>
<td>Hazardous Materials storage area (i.e., containment/stORAGE OF BROKEN/LEAKING RETAIL PRODUCTS)</td>
</tr>
<tr>
<td>McDonald’s carbon dioxide compressed gas cylinders for the soda dispensers</td>
<td>✓</td>
<td>Walmart’s propane gas cylinders for forklift use; partially full, plastic five-gallon diesel fuel can</td>
</tr>
<tr>
<td>Tire &amp; Lube Express exterior, chain-link fenced enclosure contains waste batteries, tires, waste oil, and overpack poly drums for hazardous material/waste containers</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Aboveground storage tanks (ASTs)</td>
<td>✓</td>
<td>Tire &amp; Lube Express waste and virgin oil and antifreeze in mechanic’s pit</td>
</tr>
<tr>
<td>Underground storage tanks (USTs)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Storage areas</td>
<td>✓</td>
<td>Hazardous Materials storage area at interior north-central wall warehouse contains 5- and 35-gallon plastic pails used to contain retail product containers that have been spilled/broken. &quot;Hazardous Waste&quot; labels correctly filled out.</td>
</tr>
<tr>
<td>Work areas (e.g., treatment, cleaning, generation of hazardous waste)</td>
<td>✓</td>
<td>Tire &amp; Lube Express “generates” hazardous waste (waste oil and antifreeze, and automobile batteries).</td>
</tr>
<tr>
<td>Floor drains (e.g., grease traps, oil/water separators, dry wells)</td>
<td>✓</td>
<td>Grocery refrigerator and warehouse walk-in freezer for condensate water discharge, maintenance and fire sprinkler riser rooms. McDonalds western exterior clarifier. Tire &amp; Lube Express clarifier for perimeter floor drains and in mechanic’s pit.</td>
</tr>
<tr>
<td>Discharge points of floor drains</td>
<td>✓</td>
<td>Sanitary sewer, or Tire &amp; Lube Express and McDonalds clarifier.</td>
</tr>
<tr>
<td>Floor or wall staining</td>
<td>✓</td>
<td>Maintenance and sprinkler stand pipe rooms from maintenance room’s slop sink spillover.</td>
</tr>
<tr>
<td>Type of heating system</td>
<td>✓</td>
<td>Natural gas</td>
</tr>
<tr>
<td>Basements or crawl spaces</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
### ASTM Non-Scope Considerations/Business Environmental Risks

<table>
<thead>
<tr>
<th>Assessment Parameter</th>
<th>Presence</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public utilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>✓</td>
<td>Riverside Public Utilities</td>
</tr>
<tr>
<td>Sewer</td>
<td>✓</td>
<td>Riverside Public Works Department</td>
</tr>
<tr>
<td>Power</td>
<td>✓</td>
<td>Riverside Public Utilities</td>
</tr>
<tr>
<td>Natural gas</td>
<td>✓</td>
<td>Southern California Gas</td>
</tr>
<tr>
<td><strong>PCBs – serial numbers, signs of leakage, owner of equipment (facility records, or manufacturer or utility owners)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluorescent light ballasts</td>
<td>✓</td>
<td>All interior lighting</td>
</tr>
<tr>
<td>Hydraulic elevators and lifts</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Electrical transformers</td>
<td>✓</td>
<td>Site transformer at northern property line.</td>
</tr>
<tr>
<td><strong>Mercury – location, condition of equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury liquid containing equipment (e.g., switches, thermostats, and other temperature control and HVAC devices)</td>
<td>✓</td>
<td>Thermostats appear to not contain mercury level switches.</td>
</tr>
<tr>
<td>Fluorescent lights</td>
<td>✓</td>
<td>All interior lighting</td>
</tr>
<tr>
<td>Mercury vapor lamps and/or HID lamps</td>
<td>✓</td>
<td>Parking lot illumination</td>
</tr>
<tr>
<td><strong>Lead – location and condition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>✓</td>
<td>Should not be present based on date of building construction.</td>
</tr>
<tr>
<td>Paint</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Solder</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Formaldehyde</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floor covering</td>
<td>✓</td>
<td>Should not be present based on date of building construction.</td>
</tr>
<tr>
<td>Furniture</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Chlorofluorocarbons (CFCs) – location, condition of equipment, information on all external labels indicating CFC content and serial numbers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air conditioning units</td>
<td>✓</td>
<td>Roof mounted</td>
</tr>
<tr>
<td>Refrigeration units</td>
<td>✓</td>
<td>Grocery area south-central interior</td>
</tr>
<tr>
<td>Walk-in coolers and freezers</td>
<td>✓</td>
<td>Warehouse</td>
</tr>
<tr>
<td><strong>Potential asbestos-containing building materials – location and condition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>✓</td>
<td>Potential in roof mastic and penetration sealant(s).</td>
</tr>
<tr>
<td>Assessment Parameter</td>
<td>Presence</td>
<td>Findings</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Floor tile</td>
<td>Yes</td>
<td>Should not be present based on date of construction/remodels.</td>
</tr>
<tr>
<td>Architectural spray-on material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spray on structural fireproofing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-formed pipe lagging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High voltage power lines</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Universal wastes</td>
<td>Yes</td>
<td>Discarded beverage refrigerators located within the northern exterior refrigeration unit’s enclosure.</td>
</tr>
<tr>
<td>Worker health and safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial hygiene</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Indoor air quality</td>
<td>Yes</td>
<td>The exhaust duct from the natural gas fired, roof-mounted heater in the loading dock area is detached. Combustion products (e.g., carbon monoxide) discharge into building.</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory compliance</td>
<td>Yes</td>
<td>Improper storage of propane bottles in the northern exterior refrigeration unit’s enclosure, and five-gallon, plastic, diesel fuel can, containing about one gallon of fuel within the same enclosure.</td>
</tr>
</tbody>
</table>

Notes:
N/A = not applicable

\(^{a}\) Source: Alaska Petroleum Environmental Engineering, Inc., *Phase I Environmental Site Assessment Wal-Mart Store #2028, 5200 Van Buren Boulevard, Riverside, CA*, March 24, 2009, Table 4.0, pp. 15–20 and Albert A. Webb Associates.

\(^{b}\) The storage tanks used by Tire & Lube Express are located in the mechanic’s pit. While some agencies would consider these storage tanks ASTs, some agencies, including the City, have strict policies regarding ASTs and USTs. In this case, the City considers these storage tanks to be USTs by merit of being located below ground surface and within the mechanic’s pit. The Phase I refers to these storage tanks as ASTs. The table in this DEIR reflects the proper designation per City policy. The designation correction does not significantly or materially affect the findings of the Phase I.

\(^{c}\) These issues were as of the completion of the Phase I.

In a records search of federal, State, supplemental, and local government databases, only the HAZNET\(^{5}\) database recorded a result of the Project site. According to HAZNET, 0.4 ton of unspecified solvent mixture waste was recycled, 0.45 tons of other empty containers of 30 gallons or more were disposed of at a Riverside County facility, 0.22 ton of unspecified solvent mixture waste was sent to a transfer station, and 0.22 ton of unspecified aqueous solution was recycled at a County of Riverside facility. Additionally, the Project site is not listed as having any federal liens, as an orphan facility, or as a Brownfield property. (Phase I, Appendix I, p. 6)

\(^{5}\) The HAZNET database contains facility and manifest data; which is extracted from the copies of hazardous waste manifests received each year by the California Department of Toxic Substances Control.
5.5.1.5 Results of Database Searches in the Vicinity of the Project Site

Surrounding land uses include residential and commercial uses. Located off-site immediately to the southeast of the Project site is a 24-hour fast-food restaurant (McDonald’s) with a drive-through lane. This off-site use is only accessible from the Project site. Adjacent to the north of the Project site are multi-family residential and commercial uses; to the east is Van Buren Boulevard and commercial and single-family residential uses; to the south are commercial and multi-family residential uses as well as a large-lot, single-family residence identified for a retail use of firewood sales; and to the west are single-family residential uses. Additionally, dotted throughout the Project site vicinity are vacant, graded lots on parcel sizes typical of an urban/developed area. Industrial and business park uses are also located in the area, generally concentrated along Arlington Avenue. Table 5.5-F – Government Record Search Summary of Project Site Vicinity, presents the results of the regulatory database search conducted for the properties within a one-half mile radius of the Project site. The abbreviations and acronyms used in the database column of the Table 5.5-F are defined and explained in Table 5.5-G – Abbreviations/Acronyms from Government Records Search Summary.

Table 5.5-F – Government Record Search Summary of Project Site Vicinity

<table>
<thead>
<tr>
<th>Location</th>
<th>Name</th>
<th>Database</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>5500 Van Buren Boulevard</td>
<td>Econo Lube N’ Tune</td>
<td>HAZNET, CA FID UST, SWEEPS UST</td>
<td>Underground storage tanks; disposal of waste oil, mixed oil, aqueous solution, solvent mixture waste.</td>
</tr>
<tr>
<td>4975 Van Buren Boulevard</td>
<td>G&amp;G Gas &amp; Liq. G &amp; K Petro, Inc. RBS Petrol, Inc G and K Petro</td>
<td>HIST UST, UST, LUST, Cortese, CA FID UST, SWEEPS UST</td>
<td>Active case of leaking underground storage tanks where groundwater has been affected.</td>
</tr>
<tr>
<td>5520 Van Buren Boulevard</td>
<td>Goodyear Tire Co. Goodyear Tires Goodyear (Van Buren) Goodyear Tire Centers</td>
<td>RCRA-SQG, FINDS, HAZNET, LUST, Cortese, CA FID UST, EMI, SWEEPS UST</td>
<td>Small-small quantity generator with no violations; disposal of aqueous solution with less than 10% total organic residues, solvents and waste oil; leaking underground storage tanks.</td>
</tr>
<tr>
<td>Location</td>
<td>Name</td>
<td>Database</td>
<td>Remarks</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------</td>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4930 Van Buren Boulevard</td>
<td>Thrifty Oil Stn. #340</td>
<td>CHMIRS HIST UST RCRA-SQG FINDS</td>
<td>Fuel spill; underground storage tank; small-small quantity generator of benzene and ignitable hazardous waste with no violations; leaking underground storage tanks.</td>
</tr>
<tr>
<td></td>
<td>Arco Facility No 09710</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thrifty Oil #340</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arco #9710</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thrifty #340</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Database</td>
<td>Remarks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4890 Van Buren Boulevard</td>
<td>Shell Service Station – 135824</td>
<td></td>
<td>Small-small quantity generator, large quantity generator of benzene and ignitable hazardous waste with no violations; disposal of organic solids, aqueous solution with less than 10% total organic residues, tank bottom waste, organic solids, leaking underground storage tank.</td>
</tr>
<tr>
<td></td>
<td>Shell Van Buren 76</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shell Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shell/Jimmy’s Gas Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RCRA-SQG FINDS HAZNET Cortese CA FID UST SWEEPS UST LUST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4865 Van Buren Boulevard</td>
<td>National Convenience Store</td>
<td>Cortese LUST HAZNET</td>
<td>Leaking underground storage tank; disposal of waste oil, mixed oil, aqueous solution with 10% or more total organic residues.</td>
</tr>
<tr>
<td></td>
<td>NCS/Stop &amp; Go #01-32 Beacon/NCS 13349</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continental Dry Cleaners</td>
<td>SLIC</td>
<td>Soil and groundwater.</td>
</tr>
<tr>
<td></td>
<td>Continental Cleaners (Former)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5638 Van Buren Boulevard</td>
<td>Continental Dry Cleaners</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SLIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5640 Van Buren Boulevard</td>
<td>Winston Tire No 133</td>
<td>RCRA-SQG FINDS</td>
<td>Small-small quantity generator of tetrachloroethylene with no violations.</td>
</tr>
<tr>
<td></td>
<td>Winston Tire No 133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4620 Van Buren Boulevard</td>
<td>Crescent Auto Wrecking Disposal</td>
<td>WMUDS/SWAT</td>
<td>Record of private-use waste management unit at site.</td>
</tr>
<tr>
<td>7751 Janet Avenue</td>
<td>U.S. Army Former Camp Anza</td>
<td>LUST</td>
<td>Leaking underground storage tank.</td>
</tr>
<tr>
<td>6002 Van Buren Boulevard</td>
<td>Unocal #014 (Palm Springs Oil)</td>
<td></td>
<td>Leaking underground storage tanks; small-small quantity generator with no violations; disposal of aqueous solution with less than 10% total organic residues, organic solids, tank bottom waste, organic liquid mixture; off-site wells installed.</td>
</tr>
<tr>
<td></td>
<td>Palm Springs Oil #14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 5.5-G, Abbreviations/Acronyms from Government Records Search Summary

<table>
<thead>
<tr>
<th>Abbrev/Acronym</th>
<th>Definition/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA FID UST</td>
<td>California Facility Inventory Database of Underground Storage Tanks. The database contains a historical listing of active and inactive underground storage tank locations from the California Water Resource Control Board.</td>
</tr>
<tr>
<td>CHMIRS</td>
<td>California Hazardous Material Incident Report System. This system contains information on reported hazardous material incidents (accidental releases or spills).</td>
</tr>
<tr>
<td>Cortese</td>
<td>Hazardous Waste &amp; Substances Sites List. The sites for the list are designated by the California Water Resource Control Board, the California Integrated Waste Management Board, and the California Department of Toxic Substances Control.</td>
</tr>
<tr>
<td>EMI</td>
<td>Emissions Inventory Data. Toxics and criteria pollutant emissions data collected by the California Air Resources Board and local air pollution agencies.</td>
</tr>
<tr>
<td>FINDS</td>
<td>Facility Index System/Facility Registry System. This system contains both facility information and “pointers” to other sources that contain more detail. The following FINDS databases were included in this map findings reports: Permit Compliance System, Aerometric Information Retrieval System, Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes, Federal Underground Injection Control, Criminal Docket System used to track criminal enforcement actions for all environmental statutes, Federal Facilities Information System, State Environmental Laws and Statutes, and PCB Activity Data System.</td>
</tr>
<tr>
<td>HAZNET</td>
<td>Facility and manifest data. The data is extracted from the copies of hazardous waste manifests received each year by the California Department of Toxic Substances Control.</td>
</tr>
<tr>
<td>Abbrev/Acronym</td>
<td>Definition/Explanation</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>HIST UST</td>
<td>Hazardous Substance Storage Container Database. This database is a historical listing of underground storage tank sites.</td>
</tr>
<tr>
<td>LUST</td>
<td>Geotracker’s Leaking Underground Fuel Tank Report. These reports contain an inventory of reported leaking underground storage tank incidents.</td>
</tr>
<tr>
<td>RCRA-SQG</td>
<td>Resource Conservation and Recovery Act – Small Quantity Generators. RCRAInfo is USEPA’s comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act. Small quantity generators generate between 100 kg and 1,000 kg of hazardous waste per month.</td>
</tr>
<tr>
<td>SLIC</td>
<td>Spills, Leaks, Investigations, and Clean-ups. Statewide cases involving spills, leaks, investigations, and cleanup program. This program is designed to protect and restore water quality from spills, leaks, and similar discharges.</td>
</tr>
<tr>
<td>SWEEPS UST</td>
<td>Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the California Water Resource Control Board in the early 1990s. The listing is no longer updated or maintained.</td>
</tr>
<tr>
<td>SWRCY</td>
<td>Recycler Database. A listing of recycling facilities in California.</td>
</tr>
<tr>
<td>UST</td>
<td>Active underground storage tank facilities.</td>
</tr>
<tr>
<td>WMUDS/SWAT</td>
<td>Waste Management Unit Database. This database is used by the California Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units.</td>
</tr>
</tbody>
</table>

Notes:

### 5.5.1.6 Airport Compatibility Zones

The Project site is located approximately one mile from the Riverside Municipal Airport (RMA) and is located within the land use compatibility plan area of RMA. The majority of the 13.73 acre Project site is located within Compatibility Zone D. Specifically, approximately 12.49 acres, or 543,919 SF, of the Project site is located in Zone D, including the existing Walmart store and proposed expansion area. The southern portion of the Project site is located in Compatibility Zone E (**Figure 5.5-1 – Riverside Municipal Airport Compatibility Zones**), as designated by the Riverside County Airport Land Use Compatibility Plan (RCALUCP). The portion of the Project site within Zone E includes the southern portion of the parking area. The primary focus of RCALUCP is on broadly defined noise and safety impacts, as well as to make compatibility determinations for compliance of all proposed development around an airport. The basic compatibility criteria for Zones D and E as established under RCALUCP are discussed in Section 5.5.4.3, County Regulations.
Figure 5.5-1. Riverside Municipal Airport Compatibility Zones

Source: Riverside County GIS, 2010.

Legend:
- Red: Project Site
- Yellow: Zone A
- Green: Zone C
- Blue: Zone D
- Pink: Zone B2
- Dark Green: Zone E
- Orange: Zone B1

Path: G:\2010\10-0157\GIS\EIR_AirportSZs.mxd

Source: Riverside County GIS, 2010.
5.5.2 Comments Received in Response to the Initial Study/Notice of Preparation

Three comment letters were received regarding Hazards and Hazardous Materials in response to the IS/NOP for this Project. A comment letter was received from ALUC, and two comment letters were received from the California Department of Toxic Substances Control (DTSC). These letters are included in Appendix A to this DEIR and summarized in the following paragraphs.

ALUC’s letter, dated October 19, 2010, was received from Edward C. Cooper, Director, at ALUC’s office located at the County Administrative Center, 4080 Lemon Street, 14th Floor, Riverside, California 92501. The letter states the IS/NOP is correct in noting the Project site’s location within Zone D and Zone E of RMA; however, the compatibility analysis was incorrect. The maximum allowable single-acre intensity for Zone D was mistakenly used as the average intensity. The average intensity for Zone D is 100 persons per acre, with a maximum of 300 persons in any single-acre area (or 390 persons with full 30 percent design bonus). This average intensity should be multiplied by the total acreage of the Project site within Zone D. As a result, the IS/NOP’s determination of a less than significant impact requires further consideration, as this initial analysis needs to be revised. As the City’s General Plan is consistent with RCALUCP and the Project passes the 20,000-square-foot threshold as to be considered a “major land use action,” it is strongly recommended an application be processed through ALUC. ALUC requests a copy of the revised analysis, which is expected to reflect a significant impact that should be addressed in the EIR. Lastly, ALUC offers its assistance in appropriately addressing any compatibility issues. The revised analysis requested by ALUC is provided in this section of the DEIR. Following receipt of the ALUC comment letter, the Project has since received ALUC approval with the granting of a risk-reduction intensity bonus by the City. A copy of the approval is included as Appendix C.3 to this DEIR.

DTSC’s first letter, dated October 26, 2010, was received from Greg Holmes, Unit Chief, Brownfields and Environmental Restoration Program, at DTSC’s office located at 5796 Corporate Avenue, Cypress, California 90603. The letter states the EIR should evaluate area conditions to determine if there is a threat to human health or the environment, and recommends utilizing regulatory agencies databases. The preparation of the EIR should initiate investigation and/or remediation of the Project area; the findings of a Phase I Environmental Site Assessment and/or necessary remediation work plans and regulatory agency reports should be summarized in the EIR. An investigation should include the presences of hazardous chemicals, mercury, and asbestos-containing materials and legally required precautions taken during demolition. If contaminated soils are encountered, they should be disposed of properly. Human and environmental sensitive receptors should be protected during demolition and construction activities. If the Project will generate hazardous waste, it must be done in compliance with regulations. Lastly, DTSC offers its services for providing cleanup oversight. This section of the DEIR addresses DTSC’s concerns by providing a detailed summary of the results of the Project PESA completed for the Project site and a discussion of the Project design considerations relative to the removal of the UST at the Tire & Lube Express.

DTSC’s second letter, dated November 10, 2010, was received from Alberto T. Valmidiano, Project Manager, Brownfields and Environmental Restoration Program – Chatsworth office, at DTSC’s office located at 9211 Oakdale Avenue, Chatsworth, California 91311. The letter states that a site investigation
should be conducted as a result of the proposed removal of the USTs, wherein a leakage may have occurred that could pose a threat to human and environmental health. The environmental investigation and/or remediation should be conducted under a regulatory-agency-approved work plan. If soil contamination is encountered or suspected, construction should be immediately halted and appropriate health and safety procedures implemented. Additionally, the EIR should show how any required investigation and/or remediation will be conducted if the event soil contamination is encountered during demolition and/or construction, and which agency will provide regulatory oversight. Lastly, DTSC offers its services for preparation and cleanup oversight. This section of the DEIR addresses DTSC’s concerns by providing a detailed summary of the results of the Phase I completed for the Project site and a discussion of the Project design considerations relative to the removal of the UST at the Tire & Lube Express.

5.5.3 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in State CEQA Guidelines Section 15064.7. However, the City’s “Environmental Checklist” for the Project (see Appendix A to this DEIR) indicates the impacts related to hazards and hazardous materials may be considered potentially significant if the Project would:

- 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; and/or
- 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 use airport, would the project result in a safety hazard for people residing or working in the project area.

5.5.4 Related Regulations

5.5.4.1 Federal Regulations

A variety of federal laws and regulations governing the management and control of hazardous substances have been established at the federal level to protect the environment. Primary federal agencies with responsibility for hazardous materials management include the United States Environmental Protection Agency (USEPA), United States Department of Labor’s Occupational Safety and Health Administration (OSHA), United States Department of Transportation (USDOT), and the Nuclear Regulatory Commission (NRC). Major federal laws and issue areas include the following statutes and regulations promulgated hereunder.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Discovery of environmental health damage from disposal sites prompted the United States Congress to pass CERCLA, also known as Superfund. The purpose of CERCLA is to identify and cleanup chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.
Superfund Amendments and Reauthorization Act
The Superfund Amendments and Reauthorization Act (SARA) pertains primarily to emergency management of accidental releases. It requires formation of State and local emergency planning committees, which are responsible for collecting, material handling, and transportation data for use as a basis for planning. Chemical inventory data are made available to the community at large under the “right-to-know” provision of the law. Additionally, SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory (TRI).

Resource Conservation and Recovery Act
Resource Conservation and Recovery Act (RCRA) Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from its site of generation to its ultimate disposition. The 1984 amendments to RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of wastes within their jurisdictions. Subtitle I requires monitoring and contaminant systems for underground storage tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank.

Hazardous Materials Transportation Act
The Hazardous Materials Transportation Act (HMTA) is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, in the sky, or in pipelines. It includes provisions for materials classification, packaging, marking, labeling, placarding, and shipping documentation.

Federal Aviation Regulations, Part 77
The Federal Aviation Regulations (FAR), Part 77, Objects Affecting Navigable Airspace, establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. The regulations require that the Federal Aviation Administration (FAA) be notified of proposed construction or alteration of objects (whether permanent, temporary, or of natural growth) using FAA Form 7460-1 if those objects would be of a height that exceeds FAR Part 77 criteria. Further, FAR Part 77 regulations define a variety of imaginary surfaces at certain altitudes around airports. Surfaces include the primary surface, approach surface, transitional surface, horizontal surface, and conical surface. Collectively, the surfaces around an airport define a bowl-shaped area with ramps sloping up from each runway end. FAR Part 77 standards are not absolute height restrictions, but instead identify elevations at which structures may present a potential safety problem. Penetrations of the FAR Part 77 surface generally are reviewed on a case-by-case basis.
5.5.4.2 State Regulations
At the State level, California has developed hazardous waste regulations that are similar to the federal laws, but that are more stringent in their application in some cases. The California Environmental Protection Agency (Cal/EPA) has broad jurisdiction over hazardous materials management in the State. Within Cal/EPA, DTSC is the primary State agency with jurisdiction over hazardous chemical materials management. While DTSC has the primary responsibility for enforcement and implementation of hazardous waste control laws in the State, this responsibility is shared with other State and local government agencies, including the State Water Quality Control Board (SWQCB), Regional Water Quality Control Board (RWQCB), and city and county governments. Other State agencies involved in hazardous materials management are the California Department of Industrial Relations’ Division of Occupational Safety and Health (Cal/OSHA), California Emergency Management Agency’s Accidental Release Prevention (Cal/ARP), California Department of Fish and Game (CDFG), California Air Resources Board (CARB), California Department of Transportation (Caltrans), California Office of Environmental Health Hazard Assessment (OEHHA), and the California Department of Resources Recycling and Recovery (CalRecycle).6

Hazardous chemical and bio-hazardous materials management laws in California include the following statutes and regulations promulgated hereunder:

California Code of Regulations
Most State and federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations (CCR), Title 22, Division 4.5, Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, treatment, storage, and disposal facilities. As California is a fully authorized State according to RCRA, most RCRA regulations, such as those contained in 40 Code of Federal Regulations (CFR) 260, et seq., have been duplicated and integrated into Title 22. However, since DTSC regulates hazardous waste more stringently than USEPA, the integration of State and federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as RCRA. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than do RCRA regulations in 40 CFR 260. To aid the regulated community, California compiled the hazardous materials, waste, and toxics-related regulations contained in CCR Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27, into one consolidated CCR Title 26 “Toxics.” However, the California hazardous waste regulations are still commonly referred to as Title 22.

California Hazardous Material Management Act
The California Hazardous Material Management Act (HMMA) requires that businesses handling or storing certain amounts of hazardous materials prepare a Hazardous Materials Business Plan (HMBP), which includes an inventory of hazardous materials stored on site above specified quantities, an emergency response plan, and an employee training program. Businesses that use, store, or handle 55 gallons of liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature

6 CalRecycle was formerly known as California Integrated Waste Management Board.
and pressure require HMBPs. Plans must be prepared prior to facility operation and are reviewed/updated biennially or within 30 days of a change.

**California Hazardous Waste Control Law**

California Hazardous Waste Control Law (HWCL). HWCL is the primary hazardous waste statute in the State. HWCL requires a hazardous waste generator, which stores or accumulates hazardous waste for periods greater than 90 days at an on-site facility or for periods greater than 144 hours at an off-site or transfer facility that treats or transports hazardous waste, to obtain a permit to conduct such activities. HWCL implements RCRA as a “cradle-to-grave” waste management system in the State. HWCL specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reused as raw materials. HWCL exceeds federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates that number of types of wastes and waste management activities that are not covered under federal law with RCRA.

**State Aeronautics Act**

The State Aeronautics Act, which is codified in Public Utilities Code Section 21670, *et seq.*, establishes the requirement for the creation of airport land use commissions for every county in which there is located an airport that is served by a scheduled airline. Additionally, these sections of the Public Utilities Code mandate the preparation of Comprehensive Land Use Plans (CLUP) to provide for the orderly growth of each public airport and the area surrounding the airport. The purpose of CLUPs includes the protection of the general welfare of inhabitants within the vicinity of the airport and the general public.

**California Emergency Services Act**

California Government Code 8550-8692 provides for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, manmade, or war-caused emergencies that result in conditions of disaster or extreme peril to life, property, and the resources of the State. The general purpose is to protect the health and safety, and preserve the lives and property of the people of the State.

**Cal/OSHA**

Site safety requirements are generally based on the specifications of Cal/OSHA. Applicable specifications prepared by OSHA related to earth resources consist of 29 CFR Part 1926 (United State Department of Labor, 1989), which focuses on worker safety during excavation, shoring, and trenching.

**5.5.4.3 County Regulations**

**Riverside County Hazardous Waste Management Plan**

The Riverside County Hazardous Waste Management Plan (CHWMP) identifies current and projected future hazardous waste generation and management needs through the County of Riverside (County). CHWMP also provides a framework for the development of facilities to manage hazardous wastes, i.e.,
facility siting criteria, and includes a Households Hazardous Waste Element that is designed to divert household hazardous wastes from County landfills. CHWMP addresses only those hazardous waste issues with which local governments have responsibilities, namely land use decisions. The County and cities are required to implement facility siting policies and criteria within local planning and permitting processes.

**Riverside County Airport Land Use Compatibility Plan**

The Riverside County Airport Land Use Compatibility Plan (RCALUCP). RCALUCP is the compatibility plan of ALUC. The basic function of RCALUCP is to promote compatibility between airports in the County and the land uses that surround them. RCALUCP serves as a tool for use by ALUC in fulfilling their duty to review proposed development plans. Additionally, RCALUCP sets the compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners (including special district and other local government entities as well as private parties) in their design of new development.

The primary focus of RCALUCP is on broadly defined noise and safety impacts, as well as to make compatibility determinations for compliance of all proposed development around an airport.

The basic compatibility criteria for Zones D and E as established under RCALUCP are shown on the following table.

**Table 5.5-H – Basic Compatibility Criteria for Zones D and E**

<table>
<thead>
<tr>
<th>Zone</th>
<th>Locations</th>
<th>Maximum Densities/Intensities</th>
<th>Other Uses (p/ac)&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Open Land&lt;sup&gt;f&lt;/sup&gt;</th>
<th>Additional Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Residential (du/ac)&lt;sup&gt;d&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>≤0.2 (avg parcel size ≥5.0 ac)</td>
<td></td>
<td></td>
<td>• Highly noise-sensitive outdoor nonresidential uses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥5.0 (avg parcel size ≤2.0 ac)</td>
<td></td>
<td></td>
<td>• Hazards to flight</td>
</tr>
<tr>
<td>D</td>
<td>Primary Traffic Patterns and Runway Buffer Area</td>
<td></td>
<td></td>
<td>100</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10% required</td>
<td></td>
<td>• Children’s schools, hospitals, nursing homes discouraged</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Deed notice required</td>
</tr>
<tr>
<td>E</td>
<td>Other Airport Enviorns</td>
<td>No limit</td>
<td></td>
<td>None required</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

- Zones D and E are included in this table because those are the zones in which the Project site is located. Zones not applicable.
### Maximum Densities/Intensities

<table>
<thead>
<tr>
<th>Zone</th>
<th>Locations</th>
<th>Residential (du/ac)</th>
<th>Other Uses (p/ac)</th>
<th>Open Land</th>
<th>Additional Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Avg</td>
<td>Per Ac</td>
<td>Bonus</td>
<td></td>
</tr>
</tbody>
</table>

- to the Project site were omitted from this table.

- du/ac = dwelling units per acre; p/ac = people per acre; avg = average; req’d = required

- Residential development must not contain more than the indicated number of dwelling units (excluding secondary units) per gross acre. Clustering of units is encouraged. See Countywide Policy 4.2.5 for limitations. Gross acreage includes the property at issue plus a share of adjacent roads and any adjacent, permanently dedicated, open lands. Mixed-use development in which residential uses are proposed to be located in conjunction with nonresidential uses in the same or adjoining buildings on the same site shall be treated as nonresidential development. See Countywide Policy 3.1.3(d).

- Usage intensity calculations shall include all people (e.g., employees, customers/visitors) who may be on the property at a single point in time, whether indoors or outside.

- Open land requirements are intended to be applied with respect to an entire zone. This is typically accomplished as part of a community general plan or a specific plan, but may also apply to large (10 acres or more) development projects. See Countywide Policy 4.2.4 for definition of open land.

- The uses listed here are ones that are explicitly prohibited regardless of whether they meet the intensity criteria. In addition to these explicitly prohibited uses, other uses will normally not be permitted in the respective compatibility zones because they do not meet the usage intensity criteria.

- As part of certain real estate transactions involving residential property within any compatibility zone (that is, anywhere within an airport influence area), information regarding airport proximity and the existence of aircraft overflights must be disclosed. This requirement is set by State law. See Countywide Policy 4.4.2 for details. Easement dedication and deed notice requirements indicated for specific compatibility zones apply only to new development and to reuse if discretionary approval is required.

- The total number of people permitted on a project site at any time, except rare special events, must not exceed the indicated usage intensity times the gross acreage of the site. Rare special events are ones (such as an air show at the airport) for which a facility is not designed and normally not used and for which extra safety precautions can be taken as appropriate.

- Clustering of nonresidential development is permitted. However, no single acre of a project site shall exceed the indicated number of people per acre. See Countywide Policy 4.2.5 for details.

- An intensity bonus may be allowed if the building design includes features intended to reduce risks to occupants in the event of an aircraft collision with the building. See Countywide Policy 4.2.6 for details.

Examples of prohibited land uses specific to highly noise-sensitive outdoor nonresidential uses include amphitheaters and drive-in theaters. Examples specific to hazards to flight include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase is also prohibited. Further, other development conditions applicable to Zone D specific to airspace review required for objects greater than 70 feet tall are for general guidance. Shorter objects normally will not be airspace obstructions unless situated at a ground elevation well above that of the airport. Taller objects may be acceptable if determined not to be obstructions. Discouraged land uses such as those listed on the table should generally not be permitted unless no feasible alternative is available.

Although no explicit upper limit on usage intensity is defined for Zone E, uses that attract very high concentrations of people in confined areas are discouraged in locations below or near the principal arrival and departure flight tracks. Such land uses include the ones listed in Table 5.5-H, above. This limitation notwithstanding, no use is prohibited in Zone E if its usage intensity is such that it would be permitted in Zone D. As with Zone D, examples specific to hazards to flight include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use
development that may cause the attraction of birds to increase is also prohibited. Further, the same airspace review required for objects greater than 70 feet tall within Zone D is applicable to Zone E.

**RCALUCP Countywide Policy 3.3.6**
ALUC has established a set of policies regarding special conditions in the event a proposed land use, which may not be in conformance with the criteria set forth in RCALUCP, is determined by ALUC to still be acceptable. Specifically, Policy 3.3.6 requires ALUC to make specific findings as to why the exception is being made for the proposed use, and that the proposed use will not pose a hazard or excessive noise exposures to persons on the ground or aircraft in flight. ALUC is not responsible for demonstrating that a proposed use should receive special conditions. Instead, the project’s applicant and/or lead agency is responsible for demonstration that special conditions apply to the proposed use. Further, granted special conditions are site-specific and may not be generalized to include other sites.

**5.5.4.4 City Regulations**
**The Riverside County Hazardous Waste Management Plan (CHWMP)**
The City implements applicable portions of CHWMP, as discussed in Section 5.5.4.3, County Regulations.

**City of Riverside General Plan 2025 Public Safety Element**
The *City General Plan 2025 Public Safety Element (GP 2025 PSE)* identifies public safety issues and needs anticipated to be of ongoing concern to the City during the planning period, and describes the major hazards that might affect the City, as well as the resources available to respond when an accident or emergency occurs. The GP 2025 PSE sets forth objectives and policies to address all foreseeable public safety concerns. The overall purpose is to ensure that the City takes all necessary proactive measures to reduce the risk of hazards.

The GP 2025 PSE contains the following objectives and policies related to air traffic safety relevant to the Project (GP 2025):

Objective PS-4: Protect the community from hazards related to air and ground transportation.

Policy PS-4.6: Ensure that development within airport influence areas is consistent with the Airport Protection Overlay Zone development standards and the Riverside County Airport Land Use Compatibility Plan.

**Riverside Municipal Code Section 9.48**
Section 9.48 of the Riverside Municipal Code requires that any person who uses or handles hazardous materials or mixtures containing hazardous materials in an amount equal to, or greater than: (i) five hundred pounds, (ii) fifty-five gallons, (iii) two hundred cubic feet at standard room temperature and pressure for compressed gas, (iv) ten pounds for organic peroxides, or (v) any known or suspected carcinogen, radioactive material, Class A poison, Class A or Class B explosive, shall, during the month of January prepare and submit a completed inventory form and file a hazardous materials business plan with the City Fire Department.
5.5.5 Project Design Considerations

As part of the Project design considerations, the Project will involve the safe removal of the existing on-site USTs and any potential soil remediation that may have resulted from unknown leakage. Additionally, the Project design considerations will provide for the safety of on-site employees, customers, and visitors, and will provide for the safe handling of any potential occurrences of hazardous materials that may be encountered during Project construction. In addition, the Project will include risk-reduction design measures due to the Project site’s proximity to RMA.

Regarding the existing USTs, the Tire & Lube Express facility contains two 400-gallon used motor oil tanks, two 250-gallon new motor oil tanks, and one 200-gallon new motor oil tank. The tanks are all double-walled steel tanks. They are located below ground surface in the lower bay area, also known as the mechanic’s pit. The Project will remove the Tire & Lube Express facility and its associated components including the USTs. The Applicant has incorporated the following Project design considerations aimed at ensuring that the Project will not result in any significant impacts related to hazardous materials from the removal of the USTs:

- Prior to removing the USTs, the Applicant or one of its contractors will obtain any necessary permits from the County and City. Removal of the USTs will be performed as described in California Fire Code Section 3404.2.14.1, and removal procedures will include:
  - Flammable and combustible liquids will be removed from the tanks and connected piping;
  - Unused piping will be disconnected from the tanks;
  - Residual liquids in piping will be drained into the tanks;
  - Tank openings will be capped and plugged, leaving one opening for pressure equalization;
  - Tanks will be purged of vapor and inserted with dry ice prior to removal;
  - Vapors will be monitored during tank removal to ensure safety; and
  - Removed tanks and piping will be disposed of in accordance with regulatory restrictions.

- Undisturbed soil samples will be collected at the lowest elevation beneath each former UST. A hole will be cored in the concrete floor to allow for sample collection. A California-registered professional geologist will use a hand auger to collect two soil samples beneath each of the former USTs, for a total of 10 soil samples. The soil samples will be collected approximately two- and six feet below the top of the concrete floor of the lower bay. The soil samples will be placed in a glass jar and sealed with Teflon-lined lids. The samples will be labeled, placed on ice, and logged on a chain-of-custody form, which will accompany the samples to the analytical laboratory.
The soil samples will be submitted to a California-certified analytical laboratory. The laboratory will be instructed to analyze the soils samples for total petroleum hydrocarbons as waste oil (TPH[C_{24}-C_{40}]) using USEPA Method 8015 modified, California Assessment Manual metals using USEPA Method 6010B, and volatile organic compounds using USEPA Method 8260B.

Following completion of the soil sampling activities and once all analytical results have been received, a Site Assessment Report (SAR) will be prepared and submitted to the County’s Department of Environmental Health. The SAR will contain a description of UST removal and soil sampling activities, equipment disposal manifests, laboratory results in both written and tabular form, figures showing soil sampling locations, and a conclusion. The SAR will be signed by a California-registered professional geologist.

If impacted soil exceeds regulatory cleanup goals, a work plan for additional site assessment and/or remediation will be prepared and submitted to the County’s Department of Environmental Health Local Oversight Program.

Regarding the potential handling and/or disposal of existing hazardous materials, the Applicant has incorporated the following Project design considerations to ensure the Project will not result in any significant impacts related to hazardous materials:

- if any of the potentially hazardous products and materials identified by the P1ESA require removal and disposal as part of the implementation of the Project, such activities will be conducted in accordance with all applicable federal, State, and local regulations. Such products and materials may include fluorescent lights and/or HID lights, HVAC and refrigeration units, lead-acid batteries, waste oil, antifreeze, asbestos-containing building materials, universal wastes, etc.; and

- if asbestos is encountered during construction of the Project, its removal and disposal will be conducted in accordance with all applicable federal, State, and local regulations.
Regarding risk-reduction design measures as a result of the Project site’s proximity to RMA, the Applicant has incorporated the following Project design considerations to ensure the Project will not result in any significant impacts related to hazards for aircrafts and airport compatibility:

- The Project will not include:
  - Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light, visual approach slope indicator, or FAA-approved obstruction lighting;
  - Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport;
  - Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area; or
  - Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

- This following notice will be provided to all potential purchasers of the Project site property and tenants of the buildings:

  NOTICE OF AIRPORT IN VICINITY. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Professions Code Section 11010 (b) (13)(A)

- Any outdoor lighting that is installed will be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. All outdoor lighting will be downward facing;

- Any new retention basins on site will be designed so as to provide for a maximum 48-hour detention period following the conclusion of the storm event for the design storm (may be less, but not more), and to remain totally dry between rainfalls. Vegetation in and around the retention basin(s) that would provide food or cover for bird species that would be incompatible with airport operations will not be utilized in the Project landscaping;

- The single-story height will be preserved;

- No skylights will be included;
5.5 Hazards and Hazardous Materials

- Exterior walls will consist of 8-inch-thick solid grouted, 4-hour rated concrete masonry
- Building roof will consist of structural steel columns and steel roof structure framing elements, including structural steel decking;
- Use of windows will be limited to only the doors on the south elevation’s store entrances. The total area of glass (including doors) will account for only 2.3 percent of the total building face;\(^7\)
- Structure will incorporate an enhanced fire sprinkler system to exceed California Fire Code requirements; and
- Structure will include emergency exits that exceed the exit requirements set forth by the Riverside County Fire Code by approximately 15 to 20 percent.

### 5.5.6 Environmental Impacts before Mitigation

**Threshold:** 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.

**Summary of Existing Potential On-Site Hazards**

As previously discussed in Section 5.5.1, the Phase I was performed within the scope and limitations of ASTM International Practice E1527-05 and an Applicant-imposed environmental due diligence policy for business environmental risks (see 5.5.1.1, Methodology). The Phase I identified a data gap relative to the purportedly 60-year-old, 3,000-square-foot structure that was on site and demolished in 1993 as part of the construction of the existing Walmart. No additional information about this structure is available according to City Planning staff. However, this data gap did not affect the ability to identify recognized environmental conditions concerning the Project site, nor that may otherwise significantly or materially affect the findings.

The Phase I, as discussed in the preceding analysis (see 5.5.1, Setting), resulted in no recognized environmental conditions being identified on the Project site that affects or may affect development or use of the Project site, or otherwise warrants additional investigation. However, ASTM non-scope considerations/business environmental risks were identified. Specifically, potential universal wastes were identified on site. When decommissioned/discarded, certain items located on the Project site would be considered a “universal waste.” Occurrences of on-site universal wastes included the beverage refrigerators that are located within the northern exterior refrigeration unit enclosure. According to the Phase I, these items have subsequently been removed by the vendors.

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\(^7\) The east and south elevations facing Van Buren Boulevard and the parking lot, respectively, incorporates spandrel glass overlaying solid walls with no opening in the building structure. Spandrel glass is an architectural design technique utilized in creating only the appearance of an actual window for increased aesthetic appeal.
Hazardous building materials were not identified as being present on the Project site. However, the following items, when decommissioned and/or disposed of, are considered a hazardous waste:

- Fluorescent lights and/or HID lights;
- HVAC and refrigeration units, etc.;
- Lead-acid batteries, waste oil, and antifreeze; and
- Improper storage of hazardous materials (propane bottles in northern exterior refrigeration unit’s enclosure and five-gallon, plastic, diesel fuel can that contains about one gallon of fuel).

According to the Phase I, the occurrences of improper storage of hazardous materials, noted above, have subsequently been stored properly.

**Construction Impacts**

During the construction phase, the existing Tire & Lube Express facility and exterior Garden Center will be removed and the existing Walmart structure expanded into this space. The Project would also include façade updates and alterations/improvement to the surface parking lot. The Tire & Lube Express facility will be completely removed from the property, and as such, will not be relocated to a different area of the Project site. The exterior Garden Center would be relocated (Figure 3-4, Site Plan).

The construction phase will include the removal and disposal of existing building materials and the temporary staging and installation of new building materials. Additionally, construction equipment will be utilized, and thus, the construction phase would generate particulate matter, carbon monoxide, and ozone precursors, which will not exceed the regional daily thresholds established by the South Coast Air Quality Management District, as discussed in Section 5.2, Air Quality, of this DEIR.

Construction of the Project would be concentrated on the eastern portion of the existing structure and may require the temporary use and storage of some hazardous materials, such as paints, oils, solvents, and cleansers. The amounts of such materials would be limited to quantities necessary for construction of the proposed expansion. The Phase I noted common types of potentially hazardous products and materials (fluorescent lights and/or HID lights; HVAC and refrigeration units; lead-acid batteries, waste oil, and antifreeze) that are currently found on the Project site. Some of these products will be removed and disposed of as part of the construction of the Project. As a result, the Applicant has incorporated into the design consideration for the Project the handling and disposal of these products, which will be in accordance with all applicable federal, State, and local regulations.

Additionally, the Phase I noted a potential for the occurrence of asbestos in the existing roof mastic and penetration sealant(s). As a result, the Applicant has incorporated into the design consideration for the Project the handling and disposal of potentially occurring asbestos, which will be in accordance with all applicable federal, State, and local regulations. Further, USTs associated with the Tire & Lube Express will be removed. As a result, the Applicant has incorporated into the design consideration of the Project a UST removal work plan and subsequent soil sampling, which will be in accordance with all applicable federal, State, and local regulations, as well as in accordance with the work plan (see Appendix C.2 to this DEIR (SHAW 2011)).
Together with the Project design considerations and the mandatory compliance of regulations, standards, and guidelines established at the federal, State, and local level, related to storage, use, and disposal of hazardous materials, and compliance with applicable manufacturers’ instructions, the public and environment would be protected from the accidental release of hazardous materials during construction. Further, the Project is not anticipated to present any hazards to RMA or its associated activities during construction. Therefore, impacts regarding the release of hazardous materials during construction are less than significant.

**Operational Impacts**

The store expansion proposed by the Project will generally include additional square footage to accommodate expanded grocery sales. Thus, the retail nature of the existing land use will remain unaffected. Additionally, the existing Walmart will continue to include the use of hazardous materials in small quantities for routine cleaning, maintenance, and landscaping, as well as products for purchase. Products available for purchase that may be considered hazardous include cleaning supplies, paints, lawn care products, insecticides, etc. The quantities, and their associated secure packaging, of these products stored on site do not constitute or create a significant hazard to the public or environment. Additionally, all potentially hazardous materials would be contained, stored, and used in accordance with the manufacturers’ instructions and handled in compliance with the applicable standards and regulations, such as those administered by OSHA, Cal/OSHA, and the City Fire Department. Through adherence to these regulatory guidelines, operation activities would not create a significant hazard to the public or environment through the release of hazardous materials. Further, the removal of the Tire & Lube Express and its associated components including the USTs may constitute an overall reduction in potential on-site hazards and hazardous materials. Therefore, impacts regarding the release of hazardous materials during operation are less than significant.

**Threshold:** 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 use airport, would the project result in a safety hazard for people residing or working in the project area.

The Project site is located in Zone D and Zone E of RMA and subject to the compatibility analysis of RCALUCP. Specifically, of the 13.73-acre Project site, approximately 12.49 acres, or 544,064 SF, is located in Zone D (Figure 5.5-1). This portion includes the existing Walmart structure and the area of the proposed expansion. The remaining approximately 1.24 acres, or 54,014 SF, is located in Zone E. This portion includes the southern portion of the surface parking lot.

Consistency with RCALUCP is weighed by each criterion of the applicable compatibility zone. These criteria include per-acre average intensity, single-acre maximum intensity, level of subjected aircraft noise on project, open area on site, and type of land use.

**Per-Acre Average Intensity**

The per-acre average intensity criterion establishes restrictions on how many persons can be generated by the land use per acre. ALUC recommends determining land use intensity by the Building Code Method and Parking Space Method (these methodologies are provided in Appendix C of the RCALUCP).
The Building Code Method establishes occupancy levels based on the California Building Code’s minimum SF per occupant to determine the maximum occupancy of particular land uses. This resulting amount is used as a factor in projecting land use intensity, and certain uses are adjusted further in an attempt to reflect a more accurate representation; however, the results may still produce an over-projection. The Parking Space Method multiplies the number of parking spaces provided or required (whichever is greater) by an assumed average vehicle occupancy. This method is appropriate where the land use is expected to be dependent on access by vehicles. Contrary to the Building Code Method, the results of the Parking Space Method may produce an under-projection.

Table 5.5-I – Maximum Occupancy Levels by Building Code Method, shows the application of the Building Code Method to the Walmart store in the post-Project condition, which is the expanded Walmart store, and the resulting maximum occupancy.

### Table 5.5-I – Maximum Occupancy Levels by Building Code Method

<table>
<thead>
<tr>
<th>No.</th>
<th>Land Use a</th>
<th>Minimum SF Per Occupant a</th>
<th>Expanded Walmart Store</th>
<th>Max. Occupancy Per Use</th>
<th>50 Percent Reduction b</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.</td>
<td>Offices</td>
<td>100 SF</td>
<td>5,500 SF</td>
<td>55 persons</td>
<td>28 persons</td>
</tr>
<tr>
<td>26.</td>
<td>Storage and Stock Rooms</td>
<td>300 SF</td>
<td>33,300 SF</td>
<td>111 persons</td>
<td>(111 persons)</td>
</tr>
<tr>
<td>27.</td>
<td>Stores – Retail Sales Rooms, Basements, and Ground Floors</td>
<td>30 SF</td>
<td>114,600 SF</td>
<td>3,820 persons</td>
<td>1,910 persons</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>2,049 persons</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

- **a** Source: Mead & Hunt and Coffman Associates, Riverside County Airport Land Use Compatibility Plan, October 14, 2004. Appendix C, Table 2A.
- **b** The Building Code Method recommends occupancy levels for office and retail areas be adjusted by 50 percent.
- **c** The Building Code Method does not recommend an adjustment for storage and stock rooms use.

As shown in Table 5.5-I, utilizing ALUC’s Building Code Method, the Project will generate a maximum occupant intensity potential of 2,049 persons on site. In order to determine the average intensity per acre, the resulting maximum occupant intensity of 2,049 persons is then divided by the gross acreage of the site as well as the half-width area of the adjoining Van Buren Boulevard. The Project site encompasses approximately 789 feet of street frontage, and Van Buren Boulevard has a planned ultimate right-of-way of 144 feet, thus, the half-width is 72 feet. This half-width results in approximately 1.3 acres. The Project site is approximately 13.73 acres, and with the 1.3-acre half-width included, results in 15.03 acres. The per-acre average intensity of the Walmart store with the Project, then, is 136 persons.

RCALUCP Policy 3.1.4(b) prohibits project sites from exceeding the average intensity per acre as determined by compatibility zone; however a special intensity bonus may be granted if risk-reduction measures are incorporated into the design of the Project. These risk-reduction measures are listed in RCALUCP Policy 4.2.6(b) and include, but are not limited to: using concrete walls, limiting the number

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8 As determined by the following calculation: (789 feet of street frontage) x (72 feet of half-width) = 56,808 SF, or 1.304 acres.
and size of windows, upgrading the strength of the building roof, avoiding skylights, enhancing the fire sprinkler system, limiting buildings to a single story, and increasing the number of emergency exits. As shown previously on Table 5.5-H, the average intensity per acre for Compatibility Zone D is 100 persons, although a potential intensity bonus of up to 30 percent is allowable. Thus, the Building Code Method shows the Project will surpass the average intensity per acre by 36 percent, and even at full design bonus, will still surpass the allowable intensity. Therefore, under the Building Code Method, the Walmart store with the Project will not be consistent with the average per-acre intensity criterion for Compatibility Zone D pursuant to RCALUCP Countywide policy.

In utilizing the Parking Space Method, an assumption toward the average vehicle occupancy of site-customers is required. Based on the United States Department of Transportation’s 2009 National Household Travel Survey, the average vehicle occupancy for cars is 1.59 persons, for vans 2.35 persons, for sport utility vehicles 1.92 persons, and for pickups 1.49 persons (USDOT). The combined average of these types of vehicles is 1.84 persons. The expanded Walmart will provide 620 parking spaces, and with the assumption of 1.84 persons per vehicle, will result in an on-site intensity potential of 1,141 persons (620 spaces times 1.84 persons per space). As with the Building Code Method, the resulting 1,141 persons is then divided by the gross acreage plus the half-width of the adjoining Van Buren Boulevard, which results in a per-acre average intensity of 76 persons (1,141 divided by 15.03). Using this intensity methodology, the expanded Walmart will be consistent with the average per-acre intensity criterion for Compatibility Zone D pursuant to RCALUCP Countywide policy.

Between these two methodologies, there exists a projected difference in on-site maximum occupancy potential of 908 persons and of 60 persons in a per-acre average intensity. This difference also results in a determination of both inconsistent and consistent with the applicable compatibility criterion for Compatibility Zone D pursuant to RCALUCP Countywide policy.

As is stated in Appendix C to RCALUCP, the intensity calculation methodologies may produce an over-projection with the Building Code Method, and an under-projection with the Parking Space Method. In the application of these Countywide policies to the expanded Walmart, the consistency determinations are inconsistent with one another. For this reason, ALUC has determined applying the standard person-to-total-gross-building-square-footage ratio, which is used in the individual airport policies of French Valley, Chino, and Perris Valley, to the Riverside Municipal Airport Land Use Compatibility Plan (RMALUCP) is appropriate for this Project (ALUCDR). Further, Countywide Policy 3.3.6 recognizes certain instances where a project may be incompatible, but may still be found acceptable by ALUC.

The referenced standard ratio is 1 person per 115 total gross building SF. In applying this ratio, the resulting 153,399-SF expanded Walmart will generate an overall intensity of 1,334 persons. This overall intensity divided by the 15.03 acres of the gross acreage and adjoining roadway half-width results in a per-acre average intensity of 89 persons. This per-acre average intensity is below the 100-person maximum as established by the RCLUCP for Compatibility Zone D. Therefore, the Project will be

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9 Individual airport policies and compatibility maps are located in Chapter 3 of RCALUCP.
consistent with land use compatibility plan for the RMA, and related impacts will be less than significant.

**Single-Acre Maximum Intensity**

The single-acre maximum intensity criterion establishes restrictions on how many persons can be located in any single acre of the site. The expanded Walmart will comprise a single-story box-like structure with an approximately 3.52-acre building footprint, and the 114,600-SF retail space alone will envelop more than one acre. As shown previously in Table 5.5-I, the Building Code Method lists the minimum SF per occupant for retail area as 30 SF, which is also recommended to be adjusted by 50 percent. Using this method and looking only at the resulting retail area, an acre, which is 43,560 SF, is divided by the 30-SF minimum per occupant for retail. The quotient is 1,452 persons, which is then adjusted 50 percent as recommended for retail area under the Building Code Method. The result, then, is 726 persons in a single acre for the retail area. As shown previously on Table 5.5-H, the single-acre maximum intensity for Compatibility Zone D is 300 persons, and with a full design bonus, 390 persons. Thus, under the Building Code Method, the expanded Walmart will be inconsistent with the single-acre maximum intensity pursuant to RCALUCP Countywide policy.

Using the Parking Space Method, the persons generated on site are divided by the building footprint. As discussed previously, the expanded Walmart store will generate 1,141 persons on site, and the proposed building footprint will be 3.52 acres. The result, then, is 324 persons in a single-acre. Thus, under the Parking Space Method, the expanded Walmart store will be consistent with the single-acre maximum intensity, if a design bonus of at least eight percent is granted, pursuant to RCALUCP Countywide policy.

As with the calculations for establishing the per-acre average intensity, the two methodologies project different single-acre maximum intensities under RCALUCP Countywide policy. Specifically, there exists a difference of 400 persons in single-acre intensity and a determination of both inconsistent and conditionally consistent with the applicable compatibility criterion for Compatibility Zone D.

As previously discussed, due to the over- and under-projection potentials, which result in inconsistent compatibility determinations with RCALUCP, ALUC has determined applying the standard person-to-total-gross-building-square-footage ratio that is used in the individual airport policies of French Valley, Chino, and Perris Valley, to RMALUCP is appropriate for this Project. In applying said ratio, the resulting overall intensity is 1,334 persons. This overall intensity divided by the 3.52-acre building footprint results in a single-acre intensity of 379 persons. This single-acre intensity surpasses the single-acre maximum intensity of 300 persons; however, risk-reduction measures, if granted, can provide up to a 30 percent intensity bonus. Following receipt of the ALUC comment letter, the Project has since received ALUC approval with the granting of a risk-reduction intensity bonus by the City. A copy of the approval is included in Appendix C.3 to this DEIR. Risk-reduction measures are included as the Project design considerations and will be incorporated by the Applicant. Further, ALUC has identified these risk-reduction measures as satisfactory (see Appendix C.3 to this DEIR). Therefore, related impacts will be less than significant.
Level of Subjected Aircraft Noise on Project
Each airport has established Community Noise Equivalent Level (CNEL) contours that reflect noise exposure in decibels (dB) to the surrounding area created by aircraft activity. RMA has three noise contours, which are 65 dB CNEL, 60 dB CNEL, and 55 dB CNEL. The former is the highest noise exposure contour and is nearest to RMA’s runways. Pursuant to Map RI-3 – Noise Compatibility Contours Riverside Municipal Airport, on page 3-33 of RMALUCP, the Project site is outside a designated noise contour. As such, the Project site is exposed to average levels of aircraft noise that are below 55 dB CNEL. Further, the Project will not include noise sensitive uses. Therefore, the expanded Walmart store will be consistent with noise policies pursuant to RCALUCP and RMALUCP, and related impacts will be less than significant.

Open Area
RCALUCP requires open area in varying amounts in the following compatibility zones: A, B1, C, and D. The intended use of these open areas would be to serve as an emergency landing for aircraft. These open land requirements are intended to be applied with respect to an entire zone. While the objective of the requirement is typically accomplished as part of a community general plan or a specific plan, it may also apply to large development projects of 10 acres or more. As discussed previously, the Project site encompasses 13.73 acres and is located within Compatibility Zone D, which requires 10 percent open area. The open area requirement for the Project site, then, is approximately 59,808 SF. However, in order to achieve the open area requirement pursuant to RCALUCP, the Project will not be able to comply with the City’s Zoning Code regarding parking lot landscaping, which requires shade trees in surface parking lots at a ratio of one shade tree per four parking spots. These shade trees must also be dispersed throughout the surface parking lot area. As a result, ALUC determined that the Project site’s proximity to Van Buren Boulevard, which will ultimately be widened to a 144-foot right-of-way, could act as an emergency touchdown location in lieu of the Project site (see Appendix C.3 to this DEIR). Therefore, related impacts will be less than significant.

Type of Land Use
Certain types of land uses pose dangers to aircraft or may not be appropriate to be exposed to associated aircraft noise. The Project will not include noise-sensitive nonresidential outdoor uses; or hazards to flight including tall objects, visual, or electronic forms of interference with the safety of aircraft operations. Additionally, the Project will not cause an attraction of birds and has addressed the topic in the Project design considerations discussed previously. Therefore, the expanded Walmart store will be consistent with land use types pursuant to RCALUCP and RMALUCP, and related impacts will be less than significant.

FAR Part 77
As discussed in Section 5.5.4.1 Federal Regulations, FAR Part 77 establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. Objects exceeding FAR Part 77 height limits require an FAA obstruction evaluation review. The elevation of RMA’s nearest runway is approximately 748 feet AMSL, and is approximately 3,860 feet.

from the Project site. The slope between the two types is generally 100:1. As such, the height threshold that would trigger an FAA obstruction evaluation review is 786 feet AMSL. The finished floor elevation of the expanded Walmart is approximately 741 feet, and the single-story building will not exceed 34 feet. Additionally, the expanded Walmart will not include structures greater than 40 feet in height. Therefore, the expanded Walmart will be consistent with FAR Part 77, and related impacts will be less than significant.

5.5.7 Proposed Mitigation Measures
An Environmental Impact Report is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Development of the proposed Project with incorporation of the Project design considerations discussed previously under Section 5.5.5 Project Design Considerations, will not result in any significant impacts that will require mitigation. Specifically, impacts were found to be less than significant; therefore, no mitigation measures are necessary.

5.5.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented
Implementation of the proposed Project with incorporation of the Project design considerations discussed previously under Section 5.5.5, Project Design Considerations and compliance with federal, State, and local law and regulations relative to hazards materials, will not result in any significant impacts that will require mitigation. Specifically, impacts were found to be less than significant; therefore, no mitigation measures are necessary.

5.5.9 Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented
The cumulative impact area for impacts relative to the use of hazardous materials is the City. The proposed Project, along with several of the cumulative projects, may use and/or store hazardous materials and universal wastes. Established procedures (City of Riverside Municipal Code 9.48) require businesses to disclose storage and handling of hazardous materials and hazardous waste, to establish and implement emergency response plans, and to cooperate in periodic reporting and inspections.

Implementation of the proposed Project with incorporation of the Project design considerations discussed previously in Section 5.5.5 will not result in any significant impacts that will require mitigation. With respect to the cumulative development projects, each of these projects will be required to evaluate its own project-specific potential impacts, including those associated with the release of hazardous materials into the environment, or from exposure to a health hazard, in excess of regulatory standards; exposure of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or the location of a listed hazardous materials site, etc. Since hazardous material and risk of upset conditions are largely site-specific, this would occur for each individual project affected, in conjunction with development proposals on these properties. Further, local municipalities
are required to follow federal, State, and local laws and regulations regarding hazardous materials and other hazards.

In light of the existing regulatory framework governing the storage and use of hazardous materials and waste, the Project’s cumulative impact related to hazard and hazardous materials is less than significant, and the Project’s contribution is not considerable. Therefore, through compliance with federal, State, and local laws and regulations pertaining to hazards and hazardous materials, cumulatively considerable impacts are reduced to a level that is **less than significant**.

The proposed Project and several of the cumulative projects are located within Riverside Municipal Airport Land Use Compatibility Zones B-2, C, D, and E ([Figure 6-1 – Cumulative Development Location Map](#)). The ALUCP sets forth what types and intensity of uses are suitable within each of these zones. Proposed development (such as the Project and cumulative projects in the area) which does not meet all criteria set forth in the RCACLUCP is subject to review by ALUC. ALUC may, as part of its review, impose height, use, and lighting restrictions on development to reduce the potential impacts to aircraft associated with use of the RMA to less than significant levels. However, as discussed previously, this proposed Project has been found by ALUC to be conditionally consistent with RCACLUCP with implementation of the risk-reduction design measures shown in Section 5.5.5, Project Design Consideration. These risk-reduction measures will minimize Project-specific effects, and a similar review and any imposed conditions by ALUC of applicable cumulative projects, will minimize cumulative effects. Therefore, implementation of the proposed Project consistent with the Project design considerations will not contribute to cumulatively considerable impacts associated with operations at RMA, nor will it result in a safety hazard to people meeting or working in the Project area, and potential impacts will be **less than significant**.

### 5.5.10 References

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Alaska Petroleum Environmental Engineering, Inc., *Phase I Environmental Site Assessment, Wal-Mart Store #2028, 5200 Van Buren Boulevard, Riverside, California*, March 24, 2009. (Included as Appendix C.1.) [Cited as Phase I]


Shaw Environmental, *UST Removal Work Plan, Walmart Store #2028, Riverside, CA*, September 14, 2011. (Included as Appendix C.2.) [Cited as SHAW 2011]

Riverside County Airport Land Use Commission, *Airport Land Use Commission (ALUC) Development Review*, May 10, 2011. (Included as Appendix C.3) [Cited as ALUCDR]


5.6 Hydrology and Water Quality

This section of the DEIR evaluates Project-related impacts to hydrology and water quality and is based, in part, on the Project Specific Water Quality Management Plan, Riverside (S) Walmart Expansion, 5200 Van Buren Blvd. Riverside, CA 92503, Design Review No. P09-0600, August 12, 2010, prepared by Nasland Engineering (the Preliminary Project-Specific WQMP). The Preliminary Project-Specific WQMP is herein incorporated by reference and is available for review at the City of Riverside Community Development Department’s Planning Division.

Potential impacts related to:

- substantially depleting groundwater supplies or interfering 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 altering the existing drainage pattern of the site or 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;
- substantially altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increasing the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- creating or contributing runoff water which would exceed the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff;
- placing 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;
- placing within a 100-year flood hazard area structures which would impede or redirect flood flows;
- exposing 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/or
- inundation by seiche, tsunami, or mudflow;

were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A). The following discussion addresses potential impacts related to:

- violating any water quality standards or waste discharge requirements; and
- otherwise substantially degrading water quality.
As discussed below, the Project’s potential to violate water quality standards or waste discharge requirements, or to otherwise substantially degrade water quality is considered to be **less than significant**.

### 5.6.1 Setting

The following discussion describes the proximity of the Project to nearby water bodies, provides background information on water quality issues related to surface and groundwater in the Project area, and describes the existing drainage condition in order to evaluate potential Project-related impacts to water quality.

#### 5.6.1.1 Surface Water Resources

The Project site is located within the larger Santa Ana River Watershed, specifically, within the Santa Ana Riverside, Reach 3 Watershed, and is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB).

The Santa Ana River flows from the San Bernardino Mountains to the Pacific Ocean for over 100 miles. The Santa Ana River is the “receiving water” for over 2,700 square miles covering portions of San Bernardino, Riverside, and Orange Counties. (GP 2025 FPEIR, Volume 2, p. 5.8-4)

The main stem of the Santa Ana River is divided into six reaches, each of which is generally a hydrologic and water quality unit (Basin Plan, p. 1-10). Reach 3 of the Santa Ana River, which is the receiving water for drainage leaving the Project site (WQMP 2010, p. A-4), includes the river from Mission Bridge to Prado Dam (Basin Plan, p. 1-10). Each reach of the Santa Ana River has assigned beneficial uses as further discussed in Section 5.6.4.2 State (Related Regulations). Beneficial uses are threatened or lost when water quality objectives are violated. Reach 3 is listed as an impaired water body for pathogens on the 2006 Clean Water Act (CWA) Section 303(d) List of Water Quality Limited Segments Being Addressed by the United States Environmental Protection Agency (USEPA) Approved Total Maximum Daily Loads (TMDLs) (GP 2025 FPEIR, Volume 2, p. 5.8-4).

Surface water quality may be impacted by both point source and non-point source (NPS) discharges of pollutants. Point source discharges are regulated through National Pollutant Discharge Elimination Systems (NPDES) permitting. NPS pollution is considered to be the leading cause of water quality impairments in the State, as well as the entire nation. NPS pollution is not as readily quantifiable as pollution that is derived from point sources, since it occurs through numerous diffuse sources. Rainwater, snowmelt, or irrigation water can pick up and transport pollutants as it moves across land or paved surfaces, and these pollutants may ultimately be discharged into streams, lakes, oceans, and groundwater. Urban areas and agriculture are both considered to substantially contribute to NPS in surface waters. As rainfall or irrigation waters intercept pollutants in the landscape, these pollutants may be transported in contaminated runoff and enter streams, lakes, and oceans.
Potential pollutants generated by the existing commercial use at the Project site include: trash and debris, oil and grease, sediment/turbidity, nutrients, oxygen-demanding substances, pesticides, organic compounds (specifically petroleum hydrocarbons), bacteria and viruses, and metals (WQMP 2010, p. A-5).

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Figure 5.6-1. Santa Ana River Watershed

LEGEND
- Major Streams
- Santa Ana River Watershed
- San Jacinto Valley Watershed

Source: USGS National Hydrography Dataset/ DLG's, 2006.
5.6.1.2 Groundwater Resources
The City of Riverside established its own water utility, the Riverside Public Utilities Department (RPU), in 1913 (GP 2025 FPEIR, p. 5.16-5). RPU has water supply wells located in the Bunker Hill, Rialto-Colton, Riverside North, Riverside South, and Arlington groundwater basins (GP 2025 FPEIR, Volume 2, p. 5.8-5). Water for domestic use is extracted via wells owned by RPU and the Gage Canal Company (GP 2025 FPEIR, Volume 2, p. 5.8-5) from the Bunker Hill Basin, Rialto-Colton Basin, and Riverside Basin, according to RPU’s 2010 Water Quality Report (WQR 2010). In 2010, RPU had extracted a total of 84,731 acre-feet of groundwater in these basins (UWMP 2010, p. 4-7) as summarized in Table 5.6—RPU Groundwater Extraction in 2010.

<table>
<thead>
<tr>
<th>Basin Name</th>
<th>Acre-feet</th>
<th>Metered or Unmetered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bunker Hill Basin</td>
<td>53,379</td>
<td>Metered</td>
</tr>
<tr>
<td>Rialto-Colton Basin</td>
<td>0</td>
<td>Metered</td>
</tr>
<tr>
<td>Riverside North Basin</td>
<td>11,141</td>
<td>Metered</td>
</tr>
<tr>
<td>Riverside South Basin</td>
<td>20,211</td>
<td>Metered</td>
</tr>
<tr>
<td>Arlington Basin</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>84,731</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Percentage of Total Water Supply**

99.9

Notes:

a Source: Riverside Public Utilities, 2010 Urban Water Management Plan, July 2011 (Table 4-5, p. 4-7).
b Production from the Bunker Hill Basin includes potable water wheeled to Western Municipal Water District.
c RPU is not drawing water from the Rialto-Colton Basin at present.
d RPU is not drawing water from the Arlington Basin at present.


5.6.1.3 Storm Drain Facilities and Existing Storm Flows
The Project is located within the Riverside County Flood Control Master Drainage Plan (MDP) for the Monroe Area (GP 2025 FPEIR, Volume 2, Figure 5.16-1) and Monroe MDP and as the Project site is already improved, there are no blue-line drainage features on the Project site.

The Project site encompasses approximately 13.73 acres and is located at the site of the existing Walmart store at 5200 Van Buren Boulevard. The Project site is fully developed and includes the main 125,827-square-foot (SF) Walmart building, the 5,300-SF exterior Garden Center, Tire & Lube Express Center (which is within the main building), and parking areas.¹

¹ The existing Walmart store and Garden Center encompasses 131,127 SF.
The entire Project site has previously been graded as a part of the existing store’s construction process and as such is predominantly occupied by the paved parking areas and structures. The majority of the Project site is predominantly level with no major grade changes (WQMP 2010, Appendix C, p. 18). Existing on-site landscaping is somewhat typical for a commercial shopping center which includes parking lot area bushes and shade trees in small, concrete-curbed islands and also along the outer edges of the site. Along the south edge of the Project property, there is a grassy open space area. On the eastern side of the Project site, running parallel to Van Buren Boulevard, is a landscaped area that is approximately 30 feet wide (varies marginally in width) which includes grass and trees that are generally larger than those located within the actual parking areas.

The Project site generally drains south-eastward to north-westward into two private drain systems. One system consists of a private on-site 24-inch diameter reinforced concrete pipe (RCP) storm drain on the east side of the Project site that discharges flows to a public 42-inch diameter RCP storm drain in Van Buren Boulevard. The second system consists of a private on-site 18-inch diameter RCP storm drain located in the parking lot south of the Walmart store that discharges flows to a public 18-inch diameter RCP storm drain in Gramercy Place. (WQMP 2010, Appendix C, p. 18) Roof runoff is conveyed away from the existing Walmart store via roof drains which conveys runoff to the private storm drain system for conveyance to either the 24-inch diameter RCP storm drain in Van Buren Boulevard or the 18-inch diameter RCP storm drain located in Gramercy Place. (WQMP 2010, Site Plan)

Storm flows from the existing uses at the Project site are 14.79, 23.01, and 33.97 cubic feet per second (CFS) for the 2 year, 10 year, and 100 year events, respectively (WQMP 2010, Appendix C, p. 2).

5.6.2 Comments Received in Response to the Initial Study/Notice of Preparation
No comments were received regarding hydrology and/or water quality in response to the IS/NOP.

5.6.3 Thresholds of Significance
The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the City of Riverside’s, “Environmental Checklist” for the proposed Project (see Appendix A) indicates that impacts related to hydrology/water quality may be considered potentially significant if the proposed Project would:

- cause a violation of any water quality standards or waste discharge requirements; and/or
- otherwise substantially degrade water quality.

5.6.4 Related Regulations
5.6.4.1 Federal Regulations
Clean Water Act (CWA)
The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of the waters in the United States. The CWA also directs states to establish water quality standards for all waters of the United States and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include Section 208, which authorizes the
preparation of waste treatment management plans, and Section 319, which mandates specific actions for the control of pollution from nonpoint sources. The EPA has delegated responsibility for implementation of portions of the CWA to the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs), including water quality control planning and control programs, such as the NPDES program. The NPDES program is a set of permits designed to implement the CWA that apply to various activities that generate pollutants with potential to impact water quality.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Section 304(a) requires the EPA to publish water quality criteria that accurately reflect the later scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon bio-monitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which the EPA has published water quality criteria and which reasonably could be expected to interfere with designated uses of a water body.

The proposed Project would comply with the CWA through the preparation and implementation of a Project Specific Water Quality Management Plan (WQMP) that identifies “Best Management Practices” (BMPs) to be incorporated into the Project design and operation to protect the beneficial uses of downstream waters. Project-specific BMPS are discussed in Section 5.6.5 Project Design Considerations.

**NPDES Permit Program – Phase I**

In November 1990, under Phase I of the urban runoff management strategy, the EPA published NPDES permit application requirements for municipal, industrial, and construction storm water discharges. The application requirements for municipalities were directed at municipalities which own and operate separate storm drain systems serving populations of 100,000 or more, or which contribute significant pollutants to waters of the United States, and required agencies to obtain coverage under municipal storm water NPDES permits.

Municipalities were required to develop and implement an urban runoff management program to address activities to reduce pollutants in urban runoff and storm water discharges that were contributing a substantial pollutant load to their systems. Rather than establishing numeric effluent limits, the EPA established narrative effluent limits for urban runoff, including the requirements to implement appropriate BMPs.

The Phase I regulations were also directed at certain facilities that discharged storm water associated with industrial activity, and construction activities that disturbed five or more acres.

**NPDES Permit Program – Phase II**

The Phase II Final Rule, published in the Federal Register on December 8, 1999, requires NPDES permits coverage for storm water discharges from:
• certain regulated small Municipal Separate Storm Sewer Systems (MS4); and
• construction activity disturbing between one and five acres of land (i.e., small construction activities).

In addition to expanding the NPDES Program, the Phase II Final Rule included minor revisions for certain industrial facilities. As with Phase I, the Phase II Program requires the development and implementation of storm water management plans to reduce pollutant discharges.

In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity, issued by the SWRCB and implemented and enforced by the nine RWQCBs. The Project is located within the boundaries of the Santa Ana RWQCB.

5.6.4.2 State Regulations
Porter-Cologne Water Quality Control Act and the Basin Plan
The Porter-Cologne Water Quality Control Act, Division 7 of the California Water Code, authorizes the SWRCB to adopt, review, and revise policies for all waters of the State (including both surface and ground waters) and directs the RWQCB to develop regional Basin Plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. The Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) is designed to preserve and enhance the quality of water resources in the Santa Ana Region for the benefit of present and future generations. The purpose of the Basin Plan is to designate beneficial uses of the region’s surface and ground waters, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives (Basin Plan, p. 1-1).

Beneficial uses are all the various ways that water can be used for the benefit of people and/or wildlife. Twenty-three beneficial uses are defined statewide, of which nineteen beneficial uses are recognized within the Santa Ana Region (Basin Plan, p. 3-2). Project related runoff would discharge into Reach 3 of the Santa Ana River. Table 5.6-B — Beneficial Uses for Water Bodies in Proximity to the Project Site, identifies and describes the beneficial uses designated for the surface water resources in the vicinity of the project.

<table>
<thead>
<tr>
<th>Receiving Water Body</th>
<th>Beneficial Usesa, b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Ana River, Reach 3</td>
<td>AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN</td>
</tr>
</tbody>
</table>

Definitions of Beneficial Usesa

<table>
<thead>
<tr>
<th>Identification</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR</td>
<td>Waters are used for farming, horticulture or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.</td>
</tr>
<tr>
<td>GWR</td>
<td>Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.</td>
</tr>
</tbody>
</table>
### Receiving Water Body

<table>
<thead>
<tr>
<th>Receiving Water Body</th>
<th>Beneficial Uses&lt;sup&gt;a, b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Ana River, Reach 3</td>
<td>AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN</td>
</tr>
</tbody>
</table>

### Definitions of Beneficial Uses<sup>a</sup>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC1</td>
<td>Water contact recreation waters, used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, ing, surfing, whitewater activities, fishing, and use of natural hot springs.</td>
</tr>
<tr>
<td>REC2</td>
<td>Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.</td>
</tr>
<tr>
<td>WARM</td>
<td>Warm freshwater habitat waters support warm water ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.</td>
</tr>
<tr>
<td>WILD</td>
<td>Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.</td>
</tr>
<tr>
<td>RARE</td>
<td>Rare, threatened or endangered species waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under the State or federal law as rare, threatened, or endangered.</td>
</tr>
<tr>
<td>SPWN</td>
<td>Spawning, Reproduction and Development waters support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife.</td>
</tr>
</tbody>
</table>

**Notes:**


The Porter-Cologne Act defines water quality objectives as “the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area” (Basin Plan, p. 4-1). **Table 5.6-C – Water Quality Objectives for Santa Ana River, Reach 3** and **Table 5.6-D – Applicable Narrative Water Quality Objectives** shows all water quality objectives for Reach 3 of the Santa Ana River. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the SARWQCB is designed to minimize and control pollutant discharges to surface and ground waters within the region, largely through permitting, such that water quality standards are effectively attained.
Table 5.6-C – Water Quality Objectives for Santa Ana River, Reach 3\(^a\)

<table>
<thead>
<tr>
<th>Water Body</th>
<th>Total Dissolved Solids</th>
<th>Hardness</th>
<th>Sodium</th>
<th>Chloride</th>
<th>Total Inorganic Nitrogen</th>
<th>Sulfate</th>
<th>Chemical Oxygen Demand</th>
<th>Boron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Ana River, Reach 3 – Prado Dam to Mission Blvd. in Riverside – Base Flow</td>
<td>700</td>
<td>350</td>
<td>110</td>
<td>140</td>
<td>10(^b)</td>
<td>150</td>
<td>30</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Notes:
\(^a\) California Regional Water Quality Control Board, Santa Ana Region, *Water Quality Control Plan Santa Ana River Basin*, February 2008, Table 4-1, p. 3-35.
\(^b\) Total nitrogen in a filtered sample

Table 5.6-D – Applicable Narrative Water Quality Objectives \(^a, b\)

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia Un-ionized</td>
<td>Discharges to Reach 3 of the Santa Ana River shall not cause the concentration of un-ionized ammonia (as nitrogen) to exceed 0.098 mg/L (NH₃-N) as a 4-day average.</td>
</tr>
<tr>
<td>Bacteria, Coliform REC-1</td>
<td>Fecal coliform: log mean less than 200 organisms/100 mL based on five or more samples/30-day period, and not more than ten percent of the samples exceed 400 organisms/100 mL for any 30-day period.</td>
</tr>
<tr>
<td>Bacteria, Coliform REC-2</td>
<td>Fecal coliform: average less than 2000 organisms/100 mL and not more than 10 percent of the samples exceed 4000 organisms/100 mL for any 30-day period.</td>
</tr>
<tr>
<td>Floatables</td>
<td>Waste discharges shall not contain floating materials, including solids, liquids, foam, or scum, which cause a nuisance or adversely affect beneficial uses.</td>
</tr>
<tr>
<td>Nitrate</td>
<td>Nitrate-nitrogen concentrations shall not exceed 45 mg/L as (NO₃) or 10mg/L (as N) in inland surface waters designated MUN as a result of controllable water quality factors.</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>Waste discharges shall not result in deposition of oil, grease, wax or other materials in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.</td>
</tr>
<tr>
<td>Solids, Suspended and Settleable</td>
<td>Inland surface waters shall not contain suspended or settleable solids in amounts which cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.</td>
</tr>
<tr>
<td>Turbidity</td>
<td>All inland surface waters of the region shall be free of changes in turbidity which adversely affect beneficial uses.</td>
</tr>
</tbody>
</table>

Notes:
\(^a\) The SARWQCB has not yet established numeric water quality objectives for these pollutants. Narrative objectives apply.
\(^b\) California Regional Water Quality Control Board, Santa Ana Region, *Water Quality Control Plan Santa Ana River Basin*, February 2008, pp. 4-9, 4-11, 4-14, 4-15.

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the California Water Code and are required to obtain approval of Waste Discharge Requirements (WDRs) from the RWQCBs. Land and groundwater related WDRs (i.e., non-NPDES WDRs) regulate discharges of
process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits.

Implementation of NPDES Permit Program
In California, the SWRCB and its RWQCBs administer the NPDES permit program. The NPDES permits cover all construction and subsequent drainage improvements that disturb one acre or more, industrial activities, and municipal separate storm sewer systems (MS4). Construction and industrial activities are typically regulated under statewide general permits that are issued by the SWRCB. The SWRCB also issues statewide general small MS4 storm water NPDES permits for public agencies that fall under that Phase II NPDES regulations.

The NPDES permit system was established in the CWA to regulate both point source and NPS discharges to surface waters of the United States. For point source discharges, each NPDES permit contains limits on allowable concentrations and mass emission of pollutants contained in the discharge. For NPS, the NPDES program establishes a comprehensive storm water quality program to manage urban storm water and minimize pollution of the environment to the maximum extent practicable. The NPDES program consists of characterizing receiving water quality, identifying harmful constituents, targeting potential sources of pollutants, and implementing a comprehensive storm water management program.

The reduction of pollutants in urban storm water discharge to the maximum extent practicable through the use of structural and non-structural BMPs is one of the primary objectives of the water quality regulations for MS4s. BMPs typically used to manage water quality of urban runoff include controlling roadway and parking lot contaminants by installing filters with oil and grease absorbents at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing education programs. BMPs have been incorporated into the design of the Project as discussed in the Section 5.6.5 Project Design Considerations.

Small MS4 Storm Water Permits
The SWRCB administers the NPDES permit program regulating storm water from construction activities for projects greater than one acre in size within the Santa Ana River watershed. The main compliance requirement of the NPDES permits is the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to identify potential on-site pollutants, identify, and implement appropriate storm water pollution prevention measures to reduce or eliminate discharge of pollutants to surface water from storm water and non-storm water discharges during construction.

The applicable MS4 Permit for the Project is Order No. R8-2010-0033, NPDES No. CAS 618033 adopted by the Santa Ana RWQCB on January 29, 2010. RCFC&WCD is the designated Principal Permittee; the City, along with the other cities in the watershed, is a Co-Permittee (SARWQCB 2010, p. 1). For purposes of implementing the MS4 permit, the proposed Project is considered a “significant redevelopment project” because Project implementation would entail the replacement of more than 5,000 SF of
impervious surface on an already developed site (SARWQCB 2010, p. 89); thus, the Project is required to comply with the provisions of the MS4 Permit.

Storm water BMPs to be implemented during Project-related demolition and construction would be identified in a SWPPP that would be prepared for the Project as part of its final design. Post-construction BMPs are identified in the preliminary project-specific Water Quality Management Plan prepared for the proposed Project entitled Water Quality Management Plan for Riverside (S) Walmart Expansion (the Preliminary Project-Specific WQMP). Both construction and post-construction BMPs, would be consistent with Supplement A of the Riverside County Drainage Area Management Plan (DAMP), Selection and Design of Stormwater Quality Controls. Examples of BMPs that may be used by this Project during demolition and construction include: silt fencing, sandbags or straw bales to control runoff, and identification of emergency procedures in case of hazardous materials spills.

Water Quality Management Plans (WQMPs) are required to address the quality of storm water or urban runoff that flows from a developed site after construction is completed and the facilities or structures are occupied and/or operational. A project-specific WQMP describes the BMPs that would be implemented and maintained throughout the life of a project and is used by property owners, facility operators, tenants, facility employees, maintenance contractors, etc. to prevent and minimize water pollution that can be caused by storm water or urban runoff. The City requires development projects to prepare and implement project-specific WQMPs as part of a federal and State regulatory program to reduce and eliminate water pollution caused by runoff flowing from storm water drainage systems into receiving waters on projects that disturb areas greater than one acre. Final project-specific WQMPs must be approved prior to issuance of building and grading permits. The City, as a Co-Permittee of the MS4 permit, minimizes the impact of urban runoff from new development and redevelopment projects and ensures the water quality of receiving waters is not degraded following development or redevelopment through the review and approval of project-specific WQMPs that include Site Design, Source Control, and Treatment Control BMPs as applicable to specific projects (GP 2025 FPEIR, p. 5.85-11).

The Preliminary Project-Specific WQMP was reviewed and approved by the City on October 18, 2010. The Preliminary Project-Specific WQMP identifies pollutants of concern, hydrologic conditions of concern, BMPs, and operation and maintenance responsibility for treatment control BMPs (WQMP 2010 p. A-5–A-27). These BMPs are further discussed in Section 5.6.5 Project Design Considerations. The primary objective of the Preliminary Project-Specific WQMP is to identify Site Design, Source Control, and Treatment Control BMPs that would be implemented by the Project to minimize the impact of urban runoff and protect water quality in Reach 3 of the Santa Ana River.

Prior to the issuance of any building or grading permits in connection with the proposed Project, the applicant would prepare a Final Project-specific WQMP, which must be approved by the City Public Works Department (GP 2025 FPEIR, p. 2.5-11). The City is also responsible for requiring the Project applicant to obtain coverage under the construction NPDES permit prior to commencement of any Project-related demolition or construction activities (GP 2025 FPEIR, p. 5.8-10). To obtain coverage, the
Project applicant must file a Notice of Intent (NOI) with a vicinity map and the appropriate fee with the SWRCB.

5.6.4.3 Local Regulations

Riverside Municipal Code

The Riverside Municipal Code (RMC) contains several provisions regulating the discharge of storm water and changes in hydrology. For example, Title 17 Grading Code of the RMC governs grading activities in the City. Most grading exceeding one acre requires a permit from the City. To obtain a permit, applicants must supply a grading plan, and if applicable, must demonstrate compliance with the General Construction Stormwater Permit described above.

In addition, Title 14 Public Utilities, Chapter 14.12 of the RMC regulates discharges into the City’s sewer and storm drain systems, and implements the City’s requirements under the MS4 permit. Among other things, this Chapter prohibits discharges to the City’s sewer and storm drain systems that contain pollutants or that would impair the operation of those systems. Chapter 14.12 also contains specific regulations for industrial dischargers. Finally, this Chapter gives the City enforcement authority to declare violations, apply penalties, and impose stop-work orders, monitoring requirements, and other enforcement mechanisms.

The Clean and Green Initiative

The City of Riverside is committed to becoming a clean, green and sustainable community. The City Council approved the Sustainable Riverside Policy Statement (SRPS). The Clean and Green Task Force framed the SRPS with a practical emphasis on how the City could implement cleaner, greener and more sustainable programs. To further Riverside’s commitment to a clean, green and sustainable future, the Clean and Green Sustainable Riverside Action Plan (Action Plan) was developed. Successful implementation of the Action Plan would ensure sustainable growth while preserving the health of the local environment for generations. The Action Plan is a working document to be continually reviewed with progress reports to be presented to the City Council at least annually. (Green Riverside)

Item 38 of the Action Plan states: “Implement water efficiency, conservation and education programs to reduce the City’s per capita potable water usage by 15 percent by 2025” (Green Riverside). In order to effectively conserve water, the Project includes water conservation measures as discussed in Section 3, Project Description and Section 5.6.5 Project Design Features.
5.6.5 Project Design Considerations

5.6.5.1 Water Quality
The Preliminary Project-Specific WQMP identifies Site Design, Source Control, and Treatment Control BMPs, which would be implemented as part of the Project. Equivalent Treatment Control Alternatives and Regionally Based Treatment Control BMPs are not applicable to the Project (WQMP 2010, p. A-20).

Site Design BMPs
Site Design BMPs are features that reduce the creation or severity of potential pollutant sources or reduce the alteration of a site’s natural flow (SARWQCB 2010, Appendix 4, p. 16). Site Design BMPs are identified in the Preliminary Project-Specific WQMP to protect downstream water quality by minimizing the amount of urban runoff, minimizing the impervious footprint of the Project, and minimizing directly connected impervious areas. To this end, the Project proposes landscaping in parking lot islands, a landscape buffer that extends along the eastern edge portion of the Project site adjacent to Van Buren Boulevard, and a large landscaped area east of the proposed store expansion area as shown in Figure 3-4 – Site Plan. The large landscaped area proposed to the east of the building would replace a portion of the existing parking area. (WQMP 2010, p. A-8) All new landscaping installed as part of the Project would be upgraded to meet xeriscape guidelines; existing landscaping that meets these guidelines would remain (WQMP 2010, p. A-9).

Runoff from the roof area and the eastern portion of the Project site would be directed toward the large landscaped area. Runoff from the middle of the parking lot would flow toward an existing catch basin which, in turn, drains into an existing 24-inch storm drain, which would drain centrally to the proposed landscaping, where it would enter proposed catch basins located in the three centered landscaped curb-islands near the southern end of the parking lot and be directed to the existing public storm drain system (Figure 3-4). Roof runoff from the northern portion of the building would be directed through existing 8-inch roof drains to existing 15-inch storm drain lines and on the western side of the Project site, into the drainage flume; on the eastern side, into the aforementioned public storm drain system. (WQMP 2010, Site Plan)

The proposed Project will include porous landscape islands, which would consist of low-lying vegetation underlaid by a sand bed with an under drain pipe that will function as porous landscape detention (PLD) features (WQMP 2010, p. A-16). These islands would be located at the southern end of the Project site. During a storm, accumulated runoff ponds in the vegetated zone and gradually infiltrates into the underlying sand bed, filling the void spaces of the sand. The underdrain gradually dewater the sand bed and discharges the runoff to a 12-inch storm drain line that would drain to an existing 18-inch storm drain line located within Gramercy Place. Runoff from the northwestern portion of the Project site would be directed into an existing drainage flume that also drains into the existing 18-inch storm drain line located within Gramercy Place. (WQMP 2010, Site Plan)

Source Control BMPs
Generally speaking, Source Control BMPs are activities or programs intended to limit the contact between pollutant sources and storm water (SARWQCB 2010, Appendix 4, p. 17). The Preliminary
**Project-Specific WQMP** identifies both Non-Structural and Structural Source Control BMPs to be implemented by the proposed Project. Non-structural Source Control BMPs includes: training and education of all new employees within six months of hire and annually thereafter; daily activity restrictions and litter control; biweekly landscape maintenance; and monthly parking lot sweeping and inspection and maintenance of the on-site drainage system (WQMP 2010, p. A-13–A-15). Structural Source Control BMPs includes: trash storage areas; biannual stencilling and signage at Project storm that discourages illegal dumping of improper materials; biweekly maintenance of the Project’s irrigation system; and monthly maintenance of the loading docks and outdoor material storage area (WQMP 2010 p. A-13–A-15).

**Treatment Control BMPs**

Treatment Control BMPs are engineered systems designed and constructed to remove pollutants from urban runoff (SARWQCB 2010, Appendix 4, p. 18). Because Reach 3 of the Santa Ana River, which is the receiving water for the majority of the City, is impaired for pathogens Pollutants of Concern (POC) for this Project include bacteria and viruses (pathogens) (WQMP, p. A-5). Therefore, Treatment Control BMPs with a medium or high effectiveness for treating pathogens as well as other pollutants generated by the Project have been identified in the Preliminary Project-Specific WQMP and are incorporated into the Project design.

The porous landscape islands identified as a Site Design BMPs in the Preliminary Project-Specific WQMP will also function as Treatment Control BMPs for the proposed Project. The BMPs were previously described under the subheading “Site Design BMPs.” The treatment efficiency associated with the BMPs is summarized in Table 5.6-E – Efficiency of Proposed Treatment Control BMPs.

<table>
<thead>
<tr>
<th>Project Pollutant</th>
<th>Pollutant of Concern</th>
<th>Efficiency of Treatment Control BMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sediment/Turbidity</td>
<td>No</td>
<td>High to Medium</td>
</tr>
<tr>
<td>Nutrients</td>
<td>No</td>
<td>Medium to Low</td>
</tr>
<tr>
<td>Organic Compounds</td>
<td>No</td>
<td>High to Medium</td>
</tr>
<tr>
<td>Trash and Debris</td>
<td>No</td>
<td>High to Medium</td>
</tr>
<tr>
<td>Oxygen Demanding Substances</td>
<td>No</td>
<td>High to Medium</td>
</tr>
<tr>
<td>Bacteria and Viruses (Pathogens)</td>
<td>Yes</td>
<td>High to Medium</td>
</tr>
<tr>
<td>Oils and Grease</td>
<td>No</td>
<td>High to Medium</td>
</tr>
<tr>
<td>Pesticides (Non-Soils Bound)</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Metals</td>
<td>No</td>
<td>High</td>
</tr>
</tbody>
</table>

Notes:


b Sand filtration is present in the used in the porous landscape islands.
5.6.5.2 Water Conservation

The Project would include the following fixtures in all store restrooms:

- high-efficiency urinals that use only 1/8 gallon (one pint) of water per flush;
- sensor-activated, 1/2 gallon per minute, high-efficiency faucets; and
- toilets that use 20 percent less water than the mandated EPA Standards of 1.6 gallon per flush fixtures and have built-in water turbines to generate the power required to activate the flush mechanism.

It is estimated that these fixtures could save up to 530,000 gallons of water per year.

Walmart will also incorporate the following measures to reduce outdoor water use in compliance with Chapter 19.570 of the Riverside Municipal Code, Water Efficient Landscaping and Irrigation (RMC, Ch. 19.570):

- Limit or eliminate the use of high water use plant materials such as lawn.
- Prepare a soils/agronomic management report to determine on-site soil texture, pH, infiltration rates.
- Hydorzone plant materials prior to designing the irrigation system to minimize water usage.
- Incorporate separate valve systems for trees in the event of severe drought.
- Specify high efficiency irrigation systems (drip, micro spray, bubbler irrigation), where feasible, to irrigate plant material.
- Specify dual or multiple program automatic controllers to operate the irrigation valves.
- Specify master control valve/flow sensor and rain sensing assembly as part of a complete irrigation system.
- Prepare an irrigation audit following installation of the system to review operational characteristics.

5.6.6 Environmental Impacts before Mitigation

Threshold: Violate any water quality standards or waste discharge requirements.

Construction of the proposed Project has the potential to result in discharges from soil disturbance. However, the Project would be required to comply with the NPDES Statewide General Construction Permit (General Permit for Stormwater Discharges Associated with Construction Activity – Order No. 99-08-DWQ) requirements, including the preparation of a SWPPP, which implements BMPs to prevent storm water pollution. Through compliance with the regulatory requirements of the NPDES Statewide General Construction Permit and on-site drainage facilities, the Project is not expected to violate any water quality standards or waste discharge requirements during construction; thus, impacts would be less than significant in this regard.
Once the proposed building expansion is constructed, the Project will have the potential to continue to generate the same types of pollutants sourced from roof and parking lot runoff as are currently being generated by the existing Walmart store. These pollutants include: trash and debris, oil and grease, sediment/turbidity, nutrients, oxygen-demanding substances, pesticides, organic compounds (specifically petroleum hydrocarbons), bacteria and viruses, and metals (WQMP 2010, p. A-5). However, as discussed in Section 5.6.5 Project Design Considerations, the proposed Project includes a series of PLD sedimentation/filtration facilities\textsuperscript{2} to treat Project-related storm water runoff for pollutants, including the POC and to slow down runoff prior to discharging into the existing public storm drain. As indicated in Table 5.6-F – Pre- and Post Project Hydrologic Conditions, implementation of the Project would not substantially alter the hydrologic conditions of the Project site.

<table>
<thead>
<tr>
<th>Table 5.6-F – Pre- and Post-Project Hydrologic Conditions\textsuperscript{a}</th>
</tr>
</thead>
<tbody>
<tr>
<td>\begin{tabular}{</td>
</tr>
</tbody>
</table>

Notes:
\textsuperscript{b} CFS = cubic feet per second
\textsuperscript{c} FPS = feet per second
\textsuperscript{d} CF = cubic feet

The Preliminary Project-Specific WQMP has been reviewed and approved by the City. Prior to the issuance of a grading permit for the Project, A Final Project-Specific WQMP would be prepared and submitted to the City for review and approval. The Final Project Specific WQMP would be in substantial conformance to the Preliminary Project Specific WQMP in that it would be required to contain measures that would effectively treat all POCs and hydrologic conditions of concern.

As summarized in Table 5.6-E – Efficiency of Proposed Treatment Control BMPs, above, the porous landscape detention sedimentation/filtration facilities provides a medium/high level of effectiveness for sediment/turbidity, organic compounds, trash and debris, oxygen demanding substances, bacteria and viruses (pathogens), and oil and grease and a low/medium level of treatment effectiveness for nutrients. Thus, all anticipated pollutants are being treated prior to leaving the Project site. Therefore, through compliance with the regulatory requirements of the NPDES permits and implementation of Site Control, Source Control, and Treatment Control BMPs as identified in the Preliminary Project-Specific WQMP, the

\textsuperscript{2} the porous landscape islands
Project’s potential to violate water quality standards or waste-discharge requirements is considered to be less than significant.

**Threshold:** Otherwise substantially degrade water quality.

Through compliance with the regulatory requirements of the NPDES Statewide General Construction Permit, the project is not expected to violate any water quality standards or waste discharge requirements during construction. As discussed in the preceding threshold, storm water may convey pollutants from the Project site downstream to the Santa Ana River. However, through the implementation of the Site Design, Source Control, and Treatment Control BMPs, identified in the Preliminary Project-Specific WQMP and the SWPPP that would be required as part of the final design, the Project would satisfy the RWQCB requirements. Therefore, the Project’s potential to substantially degrade water quality is considered to be less than significant.

5.6.7 Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). No mitigation measures related to hydrology and water quality have been identified, as project design features, implementation of a Final Project-Specific WQMP, SWPPP, and compliance with NPDES permit requirements would eliminate or reduce potential significant adverse impacts related to hydrology and water quality to less than significant.

5.6.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented

After implementation of NPDES permit requirements, SWPPP and the project-specific WQMP, all potential impacts are reduced to a level that is less than significant.

5.6.9 Summary of Cumulative Hydrology and Water Quality Effects after Mitigation Measures are Implemented

The cumulative impact area for hydrology and water quality impacts is the Santa Ana River watershed hydrologic unit. The City is located within the Santa Ana Region (Region 8) of the RWQCB and, as previously discussed, the Project site is located within Reach 3 of the Santa Ana River.

Cumulative impacts to water quality could be significant with the addition of substantial increases in development and temporary construction activities in the Santa Ana River watershed. These cumulative effects include increasing the amount of flow, sedimentation, and urban pollutants that are transmitted via storm flows to the Santa Ana River.

Cumulative impacts to water quality may occur with the addition of substantial increases in development and temporary construction activities in the Santa Ana River watershed. BMPs would be implemented during construction and long-term operation of the Project in compliance with the NPDES...
General Permit for Construction Activities and the MS4 Permit to minimize potential impacts to water quality.

The proposed Project would not result in a measurable increase in the amount of waterborne pollutants with the implementation of the BMPs identified in Preliminary Project-Specific WQMP and the SWPPP that would be prepared prior to Project construction. Therefore, Project construction and operation would not considerably contribute to a significant cumulative impact.

The proposed Project, along with all of the cumulative projects, would be required to obtain an NPDES permit and to comply with any provisions of that permit, thus reducing their potential for water quality impacts. As noted in Section 5.6.5 Project Design Consideration, the Preliminary Project-Specific WQMP identifies a PLD facility intended to remove or treat Project-related urban pollutants and slow down storm flows such that the Pre- and Post-Project hydrologic conditions are essentially unchanged as required by the RWQCB and City. Because the hydrologic conditions are essentially unchanged, the Project would avoid impacting water quality and the capacity of downstream drainage facilities. Therefore, Project-related impacts to water quality and hydrology would not be cumulatively considerable.

The increase in the amount of impermeable surfaces within the watershed resulting from the proposed Project and cumulative projects has the potential to affect groundwater recharge. However, because the Project and cumulative projects are not located within a groundwater recharge area, there would be no cumulative impacts in this regard. Additionally, the Project incorporates water conservation features as discussed in Section 5.6.5.2, which could result in a savings in the amount of water used in the Project area. Further, Walmart, along with the cumulative projects, will also incorporate measures to reduce outdoor water use regarding water efficient landscaping and irrigation in compliance with Chapter 19.570 of the Riverside Municipal Code. Therefore, cumulative impacts to water quality and hydrology resulting from implementation of the proposed Project would not be considerable.

The proposed Project is the expansion of an existing retail facility that would not introduce a significant amount of new impervious surfaces and would use existing public storm drain facilities that have adequate capacity. Therefore, implementation of the Project would not alter the existing drainage pattern of the site or require the construction of new storm drain facilities. No substantial erosion or siltation is expected, with implementation of BMPs identified in the Preliminary Project-Specific WQMP and preparation and implementation of a SWPPP that includes erosion control BMPs. For these reasons, the Project’s contribution relative to cumulative impacts on storm drains and drainage would not be considerable.

The Project site is not located within a flood hazard area or dam inundation zone; therefore, the project would not contribute to cumulative flood or dam inundation hazards.

As implementation of the Final Project-specific WQMP, SWPPP, and NPDES permit requirements would eliminate or reduce potential significant adverse impacts related to hydrology and water quality to less
than significant, cumulative environmental effects due to the implementation of the Project are also considered to be less than significant.

5.6.10 References
In addition to other documents, the following references were used in the preparation of this section of the DEIR:


5.7 Noise

This section of the DEIR evaluates Project-related noise impacts and is based on the *Acoustical Impact Analysis for the Walmart Expansion* (referenced as the AIA and cited as Webb 2011). The AIA, which is included as Appendix D to the DEIR, was prepared to determine noise impacts resulting from construction and operation of the proposed Project.

Potential impacts related to:

- the 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 (in the context of Project-specific construction-related activities);
- the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- a substantial temporary or periodic increase in ambient noise levels in the Project vicinity, above levels existing without the Project;
- excessive noise levels resulting from being located within an airport land use plan, or within two miles of a public airport or public use airport; and
- excessive noise levels resulting from being located within the vicinity of a private airstrip

were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for the Project (Appendix A), and will not be discussed further in the DEIR. The following discussion addresses potential impacts related to:

- the potential exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; and
- a potential substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

As discussed below, the Project’s potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; and result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project, is considered to be less than significant.
5.7.1 Setting
This section presents a discussion of noise fundamentals applicable to the Project, together with an assessment of existing ambient noise levels and noise sources in the Project vicinity.

5.7.1.1 Characteristics of Sound
Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound in subjective terms such as “noisy” or “loud.” To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect our ability to hear. The analysis of any project’s noise impact defines the noise environment of the project area in terms of sound intensity and its effect on adjacent land uses and receivers.

5.7.1.2 Quantification of Sound
Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which defines the level of sound in decibels (dB). Because human hearing is not equally sensitive to sound at all frequencies, the A-weighting system is used to adjust quantified or measured sound levels to approximate this frequency-dependent response; A-weighted sound is expressed as dBA. As a source of reference, common indoor and outdoor noise sources, presented in terms of dBA, are shown in relation to the approximate corresponding noise level in Table 5.7-A – Representative Environmental Noise Levels.

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Table 5.7-A – Representative Environmental Noise Levels*a

<table>
<thead>
<tr>
<th>Common Outdoor Activities</th>
<th>Noise Level (dBA)</th>
<th>Common Indoor Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>jet fly-over at 1,000 feet</td>
<td>110</td>
<td>rock band</td>
</tr>
<tr>
<td>gas lawnmower at 3 feet</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>diesel truck, 50 mph at 50 feet</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>noisy urban area during daytime</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>gas lawnmower at 100 feet</td>
<td>85</td>
<td>food blender at 3 feet</td>
</tr>
<tr>
<td>commercial area</td>
<td>80</td>
<td>garbage disposal at 3 feet</td>
</tr>
<tr>
<td>heavy traffic at 300 feet</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>quiet urban area during daytime</td>
<td>70</td>
<td>vacuum cleaner at 10 feet</td>
</tr>
<tr>
<td>quiet rural area during nighttime</td>
<td>65</td>
<td>normal speech at 3 feet</td>
</tr>
<tr>
<td>quiet suburban area during nighttime</td>
<td>60</td>
<td>large business office</td>
</tr>
<tr>
<td>quiet urban area during nighttime</td>
<td>55</td>
<td>dishwasher in next room</td>
</tr>
<tr>
<td>quiet rural area during nighttime</td>
<td>50</td>
<td>theater, large conference room (background)</td>
</tr>
<tr>
<td>quiet suburban area during nighttime</td>
<td>45</td>
<td>library</td>
</tr>
<tr>
<td>quiet rural area during nighttime</td>
<td>40</td>
<td>bedroom at night, concert hall (background)</td>
</tr>
<tr>
<td>quiet urban area during nighttime</td>
<td>35</td>
<td>broadcast/recording studio</td>
</tr>
<tr>
<td>quiet suburban area during nighttime</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>quiet rural area during nighttime</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>quiet urban area during nighttime</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>quiet suburban area during nighttime</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>quiet rural area during nighttime</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>quiet urban area during nighttime</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>lowest threshold of human hearing</td>
<td>0</td>
<td>lowest threshold of human hearing</td>
</tr>
</tbody>
</table>

Notes:
*aSource: California Department of Transportation, Technical Noise Supplement, 2009, Table 2-5, p. 2-21

Noise consists of pitch, loudness, and duration; therefore, it is difficult to describe noise with a single unit of measure. Federal and State agencies have established noise and land use compatibility guidelines that use averaging methods to noise measurement. Two measurement scales commonly used in California are the Community Noise Equivalent Level (CNEL) and the day-night level (DNL or L_{dn}). To account for increased human sensitivity at night, the L_{dn} scale includes a 10 dB weighting penalty on noise occurring during the 10:00 p.m. to 7:00 a.m. time period (Webb 2011, p. 9). The CNEL scale includes a 5 dB weighting penalty on noise occurring during the 7:00 p.m. to 10:00 p.m. time period, and a 10 dB weighting penalty on noise occurring during the 10:00 p.m. to 7:00 a.m. time period (Webb 2011, p. 9). Resulting CNEL and L_{dn} noise levels are typically within one dBA of each other and are normally interchangeable.

Other noise rating scales of importance when assessing the annoyance factor include the peak or maximum noise level (L_{max}), which is the highest exponential, time-averaged sound level that occurs during a stated period. Short-term noise impacts in this discussion are specified in terms of maximum...
levels, denoted by $L_{\text{max}}$ which reflects acoustical peaks during operational conditions and addresses the annoying aspects of intermittent noise.

Noise is particularly problematic when noise-sensitive land uses are affected. Noise-sensitive land uses are defined as uses where one would typically find activities that are interrupted by noise, such as residential uses, schools, hospitals, churches, performing arts facilities, and hotels and motels. The City of Riverside deems residential uses particularly noise sensitive because families and individuals expect to use time in the home for quiet rest; intrusive noise can interfere with such pursuits (GP 2025, p. N-21). Although some variability in standards for noise sensitivity may apply to different densities of residential development, specifically infill and mixed use developments, single-family uses are frequently considered the most sensitive (GP 2025, p. N-21).

According to the City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR), the term “substantial,” as used in this regard, is not defined in most environmental compliance guidelines. For reference, noise analysis methodology is accurate only to the nearest whole decibel and most people only notice a change in the noise environment when the difference in noise levels is around 3 dBA CNEL. A 5 dBA change (i.e., increase or decrease) in noise levels is required before any noticeable change in community response would be expected (GP 2025 FPEIR, p. 5.11-26).

Applicable noise standards for the Project are discussed below in Section 5.7.4.

**5.7.1.3 Existing Site and Surrounding Conditions**

The Project site encompasses approximately 13.73 acres and is located at the existing Walmart store at 5200 Van Buren Boulevard in the City of Riverside (Figure 3-2 – Location Map). The Project site is adjacent to the west side of Van Buren Boulevard, approximately one-half mile south of Arlington Avenue. The Assessor’s parcel numbers (APNs) for the Project site are 151-290-020 and 151-380-048.

The Project site is fully developed and includes the existing 125,827 SF Walmart store and associated parking areas located around the main store, Garden Center, Tire & Lube Express Facility, and a depressed loading dock with two loading bays located on the northeast portion of the site. The existing Tire & Lube Express facility is located on the east side of the Project site, near Van Buren Boulevard (Figure 5.7-1 – Aerial Photograph). Van Buren Boulevard is designated as a 120-foot, 6-lane Arterial roadway in the General Plan 2025 (GP 2025) Circulation and Community Mobility Element (GP 2025, Figure CCM-4).

The store’s existing loading dock is located on the north side of the store building; approximately 100 feet south of the Project site’s northern property line (Figure 5.7-1 – Aerial Photograph and Figures 3-4a and 3-4b – Site Plan). An existing 10-foot high masonry block wall exists at the perimeter of the loading dock. Existing masonry block walls border the Project site on the west and north sides; these walls vary in height but are a minimum of six feet above ground.
Figure 5.7-1. Aerial Photograph

Sources: County of Riverside, 2011; Eagle Aerial, April 2010.
The Project site is bounded by multi-family residences to the north, commercial and single-family residences to the east, commercial and multi-family residences to the south, and single-family residences to the west (Figure 5.7-1). The GP 2025 Land Use Designations for the Project site and surrounding properties are shown on Figure 5.7-2 – Surrounding Land Use Designations.

5.7.1.4 Existing Noise Levels

The predominant noise characterizing the Project site and the surrounding area is vehicular noise from area streets including: Arlington Avenue, Audrey Avenue, California Avenue, Colorado Avenue/Wells Avenue, Cypress Avenue/Jackson Street, Magnolia Avenue, Philbin Avenue, and Van Buren Boulevard.

Ambient daytime noise levels were monitored on July 7, 2011 in the Project area (monitoring locations are shown on Figure 5.7-3, Daytime Noise Monitoring Stations). Table 5.7-B – Existing Noise Levels in Project Vicinity, provides the monitored levels.

<table>
<thead>
<tr>
<th>Noise Monitoring Position</th>
<th>Monitored Ambient Noise Level (dBA)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$L_{eq}$</td>
<td>$L_{max}$</td>
</tr>
<tr>
<td>1</td>
<td>73.8</td>
<td>92.8</td>
</tr>
<tr>
<td>2</td>
<td>52.1</td>
<td>66.7</td>
</tr>
<tr>
<td>3</td>
<td>58.9</td>
<td>78.3</td>
</tr>
<tr>
<td>4</td>
<td>50.4</td>
<td>65.0</td>
</tr>
<tr>
<td>5</td>
<td>59.8</td>
<td>77.4</td>
</tr>
</tbody>
</table>

Notes:

It should be noted that noise monitoring was performed on the Walmart side of the masonry block walls located along the northern, western, and southern Project boundaries, and as such, noise readings are higher than what would be experienced off site on the residential side of the block wall.

* Noise monitoring was performed in 15-minute intervals at each location on July 7, 2011. Conditions during monitoring were typical to the site, as no activities, such as construction or other special circumstances, occurred, although school was not in session. Noise sheets are included in Appendix D.
* Ambient monitoring positions are indicated on Figure 5.7-4.
* The single highest recorded noise level event during monitoring.
* The single lowest recorded noise level event during monitoring.
Figure 5.7-2. Surrounding Land Use Designations

Walmart Expansion DEIR

Sources: City of Riverside General Plan Oct. 2003, as modified through Nov., 2010; Riverside County GIS, 2011.
Figure 5.7-3. Daytime Noise Monitoring Stations

LEGEND
- Noise Monitoring Stations
- Project Boundary

Sources: County of Riverside, 2011; Eagle Aerial, April 2010.

Walmart Expansion DEIR

Albert A. WEBB Associates
Ambient nighttime noise levels were monitored from 6 p.m., September 22, 2011, to 6 a.m., September 23, 2011, in the Project area with two noise monitoring stations on site, and one immediately off site (monitoring locations are shown on Figure 5.7-4 – Nighttime Noise Monitoring Stations). In order to facilitate the monitoring of ambient noise levels at multiple stations over a 12-hour period, a 15-minute reading was performed at one position, followed by a 15-minute reading performed at the second position, then returning again for a reading at the first position, and so on. The nighttime ambient noise level readings were conducted primarily at the western boundary just west of the existing store’s vestibule near the off-site single-family residences west of the Project site (identified as position #1), and the northern Project boundary on the north end of the loading dock area near the off-site multi-family complex north of the Project site (identified as position #2). Two readings were also performed at the eastern terminus of Gramercy Place at approximately 12:00 midnight and 6:00 a.m., on the off-site residential side of the masonry block wall to measure the level of noise attenuation occurring as a result of the wall (identified as position #3). Table 5.7-C – Existing Nighttime Noise Levels in Project Vicinity, provides the monitored levels.

Table 5.7-C – Existing Nighttime Noise Levels in Project Vicinity

<table>
<thead>
<tr>
<th>Noise Monitoring Position&lt;sup&gt;b,c&lt;/sup&gt;</th>
<th>Reading</th>
<th>Monitored Ambient Noise Level (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>l&lt;sub&gt;eq&lt;/sub&gt;</td>
</tr>
<tr>
<td>6:00 p.m. to 12:00 midnight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>55.2</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>57.4</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>55.1</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>56.4</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>55.1</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>54.4</td>
</tr>
<tr>
<td>12:00 midnight to 6:00 a.m.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>53.9</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>51.0</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>51.5</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>52.2</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>57.4</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>63.5</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>54.0</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>57.5</td>
</tr>
<tr>
<td>Noise Monitoring Position&lt;sup&gt;b, c&lt;/sup&gt;</td>
<td>Reading</td>
<td>Monitored Ambient Noise Level (dBA)</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$L_{eq}$</td>
</tr>
<tr>
<td><strong>6:00 p.m. to 12:00 midnight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1&lt;sup&gt;f&lt;/sup&gt;</td>
<td>60.6</td>
<td>71.2</td>
</tr>
<tr>
<td>2</td>
<td>59.3</td>
<td>72.4</td>
</tr>
<tr>
<td>3</td>
<td>58.4</td>
<td>62.0</td>
</tr>
<tr>
<td>4&lt;sup&gt;g&lt;/sup&gt;</td>
<td>63.5</td>
<td>67.1</td>
</tr>
<tr>
<td>5&lt;sup&gt;g&lt;/sup&gt;</td>
<td>64.3</td>
<td>73.1</td>
</tr>
<tr>
<td>6&lt;sup&gt;g&lt;/sup&gt;</td>
<td>61.0</td>
<td>64.2</td>
</tr>
<tr>
<td><strong>12:00 midnight to 6:00 a.m.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>58.4</td>
<td>59.7</td>
</tr>
<tr>
<td>8</td>
<td>57.9</td>
<td>59.2</td>
</tr>
<tr>
<td>9</td>
<td>58.4</td>
<td>60.3</td>
</tr>
<tr>
<td>10&lt;sup&gt;f&lt;/sup&gt;</td>
<td>58.3</td>
<td>74.3</td>
</tr>
<tr>
<td>11&lt;sup&gt;f&lt;/sup&gt;</td>
<td>57.8</td>
<td>73.4</td>
</tr>
<tr>
<td>12&lt;sup&gt;f&lt;/sup&gt;</td>
<td>71.2</td>
<td>93.1</td>
</tr>
<tr>
<td>13&lt;sup&gt;f&lt;/sup&gt;</td>
<td>58.9</td>
<td>74.8</td>
</tr>
<tr>
<td>14&lt;sup&gt;f&lt;/sup&gt;</td>
<td>61.4</td>
<td>83.7</td>
</tr>
<tr>
<td><strong>12:00 midnight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>52.1</td>
<td>53.9</td>
</tr>
<tr>
<td><strong>6:00 a.m.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>48.1</td>
<td>65.2</td>
</tr>
</tbody>
</table>

Notes:
It should be noted that noise monitoring at noise monitoring positions #1 and #2, was performed on the Walmart side of the masonry block walls located along the northern and western Project boundaries, and as such, noise readings are higher than what would be experienced off site on the residential side of the block wall.


<sup>b</sup> Noise monitoring was performed in 15-minute intervals at each location starting at 6:00 p.m., September 22, 2011, to 6:00 a.m., September 23, 2011. Conditions during monitoring were typical to the site, as no activities, such as construction or other special circumstances, occurred. Typical activities included loading dock activity and nightly parking lot maintenance, unless otherwise noted. Noise sheets are included in Appendix D.

<sup>c</sup> Ambient monitoring positions are indicated on Figure 5.7-5.

<sup>d</sup> The single highest recorded noise level event during monitoring.

<sup>e</sup> The single lowest recorded noise level event during monitoring.

<sup>f</sup> Noise reading captures loading dock activity.

<sup>g</sup> Noise reading captures off-site construction on Van Buren Boulevard near Audrey Avenue with increased noise levels generated by the use of a jackhammer.
Figure 5.7-4. Nighttime Noise Monitoring Stations

Sources: County of Riverside, 2010; Eagle Aerial, April 2010.

Walmart Expansion DEIR
Conditions during monitoring were typical to the site, as no activities, such as construction or other special circumstances, occurred, unless otherwise noted by footnote. It is important to note that for the daytime ambient noise monitoring school was out of session at the time of noise monitoring; thus, traffic volumes were lower than they would be when school is in session. For the nighttime ambient noise monitoring, typical activities included loading dock activity from various vendors arriving and delivering goods, and nightly parking lot maintenance performed by a contracted company. Readings 4, 5, and 6 for noise monitoring position #2 captured off-site construction on Van Buren Boulevard near Audrey Avenue with increased noise levels generated by the use of a jackhammer.

Existing vehicular-sourced noise levels (based on traffic counts taken when school was in session) generated along area roadways, at 50 feet from roadway centerline, are presented in Table 5.7-D — Existing Noise Levels at 50 Feet from Centerline Existing Conditions.

Table 5.7-D – Existing Noise Levels at 50 Feet from Centerline Existing Conditions

<table>
<thead>
<tr>
<th>Road Segment</th>
<th>ADT^b</th>
<th>dBA CNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>31,600</td>
<td>72.7</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>26,200</td>
<td>71.9</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>1,100</td>
<td>58.1</td>
</tr>
<tr>
<td>California Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>20,700</td>
<td>70.9</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>26,300</td>
<td>71.9</td>
</tr>
<tr>
<td>Colorado Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>66,00</td>
<td>65.9</td>
</tr>
<tr>
<td>Cypress Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>9,200</td>
<td>67.3</td>
</tr>
<tr>
<td>Jackson Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>10,500</td>
<td>67.9</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>29,700</td>
<td>72.4</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>21,700</td>
<td>71.1</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>4,600</td>
<td>64.3</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>2,500</td>
<td>61.7</td>
</tr>
</tbody>
</table>
As shown in Table 5.7-D, the primary roadway contributing to the Project area’s ambient noise environment is Van Buren Boulevard and the ambient noise level at the Project site is 72.7 dBA.

The existing Walmart includes one depressed loading dock with two loading bays at the northern end of the store (Figure 5.7-1). Materials transported to the store are offloaded onto this dock from trucks and truck trailers. The dock is depressed so that truck and trailer floors align with the loading dock. The loading dock is south of a 10-foot high masonry wall at the northern perimeter of the loading area. This masonry wall and existing mature trees shield the activity at the loading dock and breaks the line-of-sight to nearby sensitive receivers. By breaking the line of sight, the masonry wall interrupts the direct path of the noise from the loading dock in addition to reducing some of the acoustical energy that would be transmitted through the wall (Caltrans, p. 2-40). Currently, loading occurs at the dock at any given time during the day and night, depending on the specific vendor’s schedule. However, Walmart’s own general merchandise delivery trucks usually arrive daily with unloading taking place at approximately 4:00 p.m.

Additionally, the scheduled daily loading dock activity was monitored for its noise level on September 23, 2011. Noise was monitored from the same location identified as position #2 on Figure 5.7-4. Two noise readings were taken in the afternoon. The first reading was performed during pre-loading activity for a duration of 15 minutes beginning around 3:35 p.m., and the second reading was performed during

---

**Table 5.7-D**

<table>
<thead>
<tr>
<th>Road Segment</th>
<th>ADT</th>
<th>dBA CNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Buren Boulevard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n/o Arlington Avenue</td>
<td>46,000</td>
<td>74.3</td>
</tr>
<tr>
<td>n/o Cypress Avenue</td>
<td>32,000</td>
<td>72.8</td>
</tr>
<tr>
<td>n/o Philbin Avenue</td>
<td>29,300</td>
<td>72.4</td>
</tr>
<tr>
<td>adjacent to Project</td>
<td>31,900</td>
<td>72.7</td>
</tr>
<tr>
<td>n/o California Avenue</td>
<td>31,600</td>
<td>72.7</td>
</tr>
<tr>
<td>n/o Magnolia Avenue</td>
<td>35,000</td>
<td>73.1</td>
</tr>
<tr>
<td>s/o Magnolia Avenue</td>
<td>31,400</td>
<td>72.7</td>
</tr>
<tr>
<td>Wells Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>9,200</td>
<td>67.3</td>
</tr>
</tbody>
</table>

**Notes:**

2. Traffic counts collected for several consecutive days in June 2009, while school was in session and during non-holiday days as to procure the most accurate data. Source: Urban Crossroads, *Wal-Mart Expansion Traffic Impact Analysis*, October 18, 2010. Included in Appendix E.
3. Ambient noise level at the Project site.
loading activity for a duration of 31 minutes, as to ensure such activity was monitored, beginning around 4:00 p.m.\textsuperscript{1} \textbf{Table 5.7-E – Existing Daytime Loading Dock Noise Levels}, provides the monitored levels.

<table>
<thead>
<tr>
<th>Reading\textsuperscript{b}</th>
<th>Monitored Ambient Noise Level (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$L_{eq}$</td>
</tr>
<tr>
<td>1</td>
<td>59.5</td>
</tr>
<tr>
<td>2</td>
<td>65.6</td>
</tr>
</tbody>
</table>

\textbf{Notes:}

It should be noted that noise monitoring was performed on the Walmart side of the masonry block walls located along the northern Project boundary, and as such, noise readings are higher than what would be experienced off site on the residential side of the block wall.


\textsuperscript{b} Noise monitoring was performed on September 23, 2011, from noise monitoring position #2 as identified on Figure 4. The first reading spanned 15 minutes (pre-loading activity), and the second reading spanned 31 minutes (during loading activity). A generator attached to the Walmart structure was running for the entire duration of both readings. Noise logs are included in Appendix B to the AIA.

\textsuperscript{c} The single highest recorded noise level event during monitoring.

\textsuperscript{d} The single lowest recorded noise level event during monitoring.

\textsuperscript{e} The noise level during 90 percent of the monitoring.

\section*{5.7.2 Comments Received in Response to the Initial Study/Notice of Preparation}

No comments were received regarding noise or noise impacts in response to the IS/NOP.

\section*{5.7.3 Thresholds of Significance}

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State \textit{CEQA Guidelines}. However, the City of Riverside’s “Environmental Checklist” for the proposed Project (see Appendix A of this document) indicates that impacts related to noise may be considered potentially significant if the proposed Project 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; and/or
- a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

\textsuperscript{1} The Applicant has indicated that while the physical delivery truck may be docked in a loading bay for longer periods of time, actual loading and unloading activity of a truck at the loading bay averages six minutes total.
5.7.4 Related Regulations

5.7.4.1 Federal
The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce;
- Assisting State and local abatement efforts; and
- Promoting noise education and research.

The Federal Office of Noise Abatement and Control was initially tasked with implementing the Noise Control Act. However, the Office of Noise Abatement and Control has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The United States Department of Transportation assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration and Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately, that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

The proposed Project will comply with the appropriate OSHA regulations relative to worker exposure to noise during Project construction and operation.

5.7.4.2 State
Noise Insulation Standards

The proposed Project will comply with the appropriate noise insulation standards.

California Government Code
California Government Code Section 65302 mandates the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally
acceptable, normally unacceptable, and clearly unacceptable. The City’s GP 2025 contains a noise element that ranks land use compatibility as required by the California Government Code. The GP 2025 Noise Element is discussed in Section 5.7.4.3, below.

5.7.4.3 Local

General Plan 2025 Noise Element

In compliance with California Government Code Section 65302, the GP 2025 Noise Element identifies noise and land use compatibility criteria that identifies “Normally Acceptable,” “Conditionally Acceptable,” “Normally Unacceptable,” and “Conditionally Unacceptable” noise exposure ranges for various land uses as shown in Figure 5.7-5 – Noise/Land Use Compatibility Criteria (Figure N-10 of the GP 2025). These standards are primarily used for planning purposes such as determining a project’s compatibility with a proposed site with regard to existing and future acoustical impacts upon a project site sourced from the surrounding environment.

The “Normally Acceptable” range is defined as: specific land use is satisfactory, based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements.

The “Conditionally Acceptable” range is defined as: new construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

The “Normally Unacceptable” range is defined as: new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

The “Conditionally Unacceptable” range is defined as: new construction or development should generally not be undertaken, unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

The City includes commercial uses in three different land use categories as shown on Figure 5.7-5, “Commercial – Motels, Hotels, Transient Lodging,” “Office Buildings, Business, Commercial, Professional,” and “Freeway Adjacent Commercial, Office, and Industrial Uses.” Because the proposed Project does not include lodging and is not adjacent to a freeway, it fits within the “Office Buildings, Business, Commercial, Professional” land use category. Noise levels for commercial uses in this land use category are shown as being “Normally Acceptable” ranging up to 65 dBA CNEL/Ldn, “Conditionally Acceptable” ranging from 65 to 75 dBA CNEL/Ldn, and “Normally Unacceptable” ranging from 75 to 90 dBA CNEL/Ldn.
### Noise / Land Use Compatibility Criteria

The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

* For properties located within airport influence areas, acceptable noise limits for single family residential uses are established by the Riverside County Airport Land Use Compatibility Plan.

#### Land Use Category

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>CNEL or Day-Night Level (Ldn)</th>
<th>Conditionally Acceptable</th>
<th>Normally Acceptable</th>
<th>Normally Unacceptable</th>
<th>Conditionally Unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential*</td>
<td>55 60 65 70 75 80 85</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infill Single Family Residential*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial- Motels, Hotels, Transient Lodging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools, Libraries, Churches, Hospitals, Nursing Homes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amphitheaters, Concert Hall, Auditorium, Meeting Hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports Arenas, Outdoor Spectator Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playgrounds, Neighborhood Parks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golf Courses, Riding Stables, Water Rec., Cemeteries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Buildings, Business, Commercial, Professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial, Manufacturing Utilities, Agriculture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freeway Adjacent Commercial, Office, and Industrial Uses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nature of the noise environment where the CNEL or Ldn level is:**

- **Below 55 dB**: Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.
- **55-65 dB**: Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.
- **65-75 dB**: Very noisy urban areas near arterials, freeways or airports.
- **75+ dB**: Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

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Source: City of Riverside Community Development Dept., Riverside General Plan 2025, November 2007, page N-23
The highest allowable noise level for the category of “Office Buildings, Business, Commercial, Professional” in the most stringent “Normally Acceptable” range is 65 dBA CNEL/Ldn. It is important to note that not all exterior areas within a development are considered “sensitive” to noise (e.g., parking lots) and the standards identified in Figure 5.7-5 apply to exterior spaces within a given project that have been designated as areas anticipated to be occupied by people for purposes of being outdoors (Webb 2011, p. 10). With regard to interior noise, when a specific interior standard is not provided by a jurisdiction, the typical default to utilize is the applicable exterior standard, reduced by 20 dBA which, in this case, is 45 dBA Ldn/CNEL (Webb 2011, p. 10).

On page N-22 of the General Plan Noise Element, several Policies are identified under Objective N-1 to “minimize noise levels from point sources throughout the community, and wherever possible, mitigate the effects of noise to provide a safe and healthful environment.” These Policies include:

Policy N–1.1: Continue to enforce noise abatement and control measures particularly within residential neighborhoods.

Policy N–1.2: Require the inclusion of noise-reducing design features in development consistent with standards in Figure N–10 (Noise/Land Use Compatibility Criteria), Title 24 California Code of Regulations and Title 7 of the Municipal Code.

Policy N–1.3: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.

Policy N–1.4: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.

Policy N–1.5: Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.

Policy N–1.8: Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

The Project will be consistent with all applicable Objectives and Policies detailed in the General Plan Noise Element.

Riverside Municipal Code
The City has determined that certain noise levels are detrimental to public health, safety and welfare; and are therefore contrary to public interest. In order to control unnecessary, excessive and/or annoying noise in the City, minimize noise levels, and mitigate the effects of noise so as to provide a safe and healthy living environment (RMC, Section 7.05.010), Title 7 Noise Control, of the Riverside Municipal Code provides general regulations with regard to noise that is produced in the City.
Noise impacts projected onto adjacent properties from the Project are regulated by Sections 7.25.010 and 7.35.010 of the Riverside Municipal Code. These sections of the Riverside Municipal Code provide general regulations with regard to noise that is produced and projected onto surrounding land uses. These limits are applicable to noise generated as a result of the Project’s temporary construction and ongoing operational activities.

The maximum noise level that can be emitted from the Project site upon the nearest point of neighboring land uses is summarized in Table 5.7-F – Riverside Municipal Code Exterior Nuisance Sound Level Limits.

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Time Period</th>
<th>Noise Level Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>Night (10 p.m. to 7 a.m.)</td>
<td>45 dBA</td>
</tr>
<tr>
<td></td>
<td>Day (7 a.m. to 10 p.m.)</td>
<td>55 dBA</td>
</tr>
<tr>
<td>Commercial</td>
<td>Any Time</td>
<td>65 dBA</td>
</tr>
</tbody>
</table>

Notes:

Source: City of Riverside, Riverside Municipal Code, Title 7 Noise Control, Table 7.25.010A

Section 7.25.010 of the Riverside Municipal Code also provides criteria that apply to any exceedance of the limits present in Table 5.7-F, above. These criteria are primarily used for the purposes of code enforcement, but are provided here to outline the parameters by which a noise exceedance would be evaluated. The applicable criteria state:

A. Unless a variance has been granted as provided in this chapter, it shall be unlawful for any person to cause or allow the creation of any noise which exceeds the following:

1. The exterior noise standard of the applicable land use category, up to 5 decibels, for a cumulative period of more than 30 minutes in any hour; or

2. The exterior noise standard of the applicable land use category, plus 5 decibels, for a cumulative period of more than 15 minutes in any hour; or

3. The exterior noise standard of the applicable land use category, plus 10 decibels, for a cumulative period of more than 5 minutes in any hour; or

4. The exterior noise standard of the applicable land use category, plus 15 decibels, for the cumulative period of more than 1 minute in any hour; or

5. The exterior noise standard for the applicable land use category, plus 20 decibels or the maximum measured ambient noise level, for any period of time.
B. If the measured ambient noise level exceeds that permissible within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in five decibel increments in each category, as appropriate, to encompass the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

C. If possible, the ambient noise level shall be measured at the same location along the property line with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, then the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance that the offending noise is inaudible. If the measurement location is on the boundary between two different districts, the noise shall be the arithmetic mean of the two districts.

Chapter 7.35 of the Riverside Municipal Code provides general noise regulations. Section 7.35.010(B) states:

It is unlawful for any person to make, continue, or cause to be made or continued any disturbing, excessive or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity. The following acts, among others, are declared to be disturbing, excessive, and offensive noises in violation of this section:

4. Loading and Unloading: Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects, or permitting these activities between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to cause a noise disturbance across a residential property line or at any time exceeds the maximum permitted noise level for the underlying land use category.

5. Construction: Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, grading or demolition work between the hours of 7 p.m. and 7 a.m. on week days and between 5 p.m. and 8 a.m. on Saturdays or at any time on Sunday or federal holidays such that the sound therefrom creates a noise disturbance across a residential or commercial property line or at any time exceeds the maximum permitted noise level for the underlying land use category, except for emergency work or by variance. This section does not apply to the use of domestic power tools.

Exemptions to the regulations in Title 7 of the Riverside Municipal Code are identified in Section 7.35.020. Included among the exempted activities is work within City rights-of-way per Section 7.35.020(E), which states:

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2 Paragraphs 1, 2, and 3 of Riverside Municipal Code 7.35.010(B) relate to noise produced from televisions, radios, musical instruments, use of amplified sound, and animal noise and are not applicable to the proposed Project.
The provisions of this Title shall not apply to any work performed in the City right-of-ways when, in the opinion of the Public Works Director or his designee, such work will create traffic congestion and/or hazardous or unsafe conditions.

Noise level increases resulting from Project-related increases in traffic volumes on area roadways are not regulated by the Riverside Municipal Code; thus, there are no standards for this type of noise. Therefore, a clearly perceptible increase in noise exposure (i.e., 5 dBA) at sensitive receptor locations will be considered significant with regard to Project-specific traffic-sourced noise increases on area roadways (GP 2025 FPEIR, p. 5.11-26).

### 5.7.5 Project Design Considerations

As shown on Figure 3-4a – Site Plan (included in Section 3 of this DEIR), the Project includes a new depressed loading dock with two loading bays at the northern end of the existing Walmart building. This new loading dock will be situated adjacent to the existing loading dock (Figure 5.7-1), which will remain at its present location. As previously described in Section 5.7.1.3 Existing Site and Surrounding Conditions, there is a 10-foot high masonry block wall (i.e., an acoustical sound barrier) at the northern perimeter of the loading dock. This existing barrier separates the loading dock’s noise-producing activities from areas outside of the loading dock, including the noise-sensitive residential land use to the north (the Plymouth Manor apartments). The Project proposes an additional depressed loading dock with two loading bays adjacent to the north side of the existing loading dock and a second 10-foot high masonry block barrier at the northern perimeter of the new loading dock (Figure 3-4a). Therefore, in its final state, the Project will include two loading docks and four loading bays, acoustically protected by two 10-foot high masonry block walls and existing mature trees at the northing property line. The new loading dock will be approximately 80 feet south of the existing masonry wall at the Project site’s northern property line (Figure 3-4a).

### 5.7.6 Environmental Impacts before Mitigation

**Threshold:** 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.

The Project site is an existing commercial retail use. The Project proposes a continuation of the site’s commercial retail land use with the proposed expansion of the existing Walmart store and relocation of the Garden Center and removal of the Tire & Lube Express auto repair center. As discussed in Section 5.7.4.3, above, the City of Riverside’s noise/land use compatibility criteria provides the basis for the Project site’s commercial exterior and interior noise impact limits of 65 and 45 dBA CNEL, respectively.

**Noise Impacts to the Project**

The Project does not include any designated outdoor spaces (e.g., outdoor dining, recreation, or gathering areas) that will be impacted by noise through direct exposure. The only two exterior spaces in the Project are the Garden Center, which will be relocated to the southwest corner of the existing building, becoming separated from Van Buren Boulevard, and the parking lot areas. The relocated Garden Center will not be directly exposed to vehicular noise sourced from Van Buren Boulevard since,
at its new location the line-of-sight of the roadway, will be blocked by the Walmart store itself (Figure 3-4a). The GP 2025 and GP 2025 FPEIR do not identify vehicular parking areas as noise-sensitive locations; and although Title 7 of the Riverside Municipal Code provides noise standards for commercial exterior areas, the GP 2025 FPEIR makes it clear that the intent of those standards is to protect one neighbor from another with respect to nuisance noise (GP 2025 FPEIR, pp. 5.11–5.16). Thus, parking areas do not qualify as noise-sensitive areas as there is no expectation for it to be a serene environment for the purposes of relaxation. Therefore, no exterior noise standard applies to this Project with regard to impacts to the site. The results of the Project’s AIA are discussed below in terms of significance.

The AIA determined the only potentially significant source of noise impacting the Project site is vehicular noise emanating from the adjacent Van Buren Boulevard and analyzed existing noise levels based upon Van Buren Boulevard’s existing traffic volume as reported in Table 5.7-D, above. For proper planning, worst-case noise level impacts were determined in the AIA, taking into account future worst-case traffic levels on Van Buren Boulevard based on the variables summarized in Table 5.7-G – Primary Roadway Modeling Parameters, below.

### Table 5.7-G – Primary Roadway Modeling Parameters

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Roadway Classification</th>
<th>Right-of-Way</th>
<th>Travel Speed</th>
<th>Average Daily Traffic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Buren Boulevard</td>
<td>Arterial (six-lane)</td>
<td>120 feet</td>
<td>40 MPH</td>
<td>36,000(^b)</td>
</tr>
</tbody>
</table>

Notes:

\(^b\) The average daily traffic represents the all-inclusive traffic volumes anticipated on the segment of Van Buren Boulevard adjacent to the Project site by year 2012 including existing traffic, ambient growth through year 2012, and Project traffic.

Noise levels at the Project property line adjacent to Van Buren Boulevard, under a worst-case future traffic scenario, are projected to be 70.8 dBA CNEL (Webb 2011, p. 15). For reference, noise levels sourced from Van Buren Boulevard are reduced to 65 dBA CNEL at a distance of 160 feet inside the Project boundary (Webb 2011, p. 15). The proposed expansion will bring the east elevation of the expanded Walmart store building to within 60 feet of the property line and Van Buren Boulevard right-of-way; exterior noise levels at this location will be 67.6 dBA CNEL (Webb 2011, p. 15).

The exterior noise standard for commercial uses within the City of Riverside is 65 dBA CNEL; however, as discussed in Section 5.7.4.3, above, there are no qualifying exterior areas within the Project to which this standard applies. The Project proposes vehicular parking areas adjacent to the property line at Van Buren Boulevard. However, because a parking lot at a retail establishment is not an area in which people have an expectation for a serene outdoor environment; impacts with regard to on-site exterior noise exposure are considered **less than significant**, even under worst-case future conditions.
As discussed in Section 5.7.4.3, above, the interior noise limit for the proposed Project is 45 dBA CNEL/L_dnr. Determining interior noise levels is a function of reducing the noise impact level at a building facade by the noise attenuating properties of the structure. Typical exterior wall designs on buildings provide at least 35 dBA of noise attenuation to interior spaces; however, typical closed windows and doors provide only 15 to 20 dBA (Cowan p. 97). Depending upon the construction materials (e.g., concrete slab tilt-up walls) and design practices (e.g., more substantive windows or no windows at all), commercial and industrial buildings typically offer noise attenuation to interior spaces within the range of 25 to 30 dBA (Webb 2011, p. 15). Applying these noise attenuation values (i.e., 25 to 30 dBA) to the worst-case noise level of 67.6 dBA CNEL at the facade of the expansion area closest to Van Buren Boulevard, the Project’s interior noise levels at that portion of the building will be approximately 37.6 to 42.6 dBA CNEL (Webb 2011, p. 15). These anticipated worst-case interior noise levels are less than the applicable interior noise standard of 45 dBA CNEL; therefore, impacts with regard to on-site interior noise exposure from traffic on Van Buren Boulevard will be less than significant, even under worst-case future conditions.

Impacts Resulting from Project Construction

Construction noise levels vary according to the type(s) of equipment utilized and size of the active construction zone. Since the Project consists of the expansion of an existing store, Project construction will not require all of the construction practices typically associated with development of an undeveloped site. However minimal, demolition and construction associated with the Project is expected to require the use of equipment such as concrete saws, dozers, backhoes, cranes, forklifts, pavers, rollers, and pavement scarifiers, and smaller vehicles such as water and pickup trucks.

Project-related construction noise was modeled using the Federal Highway Administration Construction Noise Model (FHWA-HEP-05-054) also known as the Roadway Construction Noise Model (RCNM). The closest noise-sensitive receptors to the Project site are the single-family residences adjacent to the west of the site and the multi-family residential use (the Plymouth Manor apartments) located adjacent to the north of the site. The property line of the nearest single-family residence to the Project boundary line is approximately 59.5 feet west of the westernmost area in which demolition and building construction is proposed and approximately 34 feet west of an area proposed for heavy duty asphalt paving (Webb 2011, p. 17). An existing seven- to eight-foot masonry block wall separates the Project site from the residences. The Project’s north property line is approximately 79 feet north of northernmost area in which demolition and loading dock and building construction is proposed and approximately 35 feet north of an area proposed for heavy duty asphalt paving (Webb 2011, p. 17). An existing approximately eight-foot masonry block wall separates the Project site from the apartments (Webb 2011, p. 16).

Table 5.7-H – Construction Equipment and Predicted Construction Noise Levels, identifies the construction equipment modeled for each phase of Project construction, the L_max and L_eq for each piece of construction equipment, the receptor distance, and the predicted construction noise levels at the Project’s east and north property lines.
Table 5.7-H – Construction Equipment and Predicted Construction Noise Levels

<table>
<thead>
<tr>
<th>Construction Phase and Equipment</th>
<th>Actual $L_{\text{max}}$ (dBA)$^a$</th>
<th>Shielding (dBA)$^b$</th>
<th>Distance to Receiver</th>
<th>Predicted Noise$^d$</th>
<th>Predicted Noise$^d$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$L_{\text{max}}$ (dBA)</td>
<td>$L_{\text{eq}}$ (dBA)</td>
</tr>
<tr>
<td><strong>Demolition (anticipated duration 1 month)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete Saw</td>
<td>89.6</td>
<td>5</td>
<td>59</td>
<td>83.1</td>
<td>76.2</td>
</tr>
<tr>
<td>Dozer</td>
<td>81.7</td>
<td>5</td>
<td>59</td>
<td>75.2</td>
<td>71.3</td>
</tr>
<tr>
<td>Backhoe</td>
<td>77.6</td>
<td>5</td>
<td>59</td>
<td>71.1</td>
<td>67.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>83.1</td>
<td>77.8</td>
</tr>
<tr>
<td><strong>Building Construction (anticipated duration 12 months)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crane</td>
<td>80.6</td>
<td>5</td>
<td>59</td>
<td>74.1</td>
<td>66.2</td>
</tr>
<tr>
<td>Generator</td>
<td>80.6</td>
<td>5</td>
<td>59</td>
<td>74.2</td>
<td>71.2</td>
</tr>
<tr>
<td>Backhoe</td>
<td>77.6</td>
<td>5</td>
<td>59</td>
<td>71.1</td>
<td>67.1</td>
</tr>
<tr>
<td>Welder / Torch</td>
<td>74</td>
<td>5</td>
<td>59</td>
<td>67.6</td>
<td>63.6</td>
</tr>
<tr>
<td>Backhoe</td>
<td>77.6</td>
<td>5</td>
<td>59</td>
<td>71.1</td>
<td>67.1</td>
</tr>
<tr>
<td>Forklift$^f$</td>
<td>85$^g$</td>
<td>5</td>
<td>59</td>
<td>78.6</td>
<td>75.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>78.6</td>
<td>78.2</td>
</tr>
<tr>
<td><strong>Parking Lot / Paving (anticipated duration 1.5 months)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pavement Scarifier</td>
<td>89.5</td>
<td>5</td>
<td>33.5</td>
<td>88</td>
<td>81</td>
</tr>
<tr>
<td>Paver</td>
<td>77.2</td>
<td>5</td>
<td>33.5</td>
<td>75.7</td>
<td>72.7</td>
</tr>
<tr>
<td>Roller</td>
<td>80</td>
<td>5</td>
<td>33.5</td>
<td>78.5</td>
<td>71.5</td>
</tr>
<tr>
<td>Backhoe</td>
<td>77.6</td>
<td>5</td>
<td>33.5</td>
<td>76</td>
<td>72.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>88</td>
<td>82.4</td>
</tr>
</tbody>
</table>

Notes:

- Identified as Receptor #1 in the Roadway Construction Noise Model (RCNM), Version 1.1 printouts included in Appendix A to the AIA, which is included as Appendix D to this DEIR.
- Identified as Receptor #2 in the Roadway Construction Noise Model (RCNM), Version 1.1 printouts included in Appendix A to the AIA, which is included as Appendix D to this DEIR.
- Source: RCMN Version 1.1 printouts included in Appendix A to the AIA, which is included as Appendix D to this DEIR. Shielding refers to the attenuation provided by the existing wall on the eastern and northern property lines.
- Represents the loudest value of the listed construction equipment for a given phase.
- Forklift noise predicted using “All Other Equipment >5 HP” selection in RCNM.
- RCNM does not identify an Actual $L_{\text{max}}$ for this equipment. The reported number represents the “Spec $L_{\text{max}}$” per RCNM.
Construction-related noise levels analyzed for this Project assumes each construction phase occurs independently and the equipment for each phase is running simultaneously and at the closest point of anticipated construction activity to the single-family and multi-family residential uses, which is an unlikely condition. Under these conditions, the combined construction-related noise level inside the closest point of the property to the west of the Project site will be 82.4 dBA $L_{eq}$ (88 dBA $L_{max}$), which will be experienced during the parking lot and paving phase (Webb 2011, p. 18). As shown previously in Table 5.7-B, the ambient daytime noise measured along the Project’s western boundary ranges from 50.4 to 58.9 dBA $L_{eq}$ with an $L_{max}$ between 65.0 dBA and 78.3 dBA (Webb 2011, p. 19). The predicted construction noise level inside the closest point of the property to the north of the Project site will be 82 dBA $L_{eq}$ (87.6 dBA $L_{max}$), which will also be experienced during the parking lot and paving phase (Webb 2011, p. 19). As shown in Table 5.7-B, the ambient daytime noise measured at this location was 59.8 dBA $L_{eq}$ and the location can achieve 77.7 dBA $L_{max}$. Therefore, the residents in proximity to the Project site are already exposed to intermittently high noise levels.

While the predicted construction noise levels exceeds the Riverside Municipal Code noise limit of 55 dBA relating to daytime exterior nuisance noise at residential property lines, the Riverside Municipal Code Section 7.35.010.B.5 permits construction activities to exceed these levels between the hours of 7 a.m. and 7 p.m. on weekdays, and between 8 a.m. and 5 p.m. on Saturday (Webb 2011, p. 19). Moreover, spikes in noise level resulting from construction are anticipated to last no longer than a few minutes in a given hour and the entire construction period for the Project is anticipated to take approximately 14 months, with the parking lot and paving phase anticipated to last approximately 6 weeks (Webb 2011, p. 19).

Additionally, the relocation of the Garden Center to the southwest corner of the existing building will also result in temporary increase in noise levels from associated construction equipment, although it is unlikely the earthmoving construction equipment will be necessary. As such, an approximate maximum noise spike at the southwest corner will be less than the potential maximum spike on the eastern portion of the existing building where the footprint expansion will occur.

The backyards of the single-family dwellings to the west of the Project site are within 35 feet of the Project boundary line and could be exposed to intermittent, maximum noise levels of approximately 80 dBA (6 dBA attenuation afforded by the 8-foot high block wall at the property line) during Project construction. However, the ambient sampling (Table 5.7-B, Existing Daytime Noise Levels in Project Vicinity) shows these single-family dwellings are already exposed to maximum noise levels of 78.3 dBA; and already in excess of the 60 dBA standard. While some construction activity will occur at the southwest corner of the existing building to modify the existing building for the purposes of creating a Garden Center, the majority of construction will be located on the eastern portion, closer to Van Buren Boulevard, away from the sensitive receptors located adjacent to the western portion of the Project site.

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3 Based on “Suggested Maximum Sound Levels for Analysis” for a front-end loader, dozer, and truck as shown in Table 5.7-H, reduced by 6 dBA.
Furthermore, as shown by the data in Table 5.7-B, receptors adjacent to the site are intermittently exposed to maximum noise levels up to 92.8 dBA.

Therefore, with all factors considered, together with the fact that sensitive receptors adjacent to the Project site already exposed to maximum noise levels in excess of the 55 dBA residential standard, the Project’s temporary construction-related noise increase is not considered substantial (Webb 2011, p. 19). However, to reduce noise impacts from construction and assure impacts will be less than significant, construction-related mitigation measures are proposed for this Project (Webb 2011, p. 19).

**Impacts Resulting from Project Operation**

Noise from Project operations will result from activities at the new loading dock and Project-specific traffic increases. The analysis of Project-related operational noise is evaluated under the following threshold:

*Whether a substantial permanent increase in ambient noise levels will occur in the project vicinity above levels existing without the project.*

A summary of those results are included here:

**Loading Dock Operations**

The Applicant has indicated that while the physical delivery truck may be docked in a loading bay for longer periods of time, actual loading and unloading activity of a truck at the loading bay averages six minutes total, as exhibited in the loading dock activity reading shown in Table 5.7-E (Webb 2011, p. 20). According to the Applicant, the store currently receives 18 truck deliveries per week, 3 of which are refrigerated trucks. This number includes both Walmart truck deliveries and the smaller vendor truck deliveries. Vendor deliveries are currently received 24 hours a day. With implementation of the proposed Project, the number of truck deliveries is estimated to increase by 10 trucks to a total of 28 truck deliveries per week, comprised of 14 refrigerated trucks and 14 regular trucks, at an average of 2 refrigerator trucks and 2 regular trucks per day (Webb 2011, p. 20). Since the City’s single-event noise policy is a 10-minute average, loading/unloading activity-related noise would not likely cause the daytime or nighttime standards (55 and 45 dBA $L_{dn}/CNEL$, respectively) to be exceeded. However, the nuisance factor from nighttime dock operations could be sufficient for the impact to be considered bothersome, even without exceeding an established standard.

In the event idling does occur, idling time would be limited to no more than five minutes under California State law (Cal Code Regs. 2485). The Applicant has also indicated that as a matter of corporate policy, Walmart limits truck idling to three minutes through use of electronic engine controls that automatically shut off the engine after the set timeframe which will limit idling on the Project site (Webb 2011, p. 20).

---

4 With implementation of the Project, the expanded Walmart will receive one less regular truck delivery per week.
The nearest sensitive receptors to the existing and proposed expanded loading dock operations are the multi-family residential land use located adjacent to the north of the Project site. The Project’s northern property line is approximately 79 feet from the planned loading dock expansion. There is currently a 10-foot high masonry block noise control barrier at the perimeter of the existing loading dock; this barrier will remain. The proposed loading dock is also planned to include a 10-foot high masonry block wall barrier at its perimeter. Additionally, the new loading bays will also be depressed, thereby providing sufficient space for the line-of-sight between the trailers and the northern property line to be completely broken. Furthermore, there is an existing masonry block wall barrier at the northern property line, approximately eight feet in height, which separates the two properties. Beyond that, covered parking car ports and additional parking areas on the residential side of the property line act as a buffer to further separate the noise-sensitive residential dwelling units and the Project’s proposed loading dock by approximately 50 additional feet for a total distance between the apartment buildings and the proposed loading dock of approximately 129 feet (Webb 2011, p. 20).

Noise levels associated with loading dock operations can vary depending on the quantity of the shipment and any additional equipment required for unloading the materials (e.g., a forklift). As mentioned, the nearest sensitive receptor to the proposed loading dock is the Plymouth Manor apartments. Existing noise of the daytime loading dock activity was monitored shown in Table 5.7-E (loading dock activity was also captured during nighttime noise monitoring shown in Table 5.7-C). Daytime loading dock activity was measured from approximately 85 feet away from the noise source and approximately 20 feet south of the 8-foot high block wall at the northern property line. The first reading was performed prior to the arrival of the truck, and the second reading performed during actual loading activity. This second reading spanned a duration of 31 minutes as to measure the full loading dock activity from the truck’s arrival at the store, backing into the loading dock, dropping the truck bed, unloading, and the truck’s departure from the loading area. It is important to note that during the entire 31-minute loading process, there was a “generator” running, which would be consistent with the conditions for a refrigerated truck delivery and noisier than a non-refrigerated truck delivery (Webb 2011, p. 21). As indicated in Table 5.7-E, the readings show loading dock activity achieving 65.6 dBA $L_{eq}$, 82.7 dBA $L_{max}$, and 60.0 dBA $L_{min}$ as measured 85 feet from the loading dock.

To predict loading dock noise at the northern property line from the existing and proposed loading docks, the noise levels collected during daytime monitoring were input into RCNM, which allows users to enter equipment and noise levels. Table 5.7-I, Predicted Loading Dock Noise Levels summarizes the predicted noise levels at the Project’s north property line assuming the following scenarios: a single truck at the existing loading dock, two trucks at the existing loading dock, a single truck at the proposed loading dock, two trucks at the proposed loading dock, and four trucks at the existing and proposed loading docks.
<table>
<thead>
<tr>
<th>Loading Dock Scenario</th>
<th>Actual $L_{max}$ (dBA)$^c$</th>
<th>Shielding (dBA)$^d$</th>
<th>North Property Line</th>
<th>Distance to Receiver</th>
<th>Predicted Noise$^d$</th>
<th>$L_{max}$</th>
<th>$L_{eq}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Condition, one truck at existing loading dock</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Loading Dock (existing)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>100</td>
<td>76</td>
<td>73</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
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<td></td>
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<tr>
<td><strong>Existing Condition, two trucks at existing loading dock</strong></td>
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<td></td>
</tr>
<tr>
<td>Loading Dock (existing)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>100</td>
<td>76</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Loading Dock (existing)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>100</td>
<td>76</td>
<td>73</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Proposed Project, one truck at proposed loading dock</strong></td>
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<td></td>
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<tr>
<td>Loading Dock (proposed)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>79</td>
<td>78</td>
<td>75</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Proposed Project, two trucks at proposed loading dock</strong></td>
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<tr>
<td>Loading Dock (proposed)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>79</td>
<td>78</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Loading Dock (proposed)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>79</td>
<td>78</td>
<td>75</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<td><strong>Existing Condition plus Proposed Project, four trucks at loading docks</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Loading Dock (existing)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>100</td>
<td>76</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Loading Dock (existing)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>100</td>
<td>76</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Loading Dock (proposed)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>79</td>
<td>78</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Loading Dock (proposed)</td>
<td>87</td>
<td>5</td>
<td></td>
<td>79</td>
<td>78</td>
<td>75</td>
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<tr>
<td><strong>Total</strong></td>
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</tbody>
</table>

Notes:
- $^b$ The calculation printouts indicating parameters used in the analysis are provided in Appendix A to the AIA, which is included as Appendix D to this DEIR.
- Based on measured $L_{max}$ of 82.7 dBA at 85 feet. Refer to Table 5.7-E. The reference noise level at 50 feet was determined using methodology described on pages 2-32 through 2-34 of the California Department of Transportation Division of Environmental Analysis, *Technical Noise Supplement*, November 2009.
- Shielding refers to the attenuation provided by the existing wall on the northern property lines.
- $^e$ Source: RCMN Version 1.1 printouts included in Appendix A to the AIA, which is included as Appendix D to this DEIR.
- $^f$ Represents the loudest value of the Measured Loading Dock Activity.
As shown in Table 5.7-I, existing loading dock noise at the northern property line for a single refrigerated truck is predicted to have an $L_{\text{max}}$ of 76 dBA and an $L_{\text{eq}}$ of 73 dBA. Two refrigerated trucks at the existing loading dock is predicted to have an $L_{\text{max}}$ of 76 dBA and an $L_{\text{eq}}$ of 76 dBA. In comparing the predicted noise, which is based on the $L_{\text{max}}$ with the noise measured during the 31-minute reading (Table 5.7-E), the measured $L_{\text{eq}}$ was 65.6 dBA, the measured $L_{\text{min}}$ was 60.0 dBA, and the measured $L_{90}$, which represents the noise level for 90 percent of the sound levels monitored, was 60.9 dBA. This indicates that the measured $L_{\text{max}}$ was an isolated, brief noise spike incident that can be reasonably expected from a loading dock, albeit infrequently, and did not achieve a cumulative period of more than one minute (Webb 2011, p. 22). That is, the predicted noise for loading dock activities represents a worst case scenario.

Also shown in Table 5.7-I, a single refrigerated truck at the proposed loading dock is predicted to have an $L_{\text{max}}$ of 78 dBA and an $L_{\text{eq}}$ of 75 dBA. Because this is a less than 3 dBA change from the existing condition, it will be imperceptible (Webb 2011, p. 22). Two refrigerated trucks at the proposed loading dock is predicted to have an $L_{\text{max}}$ of 78 dBA and an $L_{\text{eq}}$ of 78 dBA, which is also a less than 3 dBA change from the existing condition. In the highly unlikely event that four refrigerated trucks arrive simultaneously and are unloading at the same time, the predicted noise levels would be 78 dBA $L_{\text{max}}$ and 80 dBA $L_{\text{eq}}$. The difference in $L_{\text{eq}}$ between this worst case scenario (80 dBA $L_{\text{eq}}$) and the existing condition assuming two refrigerated trucks are unloading at the same time (76 dBA $L_{\text{eq}}$) is greater than 3 dBA and may be perceived, and has the potential to be considered substantial (Webb 2011, pp. 22-23).

As discussed in Section 5.7.5, the proposed loading dock will be depressed and will have a 10-foot high masonry wall at its northern perimeter, which will break the line-of-sight between any loading dock activity and the apartments. Noise from the loading dock activity after implementation of the proposed Project may be perceptible, particularly the infrequent and brief spikes in noise. However, given the existing noise levels already occurring at the Project site (see Table 5.7-B, Table 5.7-C, Table 5.7-D, and Table 5.7-E), and that this change is less than 5 dBA, it is not considered substantial (Webb 2011, p. 23). However, the worst case loading dock activity scenario of four trucks arriving simultaneously during the hours of midnight to 6:00 a.m., has the potential to be substantial. As such, to avoid this potentially significant, albeit unlikely noise impact, an operation-related mitigation measure to limit the number of trucks arriving and unloading at the same time between midnight and 6:00 a.m. will be incorporated for this Project.

**Project-Specific Traffic**

As discussed in Section 5.7.4.3, noise level increases resulting from new Project-related traffic on area roadways are not regulated by the Riverside Municipal Code; thus, there are no standards for this type of noise. However, according to the GP 2025 FPEIR, a clearly perceptible increase in noise exposure (i.e., 5 dBA) at sensitive receptor locations will be considered significant, with regard to Project-specific traffic-sourced noise increases on area roadways (GP 2025 FPEIR, p. 5.11-26).
The proposed Walmart expansion will result in the generation of approximately 1,657 new trips per day (Urban Crossroads, Table 4-5, p. 36). Increases to noise levels resulting from these additional trips plus ambient growth\(^5\) rates are projected to be less than one-half decibel (see Table 5.7-J \textit{Noise Levels at 50 Feet from Centerline – Existing Plus Ambient Growth Plus Project Conditions}), which is considered imperceptible to the human ear, even under clinical conditions. Noise level increases resulting from Project-related trips, plus ambient growth, plus cumulative projects, are also projected to be less than one-half decibel.

\section*{Conclusion}

Although Project-related construction may result in temporary and periodic exposure of persons to or generation of noise levels in excess of standards established in the Riverside Municipal Code, because of the masking effect of existing ambient noise it is unlikely that increased noise levels will be noticed. To assure construction-related noise will not be substantial and will result in a less than significant impact, construction-related mitigation measures are proposed. Noise levels associated with Project-operations will not exceed the standards established in the Riverside Municipal Code or the significance criteria identified in the GP 2025 FPEIR. To assure operation-related noise, specifically loading dock activity, will not be substantial and will result in a less than significant impact, an operation-related mitigation measure is proposed. Therefore, with implementation of mitigation measures identified in Section 5.7.7, Project impacts regarding the 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, impacts will be \textbf{less than significant}.

\textit{Threshold: A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.}

Potential permanent or long-term noise impacts associated with the Project include on-site sources from typical Project operations and off-site sources such as Project-specific traffic increases on area roadways.

\section*{On-Site Noise}

With regard to on-site noise sources, the Project’s proposed expansion will add a second depressed loading dock on the north side of the Walmart store in the same general location as the existing loading dock (\textit{Figures 3-4a and 5.7-1}). Materials handling at cross-dock facilities occur within designated loading areas where truck trailers block noise propagation through open bay doors. If fork-lifts are used, an occasional thump can be audible when it drives into a trailer to pick up or set down a pallet of materials but such single-event noise is infrequent. Operational noise is not considered a source of significant impact when topography or a barrier (e.g., a wall or building) shields the visibility of the loading activity; such is the case at this location as previously described in Sections 5.7.1.3 and 5.7.5. Due to a number of variables, noise levels associated with loading dock operations can vary.

\(^5\) Ambient growth does not include other approved and pending projects.
The nearest sensitive receptors to the proposed expanded loading dock operations are the Plymouth Manor multi-family residential apartments, adjacent to the north side of the Project site. The Project’s northern property line is approximately 79 feet north of the planned loading dock expansion. There is a 10-foot high masonry block noise control barrier at the perimeter of the existing loading dock, which will remain. The proposed loading dock is also planned to include a 10-foot high masonry block wall barrier in addition to being depressed, which will result in the line-of-sight between the trailers and the Project site’s northern property line to be completely broken. Approximately 50 feet of additional separation between the proposed loading dock and the apartment buildings is provided by the existing 8-foot high masonry block wall at the northern property line of the Project site, existing covered parking car ports on the apartment site, and additional apartment parking areas, for a total distance between the apartment buildings and the proposed loading dock of approximately 129 feet.

Generally, there will be negligible impacts from loading dock activities to the residents adjacent to the western portion of the Project site as the Walmart building itself would act a noise barrier, breaking the line-of-sight between the loading dock and the backyards to the west. The residential backyards that abut the northwestern corner of the Project are approximately 415 feet from the existing loading dock and the proposed loading dock, and are separated from the loading area by an 8-foot high block wall at the property line. At a distance of over 400 feet to the nearest proposed dock, the noise from loading dock activities would not be substantial, as they will not be substantial to the closer multi-family residential receptor to the north of the Project site, except the worst case loading dock activity scenario has the potential to be substantial. As such, to assure loading dock activity will not be substantial and will result in a less than significant impact, an operation-related mitigation measure has been proposed. Therefore, impacts to residents adjacent to the western portion of the Project site are considered to be less than significant.

Ambient noise levels increases from operation of the Project will be generally masked by Van Buren Boulevard’s vehicular traffic volumes, which is estimated to result in approximately 72.7 dBA CNEL (Table 5.7-D) and was ambiently measured at 73.8 dBA $L_{eq}$ as shown in Table 5.7-B. Moreover, as discussed above, only in the worst case scenario of loading dock activity is there a potential for a substantial noise impact, and as a result, mitigation has been proposed. Therefore, with implementation of the identified mitigation measure in Section 5.7.7, operation of the Project and associated loading docks will not result in a substantial permanent increase in ambient noise levels at the adjacent noise-sensitive land uses and impacts in this regard are considered to be less than significant.

Off-Site Noise
With regard to noise impacts sourced from Project-specific traffic volume increases on area roadways, an increase of 5 dBA in noise level over that of the existing condition represents a significant increase (GP 2025 FPEIR, p. 5.11-26), as discussed in Section 5.7.4.3, above.

Off-site noise levels were calculated along roadway segments in the Project vicinity for the traffic-related scenarios summarized in Table 5.7-J – Traffic Scenarios Used in the Acoustical Impact Analysis. These various scenarios were modeled in the AIA to determine Project-specific increases in noise levels.
at a distance of 50 feet from roadway centerline. The uniform distance allows for direct comparisons of potential increases or decreases in noise levels based upon various traffic scenarios; however, it is important to note that at this distance from the roadway centerline, no specific noise standard necessarily applies. Therefore, the change in a noise level between scenarios is the focus of this portion of the analysis, rather than the resulting independent noise level for any one segment.

**Table 5.7-J – Traffic Scenarios Used in the Acoustical Impact Analysis**

<table>
<thead>
<tr>
<th>Traffic Scenario/Condition</th>
<th>Abbreviation</th>
<th>What is Included in this Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing</td>
<td>E</td>
<td>Existing traffic based on June 2009 traffic counts</td>
</tr>
<tr>
<td>Existing plus Ambient Growth</td>
<td>E+A</td>
<td>Existing plus ambient growth conditions represent existing volumes plus a two and one-half percent (2.5%) per year growth rate through year 2012</td>
</tr>
<tr>
<td>Existing plus Ambient Growth plus Project</td>
<td>E+A+P</td>
<td>Existing plus ambient growth plus Project-related traffic</td>
</tr>
<tr>
<td>Existing plus Ambient Growth plus Cumulative Projects</td>
<td>E+A+C</td>
<td>Existing plus ambient growth plus cumulative development projects</td>
</tr>
<tr>
<td>Existing plus Ambient Growth plus Cumulative Projects plus Project</td>
<td>E+A+C+P</td>
<td>Existing plus ambient growth plus cumulative development projects plus Project-related traffic</td>
</tr>
<tr>
<td>GP 2025 plus Project (See Section 5.7.9)</td>
<td>GP 2025 + P</td>
<td>City’s General Plan conditions at full buildout and shows conditions with and without the Project</td>
</tr>
</tbody>
</table>

**Notes:**

a Source: Urban Crossroads, Wal-Mart Traffic Impact Analysis, October 18, 2010

b Project-related traffic represents new trips associated with the proposed Walmart expansion

c Cumulative development projects are assumed to contribute traffic to one or more study area intersections (Urban Crossroads, p. 39)

**Table 5.7-B** summarizes noise levels at the analyzed roadway segments under existing conditions, without taking into account any ambient growth. **Table 5.7-K – Noise Levels at 50 Feet from Centerline Existing Plus Ambient Growth Plus Project Conditions** compares noise levels with and without Project-specific traffic under existing plus ambient growth (E+A) conditions in the projected Project completion year (2012). As indicated in **Table 5.7-K**, none of the 20 analyzed roadway segments will experience a CNEL increase greater than 5.0 dBA that is attributable to Project-specific traffic.

All Project-specific noise level changes for this scenario were limited to increases of less than 0.7 of a decibel which is considered imperceptible to the human ear, even under clinical conditions (Webb 2011, p. 26).
### Table 5.7-K – Noise Levels at 50 Feet from Centerline
Existing Plus Ambient Growth Plus Project Conditions<sup>a</sup>

<table>
<thead>
<tr>
<th>Roadway Segment</th>
<th>ADT</th>
<th>dBA CNEL</th>
<th>ADT&lt;sup&gt;b,c&lt;/sup&gt;</th>
<th>dBA CNEL</th>
<th>ADT&lt;sup&gt;d&lt;/sup&gt;</th>
<th>dBA CNEL</th>
<th>Total</th>
<th>Project-Specific Increase (dBA CNEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Van Buren Boulevard</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n/o Arlington Avenue</td>
<td>46,000</td>
<td>74.3</td>
<td>49,500</td>
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<td>47.7</td>
<td>74.6</td>
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<td>n/o Cypress Avenue</td>
<td>32,000</td>
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<td>400</td>
<td>53.7</td>
<td>73.1</td>
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<tr>
<td>n/o Philbin Avenue</td>
<td>29,300</td>
<td>72.4</td>
<td>31,500</td>
<td>72.7</td>
<td>500</td>
<td>54.7</td>
<td>72.8</td>
<td>0.4</td>
</tr>
<tr>
<td>adjacent to Project</td>
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<td>72.7</td>
<td>34,300</td>
<td>73.1</td>
<td>1,000</td>
<td>57.7</td>
<td>73.2</td>
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<td>n/o California Avenue</td>
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<td>34,000</td>
<td>73.0</td>
<td>800</td>
<td>56.7</td>
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<td>73.1</td>
<td>37,700</td>
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<td>54.7</td>
<td>73.6</td>
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<td>s/o Magnolia Avenue</td>
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<td>33,800</td>
<td>73.0</td>
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<td>50.7</td>
<td>73.0</td>
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</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>31,600</td>
<td>72.7</td>
<td>34,000</td>
<td>73.0</td>
<td>200</td>
<td>50.7</td>
<td>73.0</td>
<td>0.3</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>26,200</td>
<td>71.9</td>
<td>28,200</td>
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<td>200</td>
<td>50.7</td>
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<tr>
<td>w/o Van Buren Boulevard</td>
<td>9,200</td>
<td>67.3</td>
<td>9,900</td>
<td>67.7</td>
<td>100</td>
<td>47.7</td>
<td>67.7</td>
<td>0.4</td>
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<td><strong>Jackson Street</strong></td>
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<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>10,500</td>
<td>67.9</td>
<td>12,200</td>
<td>68.6</td>
<td>100</td>
<td>47.7</td>
<td>68.6</td>
<td>0.7</td>
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<td><strong>Philbin Avenue</strong></td>
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<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>4,600</td>
<td>64.3</td>
<td>5,000</td>
<td>64.7</td>
<td>100</td>
<td>47.7</td>
<td>64.8</td>
<td>0.5</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>2,500</td>
<td>61.7</td>
<td>2,700</td>
<td>62.0</td>
<td>0</td>
<td>0.0</td>
<td>62.0</td>
<td>0.3</td>
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<tr>
<td><strong>Audrey Avenue</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>1,100</td>
<td>58.1</td>
<td>1,150</td>
<td>58.3</td>
<td>50</td>
<td>44.7</td>
<td>58.5</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Wells Avenue</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>9,200</td>
<td>67.3</td>
<td>9,900</td>
<td>67.7</td>
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<td>50.7</td>
<td>67.8</td>
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</tr>
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<td><strong>Colorado Avenue</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>6,600</td>
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<td>47.7</td>
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<td>0.4</td>
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<tr>
<td><strong>California Avenue</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>20,700</td>
<td>70.9</td>
<td>22,300</td>
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<td>100</td>
<td>47.7</td>
<td>71.2</td>
<td>0.3</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>26,300</td>
<td>71.9</td>
<td>28,300</td>
<td>72.2</td>
<td>100</td>
<td>47.7</td>
<td>72.2</td>
<td>0.3</td>
</tr>
</tbody>
</table>
### Table 5.7 – Noise Levels at 50 Feet from Centerline Existing Plus Ambient Growth Plus Cumulative Plus Project Conditions

<table>
<thead>
<tr>
<th>Roadway Segment</th>
<th>E</th>
<th>E+A</th>
<th>Project Only</th>
<th>Project-Specific Increase (dBA CNEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADT</td>
<td>dBA CNEL</td>
<td>ADT(^b,c)</td>
<td>dBA CNEL</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>29,700</td>
<td>72.4</td>
<td>32,000</td>
<td>72.8</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>21,700</td>
<td>71.1</td>
<td>23,400</td>
<td>71.4</td>
</tr>
</tbody>
</table>

**Notes:**


\(^b\) ADT = average daily traffic.

\(^c\) Source: ADT from traffic counts collected for several consecutive days in June 2009, while school was in session and during non-holiday days as to procure the most accurate data. Source: Urban Crossroads, *Wal-Mart Traffic Impact Analysis*, October 18, 2010 (Exhibit 5-4, p. 55) minus Project Only ADT.


**Table 5.7-L** – Noise Levels at 50 Feet from Centerline Existing Plus Ambient Growth Plus Cumulative Plus Project Conditions, compares noise levels with and without Project-specific traffic under existing plus ambient growth (year 2012) plus cumulative projects conditions (E+A+C). This scenario accounts for area growth and other approved and pending projects in the Project vicinity at the year of anticipated Project completion.

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### Table 5.7-L – Noise Levels at 50 Feet from Centerline

**Existing Plus Ambient Growth Plus Cumulative Plus Project Conditions**

<table>
<thead>
<tr>
<th>Roadway Segment</th>
<th>E+A+C</th>
<th>Project Only</th>
<th>Project-Specific Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADT</td>
<td>dBA CNEL</td>
<td>dBA CNEL Total</td>
</tr>
<tr>
<td><strong>Van Buren Boulevard</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n/o Arlington Avenue</td>
<td>51,500</td>
<td>74.8</td>
<td>100</td>
</tr>
<tr>
<td>n/o Cypress Avenue</td>
<td>36,500</td>
<td>73.3</td>
<td>400</td>
</tr>
<tr>
<td>n/o Philbin Avenue</td>
<td>33,400</td>
<td>72.9</td>
<td>500</td>
</tr>
<tr>
<td>adjacent to Project</td>
<td>36,300</td>
<td>73.3</td>
<td>1,000</td>
</tr>
<tr>
<td>n/o California Avenue</td>
<td>36,900</td>
<td>73.4</td>
<td>800</td>
</tr>
<tr>
<td>n/o Magnolia Avenue</td>
<td>40,500</td>
<td>73.8</td>
<td>500</td>
</tr>
<tr>
<td>s/o Magnolia Avenue</td>
<td>34,800</td>
<td>73.1</td>
<td>200</td>
</tr>
<tr>
<td><strong>Arlington Avenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>34,500</td>
<td>73.1</td>
<td>200</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>28,800</td>
<td>72.3</td>
<td>200</td>
</tr>
<tr>
<td><strong>Cypress Avenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>10,200</td>
<td>67.8</td>
<td>100</td>
</tr>
<tr>
<td><strong>Jackson Street</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>12,400</td>
<td>68.6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Philbin Avenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>5,300</td>
<td>64.9</td>
<td>100</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>2,800</td>
<td>62.2</td>
<td>0</td>
</tr>
<tr>
<td><strong>Audrey Avenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>1,150</td>
<td>58.3</td>
<td>50</td>
</tr>
<tr>
<td><strong>Wells Avenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>10,300</td>
<td>67.8</td>
<td>200</td>
</tr>
<tr>
<td><strong>Colorado Avenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>7,600</td>
<td>66.5</td>
<td>100</td>
</tr>
<tr>
<td><strong>California Avenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w/o Van Buren Boulevard</td>
<td>22,800</td>
<td>71.3</td>
<td>100</td>
</tr>
<tr>
<td>e/o Van Buren Boulevard</td>
<td>29,100</td>
<td>72.3</td>
<td>100</td>
</tr>
</tbody>
</table>
As shown in Table 5.7-L, none of the 20 analyzed roadway segments for the E+A+C+P scenario will experience a CNEL increase of 5 dBA or greater that would be attributable to Project-specific traffic. In fact, the results of the AIA indicate that all noise level changes resulting from Project-specific traffic are expected to be less than one half of a decibel, which is considered imperceptible to the human ear, even under clinical conditions (Webb 2011, p. 28). Further, the Project’s contribution to GP 2025 conditions are also less than one-half of a decibel with only a Project-specific increase of 0.3 dBA along Jackson Street, east of Van Buren Boulevard, as discussed in Section 5.7.9, below.

Conclusion
Project-related operations at the proposed loading dock and existing loading dock may result in occasional audible thumps heard at the Plymouth Manor apartments as material is unloaded; however because of existing and proposed masonry walls between the loading dock and the apartment property, the proposed loading dock design, existing noise levels already occurring including existing ambient noise from Van Buren Boulevard, it is unlikely that increased noise levels will be noticed. However, the worst case scenario of loading dock activity has the potential to be substantial, and mitigation is proposed to assure such a scenario is avoided. With respect to noise from new Project-related trips on area roadways, as shown in Tables 5.7-K and Table 5.7-L, all Project-specific noise level changes on area roadways are expected to be less than one half of a decibel, which is considered imperceptible to the human ear, even under clinical conditions. For these reasons, impacts with regard to a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project will be less than significant.
5.7.7 Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4).

5.7.7.1 Construction

To assure constructed-related noise impacts resulting from Project implementation are not substantial and results in a less than significant impact, the following mitigation measures shall be implemented:

MM NOI 1: To prevent construction-related noise from disturbing sensitive receivers within proximity to the Project site during evening hours:

a) on-site Project construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays. No on-site Project construction shall be allowed at any hour on Sundays or federal holidays; and

b) stationary construction equipment shall be located on the Project site and large construction equipment shall be staged on site to provide the maximum distance between the equipment and the sensitive receivers adjacent to the Project site.

MM NOI 2: To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer’s specifications to the satisfaction of the City of Riverside. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Maintenance records shall be submitted monthly to the City of Riverside. Compliance with this measure shall be subject to periodic inspections by the City of Riverside.

MM NOI 3: To inform potential sensitive receivers of the pending Project construction, the Applicant shall give written notification to all landowners, tenants, business operators, and residents immediately adjacent to the Project site 30 days prior to the start of construction. The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.

MM NOI 4: To reduce noise impacts associated with temporary diesel- or gasoline-powered generators, electricity from power poles shall be used when technically feasible instead of temporary diesel- or gasoline-powered generators, as coordinated with the City of Riverside Public Utilities Department. Where a portable diesel- or gas-powered generator is necessary, it shall have maximum noise muffling capacity and be located as far as practical from noise sensitive uses.

MM NOI 5: To minimize noise from idling engines, all vehicles and construction equipment shall be prohibited from idling in excess of three (3) minutes when not in use.
5.7.7.2 Operation
This AIA determined that implementation of the proposed Project will not result in an actual substantial impact regarding noise. However, the worst-case scenario under the Project of four refrigerator trucks arriving simultaneously at the four loading bays has the potential to be considered substantial to the off-site multi-family residential use to the north. Therefore, the following mitigation measure shall be implemented:

**MM NOI 6**: No more than two (2) truck deliveries shall take place simultaneously, at any given time, between the hours of 12:00 midnight and 6:00 a.m.

5.7.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented
Mitigation measures **MM NOI 1** through **MM NOI 5**, are related to temporary construction-sourced noise. Mitigation measures **MM NOI 1, 2, and 5** are qualitative measures in that there are no quantifiable reductions associated with them. **MM NOI 1** limits the times during which construction may occur to the daytime hours during which humans are less sensitive. It also requires maximum possible setbacks from equipment and receivers. **MM NOI 2** requires that all utilized construction equipment has properly working factory-installed noise reduction device. This will serve to ensure that the projected noise levels, based on manufacturer specifications and monitored levels of properly operating equipment, will not be exceeded. **MM NOI 5** prohibits idling of vehicles and construction equipment in excess of three minutes, which will reduce the amount of noise generated by vehicles and equipment when not in use.

**MM NOI 3** does not provide a specific noise reduction value but will provide a mechanism for people to report potential exceedances in noise levels so that they can be properly handled. Reduction values associated with **MM NOI 4** can be roughly quantified. **MM NOI 4** requires the use of the local power grid thereby eliminating the need for portable generators, when technically feasible. **MM NOI 6** will assure that the worst case loading dock activity scenario will be avoided and prohibited by store policy.

While construction and operation of the Project is not expected to result in substantial noise, these mitigation measures will assure a significant impact does not result, and as such, Project impacts are less than significant.

5.7.9 Summary of Cumulative Noise Effects after Mitigation Measures are Implemented
The expansion of the existing Walmart at its current location will not contribute cumulatively to any significant sources of noise in the Project site vicinity since noise in the area from on-site Project operations will increase only marginally over that of the existing Walmart store. The expansion of the existing Walmart at its current location will not have significant cumulative contributions to off-site noise increases; as shown in Table 5.7-L, the Project will only contribute a 0.2 dBA increase on one area roadway; all other roadways are either 0.1 or less, all of which are well below the threshold of detection for human hearing (Webb 2011, p. 28). Moreover, as shown in Table 5.7-M – GP 2025 Conditions Plus
Project, the Project’s contribution to GP 2025 conditions are also less than one-half of a decibel with only a Project-specific increase of 0.3 dBA along Jackson Street, east of Van Buren Boulevard, all of which are well below the threshold of detection for human hearing (Webb 2011, p. 28). Therefore, cumulative environmental impacts with regard to noise will be less than significant.

Table 5.7-M – GP 2025 Conditions Plus Project

<table>
<thead>
<tr>
<th>Roadway Segment</th>
<th>ADT(^b)</th>
<th>dBA CNEL</th>
<th>ADT(^c)</th>
<th>dBA CNEL</th>
<th>Project-Specific Increase (dBA CNEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van Buren Boulevard</td>
<td>n/o Arlington Avenue</td>
<td>78,600</td>
<td>76.7</td>
<td>78,700</td>
<td>76.7</td>
</tr>
<tr>
<td></td>
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<td>61,700</td>
<td>75.6</td>
<td>62,100</td>
<td>75.6</td>
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<tr>
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<td>n/o Philbin Avenue</td>
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<td>75.3</td>
<td>58,400</td>
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</tr>
<tr>
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<td>56,600</td>
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<tr>
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<tr>
<td></td>
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<td>74.2</td>
</tr>
<tr>
<td></td>
<td>s/o Magnolia Avenue</td>
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<td>75.4</td>
<td>59,500</td>
<td>75.4</td>
</tr>
<tr>
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<td>73.1</td>
<td>35,000</td>
<td>73.1</td>
</tr>
<tr>
<td></td>
<td>e/o Van Buren Boulevard</td>
<td>33,300</td>
<td>72.9</td>
<td>33,500</td>
<td>73.0</td>
</tr>
<tr>
<td>Cypress Avenue</td>
<td>w/o Van Buren Boulevard</td>
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<td>70.7</td>
<td>20,200</td>
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</tr>
<tr>
<td>Jackson Street</td>
<td>e/o Van Buren Boulevard</td>
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<td>69.7</td>
<td>17,000</td>
<td>70.0</td>
</tr>
<tr>
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<td>5,100</td>
<td>64.8</td>
<td>5,200</td>
<td>64.9</td>
</tr>
<tr>
<td></td>
<td>e/o Van Buren Boulevard</td>
<td>2,800</td>
<td>62.2</td>
<td>2,800</td>
<td>62.2</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td>e/o Van Buren Boulevard</td>
<td>1,100</td>
<td>58.1</td>
<td>1,100</td>
<td>58.1</td>
</tr>
<tr>
<td>Wells Avenue</td>
<td>w/o Van Buren Boulevard</td>
<td>10,400</td>
<td>67.9</td>
<td>10,600</td>
<td>68.0</td>
</tr>
<tr>
<td>Colorado Avenue</td>
<td>e/o Van Buren Boulevard</td>
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<td>68.8</td>
<td>12,900</td>
<td>68.8</td>
</tr>
<tr>
<td>California Avenue</td>
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<td>71.5</td>
<td>24,000</td>
<td>71.5</td>
</tr>
<tr>
<td></td>
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<td>28,900</td>
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<td>29,000</td>
<td>72.3</td>
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</table>
### 5.7 Noise

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<th>dBA CNEL</th>
<th>ADT&lt;sup&gt;c&lt;/sup&gt;</th>
<th>dBA CNEL</th>
<th>Project-Specific Increase (dBA CNEL)</th>
</tr>
</thead>
<tbody>
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<td>31,100</td>
<td>72.6</td>
<td>31,300</td>
<td>72.7</td>
<td>0.1</td>
</tr>
</tbody>
</table>

**Notes:**

- <sup>b</sup> Source: ADT from traffic counts collected for several consecutive days in June 2009, while school was in session and during non-holiday days as to procure the most accurate data. Source: Urban Crossroads, *Wal-Mart Traffic Impact Analysis*, October 18, 2010 (Exhibit 5-7, p. 62 minus Project Only ADT)

### 5.7.10 References

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Urban Crossroads, *Wal-Mart Expansion Traffic Impact Analysis*, October 18, 2010 (Revised). (Included as Appendix E of this DEIR.) [Cited as Urban Crossroads]
5.8 **Transportation/Traffic**

This section of the DEIR describes existing and future traffic circulation, and evaluates the impact of the Project on these conditions. The analysis in this section is based on the *Wal-Mart Expansion, Traffic Impact Analysis, City of Riverside, California*, prepared by Urban Crossroads, October 2010 (TIA), which is included as in Appendix E to this DEIR. The TIA was performed in accordance with the *City of Riverside Traffic Impact Analysis Preparation Guide*, May 2009.

Potential impacts related 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;
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- result in inadequate emergency access; and
- conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (included as Appendix A to this DEIR) and are not discussed further in the DEIR. The following discussion addresses whether the Project has the potential to:

- cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., resulting in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or
- 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.

As discussed below, the Projects’ potential to cause a substantial increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., resulting in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections), or 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, is considered to be **less than significant with mitigation incorporated.**
5.8.1 Setting
The Project site includes the existing Walmart store and associated parking lot located at 5200 Van Buren Boulevard, to the west of the intersection of Van Buren Boulevard and Audrey Avenue (Figure 3-3 – Aerial Photograph and Figure 5.8-1 – Study Area Map), in the City of Riverside (City). The existing Walmart store currently has three direct points of access from Van Buren Boulevard (the following roadway references, amongst others, are consistently utilized throughout this section): the N. Project Driveway, Audrey Avenue, and the S. Project Driveway. Both N. Project Driveway and S. Project Driveway currently operate as right-in/right-out cross-street stops. Audrey Avenue currently operates as a signalized, full-access driveway (Urban Crossroads, p. 6).

5.8.1.1 Existing Roadway System
The existing street system in the Project area consists of roadways designated in the City of Riverside General Plan 2025 (GP 2025) Circulation and Community Mobility Element Master Plan of Roadways as Special Boulevards, Arterial Streets, Collector Streets, and Local Streets. Arterial Streets provide sub-regional and local access circulation opportunities, and the Collector Streets provide connecting access from Arterial Streets with Local Streets (GP 2025, p. CCM-10). The Project area street system generally provides two- to four-lanes of travel, and on-street parking is both discouraged and prohibited in most of the area. No freeways or interstates are in close proximity of the Project site. (Urban Crossroads, p. 1)

The existing conditions and proposed future improvements, as identified in GP 2025 Circulation and Community Mobility Element, within the Project area are described below (Urban Crossroads, pp. 18 and 22):

- **Van Buren Boulevard** is currently a 4-lane divided roadway in the Project area between Arlington Avenue and Hayes Street, and currently changes to a 6-lane divided roadway north of Arlington Avenue and south of Hayes Street to State Route 91. Van Buren Boulevard is designated as a Scenic Boulevard, Special Boulevard, Parkway, and a 120-foot Arterial Street. The roadway in the Project area between Arlington Avenue and Hayes Street will eventually be widening to 6-lanes divided roadway with a 120-foot right-of-way. Van Buren Boulevard’s designation requires special landscaping and has planned parkways along both sides. Van Buren Boulevard is planned as a significant parkway that will link neighborhoods along its path to the Santa Ana River and other major regions within the City.

- **Arlington Avenue** is currently a 4-lane divided roadway that is designated as Scenic Boulevard, Special Boulevard, Parkway, and a 120-foot Arterial Street. The segment of Arlington Avenue between Rutland Avenue and Monroe Street (the segment that intersects Van Buren Boulevard) will eventually be widening to 6-lanes divided roadway.

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1 While local streets are within the Study Area, only streets classified as “Collector” or higher are discussed in the TIA.
Figure 5.8-1. Study Area Map

Walmart Expansion DEIR


Not to Scale
- Cypress Avenue/Jackson Street is currently a 4-lane divided roadway west of Van Buren Boulevard that decreases to three undivided lanes east of Van Buren Boulevard. Cypress Avenue/Jackson Street is designated as an Arterial Street (4-lanes divided, 88-foot right-of-way) in the GP 2025 Circulation and Community Mobility Element.

- Philbin Avenue is currently a two-lane undivided roadway west of Van Buren Boulevard and turns into a driveway of a commercial center east of Van Buren Boulevard. Philbin Avenue is designated as a Collector Street (2-lanes divided, 66-foot right-of-way) in the GP 2025 Circulation and Community Mobility Element.

- Wells Avenue/Colorado Avenue is currently a four-lane undivided roadway west of Van Buren Boulevard that decreases to two undivided lanes east of Van Buren Boulevard. Wells Avenue/Colorado Avenue is designated as an Arterial Street (4-lanes divided, 88-foot right-of-way) in the GP 2025 Circulation and Community Mobility Element.

- California Avenue is currently a four-lane divided roadway west of Van Buren Boulevard and a four lane undivided roadway east of Van Buren Boulevard. California Avenue is designated as an Arterial Street (4-lanes divided, 88-foot right-of-way) in the GP 2025 Circulation and Community Mobility Element.

- Magnolia Avenue is currently a four-lane divided roadway on both sides of Van Buren Boulevard. Magnolia Avenue is designed as Scenic Boulevard, Special Boulevard, Parkway, and an Arterial Street, as well as transit- and pedestrian-oriented Mixed Use boulevard with variable widths and design, limited to four travel lanes south and west of Arlington Avenue within a six-lane right-of-way.

The existing number of through lanes for the above streets is shown on Figure 5.8-2 – Existing Number of Through Lanes and Intersection Control.

*Remainder of page intentionally blank*
LEGEND:

- = TRAFFIC SIGNAL
- = STOP SIGN
4 = NUMBER OF LANES
D = DIVIDED
U = UNDIVIDED
RTO = RIGHT TURN OVERLAP
DEF = DEFACTO RIGHT TURN LANE


Figure 5.8-2. Existing Number of Through Lanes and Intersection Control

Walmart Expansion DEIR

Not to Scale
5.8.1.2 Study Area Intersections
The Study Area evaluated in the TIA includes any intersection within a five-mile radius of the Project site consisting of: a Collector Street or a street with a higher classification with another Collector Street or a street with a higher classification, at which the proposed Project will add 50 or more peak-hour trips. In consultation with City staff and the approved TIA Scoping Agreement (included as Appendix 1.1 to the TIA, which is included as Appendix E to this DEIR), the following nine intersections (see Figure 5.8-1 – Study Area Map) were selected for analysis in the TIA (Urban Crossroads, p. 17):

1. Van Buren Boulevard at Arlington Avenue
2. Van Buren Boulevard at Cypress Avenue/Jackson Street
3. Van Buren Boulevard at Philbin Avenue
4. Van Buren Boulevard at N. Project Driveway
5. Van Buren Boulevard at Audrey Avenue
6. Van Buren Boulevard at S. Project Driveway
7. Van Buren Boulevard at Wells Avenue/Colorado Avenue
8. Van Buren Boulevard at California Avenue
9. Van Buren Boulevard at Magnolia Avenue

The existing number of through lanes and controls (i.e., stop sign, traffic signal) for the above Project Study Area intersections are shown on Figure 5.8-2 – Existing Number of Through Lanes and Intersection Control.

5.8.1.3 Existing Traffic Volumes and Operating Conditions
Levels of Service
The TIA and the City use the level of service (LOS) system of categorization to quantify traffic operations and describe how well an intersection or roadway is functioning. LOS measures several factors including operating speeds, freedom to maneuver, traffic interruptions, and average vehicle delay at intersections. The LOS approach uses a ranking system similar to the educational system with level “A” being best and level “F” being worst. The specific LOS definitions are described in Table 5.8-A – LOS Definitions.

<table>
<thead>
<tr>
<th>LOS</th>
<th>Average Total Delay (seconds/vehicle)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Signalized Intersection</strong></td>
<td><strong>Unsignalized Intersection</strong></td>
</tr>
<tr>
<td>A</td>
<td>0 to 10.00</td>
<td>0 to 10.00</td>
</tr>
<tr>
<td>B</td>
<td>10.01 to 20.00</td>
<td>10.01 to 15.00</td>
</tr>
</tbody>
</table>
5.8 Transportation/Traffic

### LOS Definitions

<table>
<thead>
<tr>
<th>LOS</th>
<th>Signalized Intersection</th>
<th>Unsignalized Intersection</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>20.01 to 35.00</td>
<td>15.01 to 25.00</td>
<td>Good operation. The influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. Minor disruptions can cause serious local deterioration in service, and queues will form behind any significant traffic disruption.</td>
</tr>
<tr>
<td>D</td>
<td>35.01 to 55.00</td>
<td>25.01 to 35.00</td>
<td>Fair operation. The ability to maneuver is restricted due to traffic congestion. Travel speed is reduced by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.</td>
</tr>
<tr>
<td>E</td>
<td>55.01 to 80.00</td>
<td>35.01 to 50.00</td>
<td>Poor operation. Operations at or near capacity, an unstable level. Vehicles are operating with the minimum spacing for maintaining uniform flow.</td>
</tr>
<tr>
<td>F</td>
<td>80.01 and up</td>
<td>50.01 and up</td>
<td>Forced or breakdown flow. It occurs either when vehicles arrive at a rate greater than the rate at which they are discharged or when the forecast demand exceeds the computed capacity of a planned facility. Although operations at these points – and on sections immediately downstream – appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.</td>
</tr>
</tbody>
</table>

**Notes:**


### Existing Traffic Volumes

Existing traffic volumes are based on traffic count data collected for several consecutive days in June 2009, while school was in session and during non-holiday days as to procure the most accurate data. Existing (2009) average daily traffic (ADT) volumes\(^2\) on streets within the Project’s Study Area are shown on Figure 5.8–3 – Existing (2009) Average Daily Traffic. Existing peak-hour traffic operations have been evaluated for the Study Area intersections. **Table 5.8–B – Intersection Analysis, Existing (2009) Conditions** presents a summary of this analysis and identifies the traffic control devices at each Study Area intersection.

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\(^2\) Traffic volumes for each leg was calculated using the following formula: \(\text{Peak Hour (Approach Volume + Exit Volume)} \times 12 = \text{Leg Volume}\). The traffic count and capacity calculation worksheets are included as Appendices 3.2 and 3.2 to the TIA, respectively. The TIA is included as Appendix E to this DEIR.
Figure 5.8-3. Existing (2009) Average Daily Traffic


Not to Scale
Table 5.8-B – Intersection Analysis, Existing (2009) Conditions

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>Delay (seconds)</th>
<th>LOS</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlington Avenue</td>
<td>TS</td>
<td>43.6</td>
<td>51.7</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Cypress Avenue/Jackson Street</td>
<td>TS</td>
<td>34.5</td>
<td>40.2</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td>TS</td>
<td>16.7</td>
<td>21.2</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>N. Project Driveway</td>
<td>CSS</td>
<td>11.2</td>
<td>14.7</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td>TS</td>
<td>11.4</td>
<td>17.1</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>S. Project Driveway</td>
<td>CSS</td>
<td>11.1</td>
<td>19.4</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Wells Avenue/Colorado Avenue</td>
<td>TS</td>
<td>29.4</td>
<td>43.8</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>California Avenue</td>
<td>TS</td>
<td>28.3</td>
<td>46.3</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td>TS</td>
<td>33.7</td>
<td>36.2</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>

Notes:

a Source: Urban Crossroads, Wal-Mart Expansion Traffic Impact Analysis, October 18, 2010, Table 3-1, p. 27
b TS = Traffic Signal; CSS = Cross-Street Stop
c Delay and LOS were calculated in the TIA using Traffix (version 8.0, 2008) for signalized and unsignalized intersections. Per the 2000 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.

The City strives to maintain at least a fair operation (LOS D) of its intersections or better on Arterial streets wherever possible, as this level is typically associated with design practice for peak periods and there are no long-standing traffic queues (GP 2025, p. CCM-11). However, at some key locations, such as City arterial roadways which are used as a freeway bypass by regional through traffic and at heavily traveled freeway interchanges, LOS E may be acceptable as determined on a case-by-case basis (GP 2025, p. CCM-11). Locations that may warrant the LOS E standard include portions of Arlington Avenue/Alessandro Boulevard, Van Buren Boulevard throughout the City, portions of La Sierra Avenue and selected freeway interchanges (GP 2025, p. CCM-11). For Local and Collector streets in residential areas, the City strives to maintain at least a good operation (LOS C) of its intersections. As indicated in the above table (Table 5.8-B), all of the Study Area intersections are currently operating at an acceptable LOS during peak hours.

5.8.1.4 Trip Generation

Trip generation represents the amount of traffic that is attracted and produced by a given land use. The Institute of Transportation Engineers (ITE) has developed trip generation factors for a number of uses; however, in certain instances it is more appropriate and accurate to develop a project-specific trip generation factor. For example, if the trip generation factors for Land Use Code 815 (Free Standing Discount Store), as published in ITE’s 8th Edition Trip Generation Manual, are applied to the square
footage of the existing Walmart store and Garden Center, the results indicate there are 139 AM peak hour trips, 656 PM peak hour trips, and 7,506 daily trips attributable to the existing Walmart (Urban Crossroads, pp. 29, 31). However, in utilizing the empirical AM and PM peak hour trip data collected for the existing Walmart, higher trip generation rates than those forecasted in ITE’s 8th Edition Trip Generation Manual are indicated for the existing Walmart store and Garden Center (Urban Crossroads, p. 31). Therefore, a Project site-specific trip generation rate has been created for the existing Walmart that more accurately captures the unique characteristics of its location, proximity to residential uses, proximity to other shopping alternatives, etc. The Project site-specific trip generation rate produces a more conservative estimate of the anticipated increase in vehicle trips due to the proposed store expansion (Urban Crossroads, p. 31).

Project site-specific trip generation rates for the existing Walmart store for the AM and PM peak hours were determined by dividing the traffic count data (collected in 2009) by the square footage of the existing Walmart store and Garden Center (Urban Crossroads, p. 31). Table 5.8-C – Existing Walmart Store Trip Generation, presents the calculated trip generation factors along with the actual AM and PM peak hour trip data.

Table 5.8-C – Existing Walmart Store Trip Generation

<table>
<thead>
<tr>
<th>Size of Existing Store and Garden Center</th>
<th>Unit</th>
<th>Peak Hour Trip Rates</th>
<th>AM</th>
<th>PM</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Walmart Trips</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td>131,127 SF&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--</td>
<td>156</td>
<td>101</td>
<td>257</td>
</tr>
<tr>
<td><strong>Calculated Walmart Specific Trip Rates</strong>&lt;sup&gt;d&lt;/sup&gt;</td>
<td>--</td>
<td>TSF&lt;sup&gt;e&lt;/sup&gt;</td>
<td>1.19</td>
<td>0.77</td>
<td>1.96</td>
</tr>
</tbody>
</table>

Notes:
- <sup>a</sup> Source: Urban Crossroads, Wal-Mart Expansion Traffic Impact Analysis, October 18, 2010, Table 4-3, p. 33
- <sup>b</sup> Count data from June 16, 2009
- <sup>c</sup> Size of existing Walmart store plus Garden Center
- <sup>d</sup> Rates calculated by dividing the number of trips by the square footage of the existing Walmart store. The daily rate is approximately 1.4 times the daily rate for ITE Land Use 815, base on the ratio of the existing counts to the rates for ITE Land Use 815 as discussed on pages 29–34 of the TIA (Appendix E of this DEIR).
- <sup>e</sup> TSF = thousand square feet

Based on the data in Table 5.8-C, above, the existing Walmart generates approximately 9,757 trips-ends per day (131.127 TSF multiplied by 74.41 trip ends per day per TSF) with 257 and 881 trips in the AM and PM peak hours, respectively.

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3 Based on an AM peak hour trip rate of 1.06 trips/SF, PM peak hour trip rate of 5.00 trips/SF, and daily trip rate of 57.24 trips/SF multiplied by 131,127 square feet (the size of the existing Walmart store and the exterior Garden Center).
5.8.1.5 Public Transit System

Bus transit in the vicinity of the Project site is provided by the Riverside Transit Agency (RTA), which operates five routes in the Study Area (Urban Crossroads, p. 24).

- **RTA Route 21**: Mulberry Avenue/Marlay Avenue in the City of Fontana to Galleria Mall at Tyler. Serves the Study Area along Van Buren Boulevard between Audrey Avenue and the S. Project Driveway. There is a bus stop for this route on the west side of Van Buren Boulevard along the Project site’s frontage.

- **RTA Route 15**: Downtown (Riverside) Terminal to Galleria Mall at Tyler. Serves the Study Area along Arlington Avenue.

- **RTA Route 13**: Chicago Avenue/Marlborough Avenue to Galleria Mall at Tyler. Serves the Study Area along Wells Avenue/Colorado Avenue.

- **RTA Route 12**: Stephens Avenue/Center Street to Pierce Street/Sterling Avenue. Serves the Study Area along California Avenue.

- **RTA Route 1**: UCR/Downtown (Riverside) Terminal to West Corona Metrolink station. Serves the Study Area along Magnolia Avenue.

5.8.2 Comments Received in Response to the Initial Study/Notice of Preparation

One comment letter was received regarding Transportation/Traffic in response to the IS/NOP for this Project. The comment letter was received from RTA and is included as Appendix A to this DEIR. The following is a summary of the comment letter:

RTA’s letter, dated November 23, 2010, was received from Mark Stanley, Director of Planning, at RTA’s office located at 1825 Third Street, Riverside, California 92517. The letter states RTA currently serves the Project site with a bus stop on the west-hand side of Van Buren Boulevard. RTA believes the Project is a potential destination for its patrons, and thus, public transportation should be considered with the Project. RTA provides bus stop design recommendations to accommodate a large transit bus. Additionally, RTA states the scope and details of the bus stop design can be determined at a later date, and provides the web address for technical information. Lastly, RTA states that public transit can serve as a mitigation measure to decrease vehicle traffic.

RTA’s comment is regarding Project design as it relates to an existing bus stop. As discussed in the Project’s IS/NOP (included as Appendix A to this DEIR) and in Section 4.1.15.4 (Environmental Effects Found Not to be Significant, Alternative Transportation), implementation of the Project will not conflict with any policies, plans, or programs that support alternative transportation, such as buses. As stated in Table 4-A – Summary of Comments Received in Response to the IS/NOP, Walmart (the Project Applicant) will work with the City and RTA regarding appropriate bus stop amenities for the Project.

Because RTA’s letter does not identify any new environmental issues or request reconsideration of the determination that potential impacts to transit will be less than significant, this topic will not be discussed further in the DEIR.
5.8.3 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, the City’s “Environmental Checklist” for the Project (see Appendix A to this DEIR) indicates that impacts related to Transportation/Traffic may be considered potentially significant if the Project would:

- cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); and/or
- 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.

5.8.4 Related Regulations

5.8.4.1 Congestion Management Program

Riverside County Transportation Commission (RCTC) is designated as the Congestion Management Agency (CMA) to oversee the Congestion Management Program (CMP) (GP 2025, p. CCM-7). RCTC approved a modification of the CMP Land Use Coordination Element that included the elimination of the Traffic Impact Assessment report process and replaced it with an Enhanced Traffic Monitoring System. Prior to this modification of the CMP, a Traffic Impact Assessment had to be prepared consistent with the CMP/Local Agency Guidelines whenever a proposed development generated greater than 200 peak hour trips. However, as of July 1, 1997, assessing these impacts consistent with the CMP guidelines is no longer required by RCTC. Therefore, although the City’s Environmental Checklist includes a reference to CMA LOS, for the purposes of this analysis, the GP 2025 will be used as the guiding document for acceptable LOS, against which impacts are measured.

5.8.4.2 Western Riverside County Transportation Uniform Mitigation Fee

In 2002, the jurisdictions of western Riverside County, including the City agreed to participate in the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) program. TUMF is a multi-jurisdictional impact fee program administered by the Western Riverside Council of Governments (WRCOG) that funds transportation improvements on a regional and sub-regional basis associated with new growth. All new development in each of the participating jurisdictions is subject to TUMF, based on the proposed intensity and type of development. (GP 2025, p. CCM-6)

TUMF program guidelines and implementation strategies are handled on an iterative basis. Fees submitted to the City are passed on to WRCOG as the ultimate program administrator, and distributed on a formula basis to the regional, local, and transit components of the program (Urban Crossroads, p. 110). Of the TUMF funds received by WRCOG, 2.6 percent is allocated to RTA for making regional transit improvements, 48.7 percent is allocated to RCTC for programming improvements to the arterials of regional significance on the Regional System of Highways and Arterials, and 48.7 percent is allocated to the five zones for programming improvements to the Regional System of Highways and Arterials (RSHA) as determined by the respective zone committees (TUMF AP, p. 7).
RSHA is the system of roadways that serve inter-community trips within western Riverside County and therefore are eligible for improvement funding with TUMF funds (TUMF Nexus 2009, p. 16). RSHA for western Riverside County was identified based on several transportation network and performance guidelines as follows:

- Arterial highway facilities proposed to have a minimum of four lanes at ultimate build-out (not including freeways);
- Facilities that serve multiple jurisdictions and/or provide connectivity between communities both within and adjoining western Riverside County;
- Facilities with forecast traffic volumes in excess of 20,000 vehicles per day by 2035;
- Facilities with forecast volume to capacity ratio of 0.90 (LOS E) or greater in 2035;
- Facilities that accommodate regional fixed route transit services;
- Facilities that provide direct access to major commercial, industrial, institutional, recreational, or tourist activity centers, and multi-modal transportation facilities (such as airports, railway terminals, and transit centers) (TUMF Nexus 2009, p. 16).

Specific transportation improvement projects are identified by WRCOG’s Public Works Committee, which is responsible for developing objective criteria for project selection and prioritization including, but not limited to, the following factors: traffic safety issues potentially created by growth, regional significance, availability of matching funds, mitigation of congestion created by new development, system continuity, geographic balance, project readiness, and completed projects with reimbursement agreements (TUMF AP, p. 12). Recommendations of the Public Works Committee are then submitted to WRCOG’s Technical Advisory Committee, which are then submitted to WRCOG’s Executive Committee (TUMF AP, p. 18). The Executive Committee is responsible for reviewing and acting on recommendations for project selection and prioritization of the Regionally Significant Arterials, 10-year Strategic Plan, and the Transportation Improvement Program (TUMF AP, p. 11).

The City participated in the preparation of the *Western Riverside County Transportation Uniform Fee Nexus Study* (dated October 18, 2002) and adopted TUMF fees based on that study. The City also participated in the preparation of an updated nexus study titled *Transportation Uniform Mitigation Fee Nexus Study: 2009 Update*. Due to the impacts of the economic recession on construction and development in Western Riverside County, the City determined that a temporary 50 percent reduction of the TUMF fees identified in the *Transportation Uniform Mitigation Fee Nexus Study: 2009 Update* would encourage development and assure that each development continues to contribute to its fair share of TUMF program costs. The reduction in TUMF fees was to be effective through December 31, 2010. (RMC Chapter 16.68, Section 16.68.020). On February 15, 2011, the City Council adopted Ordinance No. 7119 and extended the reduction in TUMF fees from January 1, 2011 through December 31, 2011, or as otherwise specified in the Ordinance (Ord. 7119).
Projects identified within the TUMF program include widening Van Buren Boulevard to 6 lanes between State Route 91 and State Route 60, including the Project frontage and Study Area (Urban Crossroads, p. 110). A portion of this segment was recently improved using TUMF program funds. Construction of through lane improvements adjacent to the Project may be eligible for TUMF credit/reimbursement. The proposed Project will participate in the TUMF program through the payment of mitigation fees based on the current fee schedule in effect at time of Payment. Payment is due prior to the final inspection for the proposed expansion (RMC Chapter 16.68, Section 16.68.060).

5.8.4.3 Traffic Signal and Railroad Signal Mitigation Fees and Transportation Impact Fees
The City’s local development impact fee (DIF) related to transportation improvements is set forth in Chapter 16.64 of the Riverside Municipal Code. This DIF is comprised of two components: the Traffic Signal and Railroad Signal Mitigation Fee and the Transportation Impact Fee, which together address local transportation needs throughout the City (Urban Crossroads, p. 110). New nonresidential development in the City is subject to the Traffic Signal and Railroad Signal Mitigation Fee component, but is not assessed in the Transportation Impact Fee component (RMC Chapter 16.64). The City is responsible for maintaining, administering, and updating the DIF program as appropriate. The program was last updated in 2006 except for the traffic and transportation components which remain unchanged. Currently, there are no immediate plans to update the City’s transportation related DIF (Urban Crossroads, p. 110).

The proposed Project will pay the Traffic Signal and Railroad Signal Impact Fee based on the current fee schedule in effect at time of payment. Payment is due prior to the final inspection for the proposed expansion (RMC Chapter 16.64, Section 16.64.030).

5.8.4.4 City of Riverside General Plan 2025 Circulation and Community Mobility Element
The Circulation and Mobility Element of the GP 2025 identifies LOS D or better as the desired performance standard for arterial streets, whenever possible. The GP 2025 further indicates that LOS E may be warranted, based on a case-by-case evaluation, at certain key locations such as portions of Arlington Avenue\Alessandro Boulevard, Van Buren Boulevard, portions of La Sierra Avenue, and selected freeway interchanges. (GP 2025, p. CCM-11)

The GP 2025 sets forth policies and goals for a transportation network consisting of freeways, streets, bike parks, railways, and airports that provide circulation within the City and access to areas outside the City. The following policies and objectives from the GP 2025 are applicable to the proposed Project.

**Circulation and Community Mobility Element (CCM)**

<table>
<thead>
<tr>
<th>Policy CCM-2.1</th>
<th>Complete the Master Plan of Roadways shown on Figure CCM-4 (Master Plan of Roadways)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy CCM-2.2</td>
<td>Balance the need for free traffic flow with economic realities and environmental and aesthetic considerations, such that streets are designed to handle normal traffic flows with tolerances to allow for potential short-term delays at peak-flow hours.</td>
</tr>
</tbody>
</table>
Policy CCM-2.3
Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

Policy CCM-10.2
Incorporate bicycle and pedestrian trails and bicycle racks in future development projects.

Policy CCM-10.11
Provide sufficient paved surface width to enable bicycle traffic to share the road with motor vehicles where traffic volumes and conditions warrant.

Objective CCM-13
Ensure that adequate on- and off-street parking is provided throughout Riverside.

Policy CCM-13.1
Ensure that new development provides adequate parking.

The Project accommodates Policy CCM-1 by taking into consideration the widening of Van Buren Boulevard as envisioned in the Master Plan of Roadways. The Project also includes a façade improvement on the building’s east elevation (which fronts Van Buren Boulevard) that is reflective of this street’s scenic boulevard designation (see Section 5.1.5 Aesthetics). Implementation of the Project will not conflict with the performance criteria identified in Policies CCM-2.2, CCM-2.3, and CCM-10.11 as discussed in Section 5.8.6 (Environmental Impacts before Mitigation). The Project will implement Policies CCM-10.2 and CCM-10.11 by constructing a sidewalk on the west side of Van Buren Boulevard and by including bicycle racks on the Project site. The Project includes adequate on-site parking as required by the City Municipal Code, and will thus implement Objective CCM-13 and Policy 13.1.

5.8.4.5 Neighborhood Traffic Management Program
As traffic volumes and congestion have increased on the major regional roadways, drivers looking to reduce their travel times begin to look at alternative routes using the local street system to avoid problem areas. This neighborhood intrusion by “cut-through” traffic has become a growing concern for some residential areas. The City has an active Neighborhood Traffic Management Program to minimize and/or prevent intrusion of regional cut-through traffic into residential neighborhoods through traffic management and traffic calming strategies, and to improve the livability of neighborhoods through controlling the impacts of outside traffic. The strategies include speed control methods, parking restrictions, speed humps, pedestrian safety improvements, and sight obstruction elimination. (GP 2025, p. CCM-22)

5.8.4.6 Traffic Signal Warrants
The California Manual on Uniform Traffic Control Devices (MUTCD) states that the satisfaction of a traffic signal warrant or warrants shall not, in and of itself, require the installation of a traffic control signal. Peak-hour traffic signal warrant analysis should only be considered as an “indicator” of the likelihood of an un-signalized intersection warranting a traffic signal. Intersections that exceed the peak-hour warrant are more likely to meet one or more of the other volume-based signal warrants. MUTCD also advises that a traffic control signal should not be installed unless:
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- one or more of the traffic signal warrants is satisfied;
- an engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection; and
- it will not seriously disrupt progressive traffic flow.

All of the existing study intersections are signalized, with the exception of the N. Project Driveway and S. Project Driveway, which currently operate as cross-street stops with right-in/right-out access only. The Project proposes installation of a traffic signal at the S. Project Driveway. No changes to the N. Project Driveway are proposed and it will remain as cross-street stop with right-in/right-out access only. For these reasons, the TIA did not include a traffic signal warrant analysis. (Urban Crossroads, p. 14)

5.8.4.7 **Significance Criteria per the City of Riverside Public Works Department Traffic Impact Analysis Preparation Guide**

Consistent with Exhibit F of the *City of Riverside Public Works Department Traffic Impact Analysis Preparation Guide*, September 2011, the TIA used LOS D as the target threshold to be maintained for all Study Area intersection analysis locations of Collector streets or higher classification streets, and LOS C as the target threshold to be maintained at all other street intersections. Intersections that operate at LOS E or LOS F are considered to be deficient, with the exception of key locations such as City Arterials that are used by regional freeway bypass traffic, and at heavily traveled freeway intersections, which allow LOS E at peak hours as accepted by City staff on a case-by-case basis. (Urban Crossroads, p. 10)

As described on the aforementioned Exhibit F, for projects that propose uses or intensities above that contained in the GP 2025, a significant impact would occur at a study intersection if the addition of Project-generated trips to existing traffic volumes causes either the peak-hour LOS to degrade from acceptable (LOS A through LOS D) to unacceptable (LOS E or LOS F), or if peak-hour delays resulting from Project traffic conditions increase by the following values (Urban Crossroads, p. 10):

- LOS A/B = 10.0 seconds
- LOS C = 8.0 seconds
- LOS D = 5.0 seconds
- LOS E = 2.0 seconds
- LOS F = 1.0 seconds

Additionally, the City requires that analysis of the GP 2025 traffic conditions be assessed utilizing the link-level buildout traffic projections4 from the *City of Riverside General Plan 2025 Program Transportation Study*, prepared by Meyer, Mohaddes Associates, May 2007 (Revised) (Urban Crossroads, p. 15). Details of how the TIA used the aforementioned link-level buildout projects are presented on pages 15–16 of the TIA (included as Appendix E to this DEIR).

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4 “Link-level buildout traffic projects” refers to volumes on roadway segments at buildout per the GP 2025. A link-level analysis evaluates roadway segments instead of the intersection operations. This is the protocol for traffic analysis selected by the City.
5.8.5 Project Design Considerations

With implementation of the Project, the N. Project Driveway is anticipated to remain as a right-in/right-out access, primarily for heavy truck deliveries to the loading docks located on the north side of the existing Walmart store. Audrey Avenue is proposed to be reconfigured to right-in/right-out/left-out access only. The S. Project Driveway is proposed to be reconfigured to a signalized right-in/left-in/right-out access only intersection. Patrons are anticipated to utilize the driveway at Audrey Avenue and the S. Project Driveway to access the Project site; thus, the S. Project Driveway is designed to serve as the main entry to the Project site, for vehicles approaching from the south. Further, the internal drive aisle at the S. Project Driveway will extend beyond its current terminus at the first crossing drive aisle, which leads to the off-site McDonald’s restaurant. The S. Project Driveway will extend from Van Buren Boulevard to the western Project site boundary, dividing the internal parking aisles into two sections (north and south of S. Project Driveway) to improve on-site vehicular circulation. Additionally, the parking lot will be restriped to provide 45 degree angled parking and extended drive aisles to better accommodate on-site traffic flow. (Urban Crossroads, pp. 4–6)

5.8.6 Environmental Impacts before Mitigation

This section includes a summary of the methodology used by the TIA for traffic projections followed by a discussion of Project impacts.

5.8.6.1 Traffic Projections

Traffic projections in the TIA considered several factors such as: ambient growth, trip generation, trip distribution, and trip assignment. Understanding these factors is important in order to properly analyze the Project’s contribution to traffic load and capacity.

Ambient Growth

Ambient or background growth accounts for unknown area growth in traffic volumes due to development outside of the Study Area and general growth resulting in traffic due to changes in neighboring communities that cannot be accurately modeled. As directed by City Public Works Department Traffic Engineering Section, future scenario traffic analyses in the TIA are based on three years of ambient growth assuming 2.5 percent per year (Urban Crossroads, p. 6). A 2.5 percent ambient growth rate represents an approximate median of regional growth derived from WRCOG’s TUMF Nexus Study 2009 Update, which projected an approximately 1.7 percent annual increase in population and an approximately 2.7 percent annual increase in employment in western Riverside County from 2007 to 2035 (TUMF Nexus 2009, p. iv). Therefore, the total ambient growth rate is approximately 7.67 percent for 2012 conditions (Urban Crossroads, p. 6). The ambient growth rate is applied to existing traffic volumes to account for area-wide growth that is not reflected by cumulative development projects. Further, ambient growth has been added to daily and peak-hour traffic volumes on surrounding roadways in addition to traffic generated by the Project. The remaining growth is anticipated to be accounted for by development of future projects in the Study Area that have been approved and/or being processed concurrently.
Trip Generation
As discussed in Section 5.8.1.4 (Existing Conditions, Trip Generation) and shown in Table 5.8-C – Existing Walmart Store Trip Generation, trip generation factors specific to the existing Walmart were calculated. Because these factors provide a more accurate representation of Project-related trips, they were used in the TIA.

Trip Distribution
Trip distribution represents the directional orientation of traffic travelling to and leaving from the Project site. Trip distribution is heavily influenced by the geographical location of the site, the location of nearby residential and office uses, and the proximity to the regional freeway system. (Urban Crossroads, p. 35)

The TIA determined the directional orientation of traffic by evaluating existing and proposed land uses, existing and proposed streets, and existing traffic volumes within the vicinity of the Project site. The distribution of Project traffic, north and south on Van Buren Boulevard, is based on driveway count data collected in June 2009 (Urban Crossroads, p. 35). Figure 5.8-4 – Project Trip Distribution shows the proposed Project’s trip distribution in terms of the percentage of trips to and from the Project site.

Trip Assignment
To determine the impact of Project-related trips on Study Area streets and intersections, the TIA assigned Project-related traffic to the adjoining roadway system based on the Project’s trip generation, trip distribution (Figure 5.8-4), and the proposed arterial highway and local street systems that would be in place at Project opening.
Figure 5.8-4. Project Trip Distribution

Walmart Expansion DEIR

LEGEND:
10 = PERCENT TO/FROM PROJECT


Not to Scale
### 5.8.6.2 Project Impacts

Due to the repetitive nature of the information and analysis presented herein, the two thresholds being addressed in this DEIR have been combined, as presented below, and are analyzed simultaneously.

**Threshold:** Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or 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.

For the purposes of this threshold, an impact will be considered “substantial” if the Project contributes to a LOS D exceedance on a City-maintained intersection within the Project’s Study Area, unless the City determines that LOS E is acceptable per GP 2025 Circulation and Mobility Element Policy CCM-2.3 or if peak-hour delays resulting from Project traffic conditions exceed the standards set forth in the *City of Riverside Public Works Department Traffic Impact Analysis Preparation Guide*. Further, it is assumed that the Project has an opening year of 2012. (*Urban Crossroads*, p 6)

**Project Construction**

The proposed Project may temporarily impact traffic if any lane on Van Buren Boulevard must be blocked due to construction activities.

**Project Trip Generation**

Implementation of the proposed Project will result in a 22,272-SF expansion of the existing Walmart store resulting in a 153,399-SF store with a 28,036-SF grocery sales area. Using the Project-specific trip generation rates identified in Table 5.8-C – *Existing Walmart Store Trip Generation*, the proposed Project is projected to generate approximately 1,657 ADTs with 44 and 149 additional ADTs during the AM and PM peak hours, respectively (*Urban Crossroads*, p. 35) as shown below in Table 5.8-D – *Project Trip Generation*.

#### Table 5.8-D – Project Trip Generation \(^a\)

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Unit</th>
<th>AM</th>
<th></th>
<th>PM</th>
<th></th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>In</td>
<td>Out</td>
<td>Total</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Calculated Walmart Specific Trip Rates (^b)</td>
<td>1.19</td>
<td>0.77</td>
<td>1.96</td>
<td>3.43</td>
<td>3.29</td>
<td>6.72</td>
<td>74.41</td>
</tr>
<tr>
<td>Proposed Project Expansion</td>
<td>22.272</td>
<td>TSF</td>
<td>27</td>
<td>17</td>
<td>44</td>
<td>76</td>
<td>73</td>
</tr>
</tbody>
</table>

**Notes:**

\(^a\) Source: *Urban Crossroads, Wal-Mart Expansion Traffic Impact Analysis*, October 18, 2010, Table 4-5, p. 36

\(^b\) Rates per Table 5.8-C – *Existing Walmart Store Trip Generation*
Figure 5.8-5 – Project (2012) Average Daily Traffic shows the distribution of these trips on Study Area streets.

A Project-specific trip generation factor for the Saturday peak hour was established and used to estimate Project-related trips. Table 5.8-E – Saturday Trip Generation Summary indicates the process by which trip generation for the Saturday peak hour was established, along with the resulting trips utilized in this analysis. The Saturday trip rate was determined by comparing the weekday and Saturday empirical count data.

<table>
<thead>
<tr>
<th>Table 5.8-E – Saturday Trip Generation Summary&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weekday versus Weekend Count Data</strong></td>
</tr>
<tr>
<td>Weekday Count Data</td>
</tr>
<tr>
<td>Saturday Count Data</td>
</tr>
<tr>
<td>(A) Saturday Counts divided by Weekday Counts</td>
</tr>
<tr>
<td><strong>Weekday PM Trip Generation Rates for Project</strong></td>
</tr>
<tr>
<td><strong>Saturday Trip Generation Rates for Project</strong></td>
</tr>
<tr>
<td><strong>Saturday Trip Generation for Project</strong></td>
</tr>
</tbody>
</table>

Notes:
<sup>a</sup> Source: Urban Crossroads, Wal-Mart Expansion Traffic Impact Analysis, October 18, 2010, Table 4-6, p. 37
<sup>b</sup> TSF = thousand square feet
<sup>c</sup> Rates per Table 5.8-C – Existing Walmart Store Trip Generation

As shown on Table 5.8-E, the proposed Walmart expansion is estimated to generate approximately 174 additional vehicles during the Saturday peak hour.
Figure 5.8-5. Project (2012) Average Daily Traffic


Not to Scale
Level of Service
Future roadway intersection performance is determined by evaluating existing traffic conditions (Table 5.8-B – Intersection Analysis, Existing (2009) Conditions) and comparing those results to future scenarios. Project-specific impacts were determined by comparing future scenarios that do not include Project traffic to scenario results that do include Project traffic. The following scenarios are evaluated in the TIA and discussed in this section of the DEIR:

- existing (baseline) plus Project (E+P);
- existing plus traffic from ambient growth (ambient) plus Project (E+A+P) for both the weekday and weekend peak period;
- existing plus ambient plus Project plus traffic from cumulative development projects (E+A+P+C);\(^5\)
- the GP 2025 Buildout; and
- the GP 2025 Buildout plus Project (GP 2025 Buildout+P).

Existing Plus Project (E+P) Intersection Analysis and ADT
Intersection LOS for the Study Area intersections assuming the E+P condition with and without proposed improvements, discussed previously in Section 5.8.5 Project Design Considerations, are shown in Table 5.8-F – Intersection Analysis, Existing (2009) plus Project Conditions (E+P).

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status(^a)</th>
<th>Delay (seconds)(^b)</th>
<th>LOS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
</tr>
<tr>
<td>Arlington Avenue</td>
<td>without improvements</td>
<td>TS</td>
<td>43.6</td>
<td>53.2</td>
</tr>
<tr>
<td>Cypress Avenue/Jackson Street</td>
<td>without improvements</td>
<td>TS</td>
<td>34.6</td>
<td>40.9</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td>without improvements</td>
<td>TS</td>
<td>16.8</td>
<td>21.4</td>
</tr>
<tr>
<td>N. Project Driveway</td>
<td>without proposed improvements</td>
<td>Intersection improvements do not exist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with proposed improvements(^b)</td>
<td>CSS</td>
<td>10.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td>without proposed improvements</td>
<td>Intersection improvements do not exist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with proposed improvements(^b)</td>
<td>TS</td>
<td>6.0</td>
<td>9.5</td>
</tr>
<tr>
<td>S. Project Driveway</td>
<td>without improvements</td>
<td>TS</td>
<td>8.2</td>
<td>12.9</td>
</tr>
</tbody>
</table>

\(^a\) Cumulative development projects account for other approved and pending projects located within the Project’s vicinity.
### Section 5 Environmental Impact Analysis

#### 5.8 Transportation/Traffic

**City of Riverside Walmart Expansion DEIR**

### Table 5.8-24

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>Delay (seconds)</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wells Avenue/Colorado Avenue</td>
<td>TS</td>
<td>29.7</td>
<td>45.8</td>
</tr>
<tr>
<td>California Avenue</td>
<td>TS</td>
<td>28.4</td>
<td>47.2</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td>TS</td>
<td>33.7</td>
<td>36.3</td>
</tr>
</tbody>
</table>

**Notes:**


b. “Improvements” as used in this column refer to improvements that are a part of the Project design considerations discussed previously in Section 5.8.5; these are not mitigated improvements.

c. TS = Traffic Signal; CSS Cross-Street Stop

d. Delay and LOS were calculated in the TIA using Traffix (version 8.0, 2008) for signalized and unsignalized intersections. Per the 2000 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.

As indicated in the above table, the off-site Study Area intersections are projected to operate at acceptable LOS during the peak hours with existing geometrics (i.e., without any improvements) under the E+P scenario.

The ADT volumes that would occur under the E+P conditions are presented on **Figure 5.8-6 – Existing plus Project Average Daily Traffic**.

*Remainder of page intentionally blank*
Figure 5.8-6. Existing Plus Project Average Daily Traffic

Legend:

10,000 = Vehicles per Day (1000's)


Not to Scale
**Existing Plus Project (E+P) Determination of Impact Significance**

Table 5.8-G – Determination of Impact Significance, Existing (2009) plus Project Conditions provides a summary of the Study Area intersection performance results for the E+P scenario in relation to the LOS thresholds and the significance criteria set forth in the City of Riverside Public Works Department Traffic Impact Analysis Preparation Guide as previously discussed in Section 5.8.4.4, above.

### Table 5.8-G – Determination of Impact Significance, Existing (2009) plus Project Conditions

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>Delay&lt;sup&gt;c&lt;/sup&gt; (seconds)</th>
<th>LOS</th>
<th>Delay&lt;sup&gt;c&lt;/sup&gt; (seconds)</th>
<th>LOS</th>
<th>Change in Delay (seconds)</th>
<th>Significant Impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Arlington Avenue</td>
<td>TS</td>
<td>43.6</td>
<td>51.7</td>
<td>D</td>
<td>D</td>
<td>43.6</td>
<td>53.2</td>
</tr>
<tr>
<td>Cypress Avenue/Jackson Street</td>
<td>TS</td>
<td>34.5</td>
<td>40.2</td>
<td>C</td>
<td>D</td>
<td>34.6</td>
<td>40.9</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td>TS</td>
<td>16.7</td>
<td>21.2</td>
<td>B</td>
<td>C</td>
<td>16.8</td>
<td>21.4</td>
</tr>
<tr>
<td>N. Project Driveway&lt;sup&gt;d&lt;/sup&gt;</td>
<td>CSS</td>
<td>11.2</td>
<td>14.7</td>
<td>B</td>
<td>B</td>
<td>10.1</td>
<td>11.9</td>
</tr>
<tr>
<td>Audrey Avenue&lt;sup&gt;d&lt;/sup&gt;</td>
<td>TS</td>
<td>11.4</td>
<td>17.1</td>
<td>B</td>
<td>B</td>
<td>6.0</td>
<td>9.5</td>
</tr>
<tr>
<td>S. Project Driveway&lt;sup&gt;d&lt;/sup&gt;</td>
<td>CSS/TS</td>
<td>11.1</td>
<td>19.4</td>
<td>B</td>
<td>C</td>
<td>8.2</td>
<td>12.9</td>
</tr>
<tr>
<td>Wells Avenue/Colorado Avenue</td>
<td>TS</td>
<td>29.4</td>
<td>43.8</td>
<td>C</td>
<td>D</td>
<td>29.7</td>
<td>45.8</td>
</tr>
<tr>
<td>California Avenue</td>
<td>TS</td>
<td>28.3</td>
<td>46.3</td>
<td>C</td>
<td>D</td>
<td>28.4</td>
<td>47.2</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td>TS</td>
<td>33.7</td>
<td>36.2</td>
<td>C</td>
<td>D</td>
<td>33.7</td>
<td>36.3</td>
</tr>
</tbody>
</table>

Notes:


b TS = Traffic Signal; CSS = Cross-Street Stop; TS = new traffic signal.

c Delay and LOS were calculated in the TIA using Traffic (version 8.0, 2008) for signalized and un-signalized intersections. Per the 2000 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.

d Additional Project-proposed improvements or improvements associated with the widening of Van Buren Boulevard are assumed at the Project driveways for existing plus Project conditions; these include roadway half-section and site access improvements.

As shown in Table 5.8-G, it is anticipated that the LOS at each intersection would remain unaffected due to the addition of Project traffic as compared to existing conditions. With respect to any change in delay, the three on-site Project intersections (N. Project Driveway, Audrey Avenue, and S. Project Driveway) will experience reduced delay and the change in delay for the off-site Study Area intersections is no greater than two seconds. Thus, there are no significant impacts anticipated at any of the off-site Study Area intersections under the E+P scenario.

**Existing plus Ambient Growth Conditions (2012) – With Project (E+A+P)**

The ADT volumes that would occur under existing plus ambient plus Project (E+A+P) conditions are presented on Figure 5.8-7 – Existing plus Ambient Growth plus Project Average Daily Traffic.
Intersection LOS under E+A+P conditions are shown in **Table 5.8-H – Intersection Analysis, Existing plus Ambient Growth (2012) plus Project Conditions.**

### Table 5.8-H – Intersection Analysis, Existing plus Ambient Growth (2012) plus Project Conditions

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>Delay (seconds)</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Arlington Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>48.1</td>
<td>60.4</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>39.0</td>
<td>53.5</td>
</tr>
<tr>
<td>Cypress Avenue/Jackson Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>36.6</td>
<td>43.9</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>16.8</td>
<td>22.2</td>
</tr>
<tr>
<td>N. Project Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with proposed improvements</td>
<td>CSS</td>
<td>10.2</td>
<td>12.3</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with proposed improvements</td>
<td>TS</td>
<td>6.1</td>
<td>10.1</td>
</tr>
<tr>
<td>S. Project Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with proposed improvements</td>
<td>TS</td>
<td>8.3</td>
<td>13.4</td>
</tr>
<tr>
<td>Wells Avenue/Colorado Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>30.8</td>
<td>53.7</td>
</tr>
<tr>
<td>California Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>30.0</td>
<td>56.5</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>28.2</td>
<td>54.0</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>34.9</td>
<td>38.7</td>
</tr>
</tbody>
</table>

**Notes:**

- b "Improvements" referenced in this column refers to proposed Project design considerations discussed previously in Section 5.8.5; these are not mitigated improvements.
- c TS = Traffic Signal; CSS = Cross-Street Stop; TS = New Traffic Signal
- d Delay and LOS were calculated in the TIA using Traffix (version 8.0, 2008) for signalized and unsignalized intersections. Per the 2000 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.
Figure 5.8-7. Existing Plus Ambient Growth
Plus Project Average Daily Traffic


Not to Scale
Under the E+A+P traffic scenario, two off-site Study Area intersections are projected to operate at unacceptable LOS during the peak hours with existing geometrics.

- Van Buren Boulevard at Arlington Avenue is projected to operate at LOS E during the PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

- Van Buren Boulevard at California Avenue is projected to operate at LOS E during the PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

As previously shown in Table 5.8-B – Intersection Analysis, Existing (2009) Conditions and Table 5.8-F – Intersection Analysis, Existing (2009) plus Project Conditions (E+P), all Study Area intersections will continue to operate at an acceptable LOS for both the AM and PM peak periods. It is the inclusion of non-Project related traffic resulting from ambient growth combined with Project traffic that results in an unacceptable LOS for the intersections of Van Buren Boulevard at Arlington Avenue and Van Buren Boulevard at California Avenue under the existing geometrics for those intersections.

**Weekend Peak Period Existing plus Ambient Growth Conditions – With Project (E+A+P)**

Project-related traffic impacts at the three Project driveways (i.e., N. Project Driveway, Audrey Avenue, and S. Project Driveway) for the weekend peak period were determined for the E+A+P scenario using the trip generation factors identified in Table 5.8-E – Saturday Trip Generation Summary and the trip distribution shown on Figure 5.8-4 – Project Trip Generation. The results of this analysis is summarized in Table 5.8-I – Intersection Analysis for Weekend, Existing plus Ambient Growth (2012) plus Project Conditions.

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>Delay (seconds)</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. Project Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td>Intersection improvements do not exist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with proposed improvements$^a$</td>
<td>CSS</td>
<td>12.3</td>
<td>B</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td>Intersection improvements do not exist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with proposed improvements$^a$</td>
<td>TS</td>
<td>11.2</td>
<td>B</td>
</tr>
</tbody>
</table>

Table 5.8-I – Intersection Analysis for Weekend, Existing plus Ambient Growth (2012) plus Project Conditions$^a$ (E+A+P)
As shown on Table 5.8-I, all three of the Project’s driveways are projected to operate at acceptable LOS during the weekend peak hour for the E+A+P condition. Thus, no improvements beyond what are proposed by the Project and discussed in Section 5.8-5 (Project Design Considerations) are required.

Existing plus Ambient Growth plus Cumulative Projects Conditions (2012) – With Project (E+A+C+P)

Pursuant to State CEQA Guidelines Section 15130, an EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable. To ascertain Project impacts to Study Area intersections and streets in combination with other approved and pending projects in the vicinity, an analysis of the existing traffic, plus traffic from ambient growth, plus traffic from cumulative development projects, plus Project traffic (E+A+C+P) was performed.

In order to comply with State CEQA Guidelines Section 15130(b)(1)(A), a list of past, present, and probable future projects that have the potential to be cumulatively considerable was produced by the City with 12 identified cumulative development. Cumulative development projects were selected based on their proximity to the Project site and because each cumulative project is anticipated to contribute traffic to one or more of the Study Area intersections (Urban Crossroads, p. 39). The 12 cumulative projects were used in the E+A+C+P scenario are shown on Figure 5.8-8 – Cumulative Development Project Location and listed in Table 5.8-J – Cumulative Development Trip Generation. Of these cumulative projects, all have been approved by the City. Specifically, Telacu Housing and Leilani Alejandro (office) have been constructed and are operational; Snowberry Creek Apartments and Walgreens are currently under construction; and California Baptist University’s student housing facility, Magnolia Avenue Baptist Church’s expansion, Fresh & Easy market, Magnolia Square, Cinnamon Creek Apartments, Bruce Karish (warehouse), William Fox Group (warehouse), and Maxi-Foods Supermarket are not yet under construction.
Figure 5.8-8. Cumulative Development Location Map

Walmart Expansion DEIR

Legend

Development Locations

1 - California Baptist University
2 - Magnolia Avenue Baptist Church
3 - Fresh and Easy
4 - Magnolia Square
5 - Cinnamon Creek Apartments
6 - Telacu Housing
7 - Snowberry Creek Apartments
8 - Leilani Alejandro (Office)
9 - Bruce Karish (Warehouse)
10 - William Fox Group (Warehouse)
11 - Walgreens
12 - Maxi-Foods Supermarket

Source: City of Riverside, Community Development Dept., 2011
Table 5.8-J – Cumulative Development Trip Generation\(^a\)

<table>
<thead>
<tr>
<th>Cumulative Projects</th>
<th>Peak Hour Trips(^b)</th>
<th>Daily(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>ID(^c) and Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 California Baptist University</td>
<td>Student Housing Facility</td>
<td>662</td>
</tr>
<tr>
<td>2 Magnolia Avenue Baptist Church</td>
<td>Church</td>
<td>62.8</td>
</tr>
<tr>
<td>3 Fresh &amp; Easy</td>
<td>Supermarket</td>
<td>15.011</td>
</tr>
<tr>
<td>4 Magnolia Square</td>
<td>Commercial Retail</td>
<td>4.52</td>
</tr>
<tr>
<td>5 Cinnamon Creek</td>
<td>Apartments</td>
<td>95</td>
</tr>
<tr>
<td>6 Telacu Housing (Senior)(^e)</td>
<td>Apartments</td>
<td>75</td>
</tr>
<tr>
<td>7 Snowberry Creek (Senior)(^e)</td>
<td>Apartments</td>
<td>224</td>
</tr>
<tr>
<td>8 Leilani Alejandro</td>
<td>Office</td>
<td>3.742</td>
</tr>
<tr>
<td>9 Bruce Karish</td>
<td>Warehousing</td>
<td>89</td>
</tr>
<tr>
<td>10 William Fox Group</td>
<td>Warehousing</td>
<td>90</td>
</tr>
<tr>
<td>11 Walgreens</td>
<td>Drugstore</td>
<td>15</td>
</tr>
<tr>
<td>12 Maxi-Foods Supermarket</td>
<td>Supermarket</td>
<td>5.385</td>
</tr>
<tr>
<td><strong>Total All Cumulative Projects</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
\(^a\) Source: Urban Crossroads, *Wal-Mart Expansion Traffic Impact Analysis*, October 18, 2010, Table 4-8, p. 45
\(^b\) Peak Hour and Daily Trips determined by use of the Cumulative Development Trip Generation Rates shown in Table 5.8-K — Cumulative Development Trip Generation
\(^c\) Cumulative project ID numbers correspond to the ID numbers presented on Figure 5.8-8 — Cumulative Development Project Location of this DEIR.
\(^d\) DU = dwelling unit; TSF = thousand square feet
\(^e\) Evaluated as non-age-restricted apartments to achieve a conservative analysis.
The ADT volumes that would occur under E+A+P+C scenario are presented on Figure 5.8-9 – Cumulative Development Average Daily Traffic.

Trips were assigned to the cumulative development projects using ITE trip generation rates as shown in Table 5.8-K – Cumulative Development Trip Generation. It should be recognized that the ITE Land Use Code for “Apartment” use was applied to California Baptist University, which consists of student housing and Telacu Housing and Snowberry Creek, both of which consists of senior housing. While these three cumulative development projects are likely to generate fewer trips than a standard apartment use, the application of the “Apartment” ITE Code provides a highly conservative cumulative trip generation analysis for this DEIR. The ADT volumes that would occur under E+A+P+C scenario are presented on Figure 5.8-10 – Existing plus Ambient Growth plus Cumulative Projects plus Project Average Daily Traffic.
Table 5.8-K – Cumulative Development Trip Generation Rates<sup>a</sup>

<table>
<thead>
<tr>
<th>Land Use and Cumulative Development Project&lt;sup&gt;b&lt;/sup&gt;</th>
<th>ITE Land Use Code</th>
<th>Unit&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Peak Hour Trip Rates</th>
<th>Daily</th>
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<tr>
<td></td>
<td></td>
<td></td>
<td>AM</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Warehousing</td>
<td></td>
<td>DU</td>
<td>0.24</td>
<td>0.06</td>
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<td>9. Bruce Karish</td>
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<td></td>
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<tr>
<td>10. William Fox Group</td>
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</tr>
<tr>
<td>Apartments</td>
<td></td>
<td>DU</td>
<td>0.10</td>
<td>0.41</td>
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<tr>
<td>1. California Baptist University (Student)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Magnolia Square</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5. Cinnamon Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Telacu Housing (Senior)</td>
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<tr>
<td>7. Snowberry Creek (Senior)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church</td>
<td></td>
<td>TSF</td>
<td>0.35</td>
<td>0.21</td>
</tr>
<tr>
<td>2. Magnolia Avenue Baptist Church</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Office (3.742 TSF)</td>
<td></td>
<td>TSF</td>
<td>3.18</td>
<td>0.43</td>
</tr>
<tr>
<td>8. Leilani Alejandro</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial (4.52 TSF)</td>
<td></td>
<td>TSF</td>
<td>3.34</td>
<td>2.14</td>
</tr>
<tr>
<td>3. Fresh and Easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial (40 TSF)</td>
<td></td>
<td>TSF</td>
<td>1.37</td>
<td>0.87</td>
</tr>
<tr>
<td>4. Magnolia Square</td>
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</tr>
<tr>
<td>Supermarket</td>
<td></td>
<td>TSF</td>
<td>2.19</td>
<td>1.40</td>
</tr>
<tr>
<td>3. Fresh and Easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Maxi-Foods Supermarket</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacy/Drugstore</td>
<td></td>
<td>TSF</td>
<td>1.89</td>
<td>1.31</td>
</tr>
<tr>
<td>11. Walgreens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
<sup>a</sup> Source: Urban Crossroads, *Wal-Mart Expansion Traffic Impact Analysis*, October 18, 2010, Table 4-7, p. 44
<sup>b</sup> Cumulative development projects as listed in Table 5.8-J – Cumulative Development Trip Generation and shown on Figure 5.8-8.
<sup>a</sup> DU = dwelling unit; TSF = thousand square feet

Remainder of page intentionally left blank.
Figure 5.8-9. Cumulative Development Average Daily Traffic

Figure 5.8-10. Existing Plus Ambient Growth Plus Cumulative Projects Plus Project Average Daily Traffic


Not to Scale
Study Area intersection LOS and ADTS for the E+A+C+P conditions are shown on Table 5.8-L – Intersection Analysis, Existing plus Ambient Growth (2012) plus Cumulative Projects plus Project Conditions.

### Table 5.8-L – Intersection Analysis, Existing plus Ambient Growth (2012) plus Cumulative Projects plus Project Conditions<sup>a</sup> (E+A+C+P)

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Delay (seconds)&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM &amp; PM</td>
<td>AM &amp; PM</td>
<td></td>
</tr>
<tr>
<td>Arlington Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>48.7 &amp; 66.2</td>
<td>D &amp; E</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>39.6 &amp; 50.2</td>
<td>D &amp; D</td>
</tr>
<tr>
<td>Cypress Avenue/Jackson Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>36.6 &amp; 46.3</td>
<td>D &amp; D</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>16.9 &amp; 22.8</td>
<td>B &amp; C</td>
</tr>
<tr>
<td>N. Project Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td></td>
<td></td>
<td>Intersection improvements do not exist.</td>
</tr>
<tr>
<td>with proposed improvements&lt;sup&gt;d&lt;/sup&gt;</td>
<td>CSS</td>
<td>10.3 &amp; 12.8</td>
<td>B &amp; B</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td></td>
<td></td>
<td>Intersection improvements do not exist.</td>
</tr>
<tr>
<td>with proposed improvements&lt;sup&gt;d&lt;/sup&gt;</td>
<td>TS</td>
<td>6.2 &amp; 10.3</td>
<td>A &amp; B</td>
</tr>
<tr>
<td>S. Project Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td></td>
<td></td>
<td>Intersection improvements do not exist.</td>
</tr>
<tr>
<td>with proposed improvements&lt;sup&gt;d&lt;/sup&gt;</td>
<td>TS</td>
<td>8.1 &amp; 13.6</td>
<td>A &amp; B</td>
</tr>
<tr>
<td>Wells Avenue/Colorado Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>31.3 &amp; 51.7</td>
<td>C &amp; D</td>
</tr>
<tr>
<td>California Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>30.5 &amp; 66.4</td>
<td>C &amp; F&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>25.5 &amp; 41.9</td>
<td>C &amp; D</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>35.2 &amp; 40.2</td>
<td>C &amp; D</td>
</tr>
</tbody>
</table>

Notes:

- <sup>b</sup> TS = Traffic Signal; CSS = Cross-Street Stop; TS = New Traffic Signal
- <sup>c</sup> Delay and LOS were calculated in the TIA using Traffix (version 8.0, 2008) for signalized and unsignalized intersections. Per the 2000 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.
- <sup>d</sup> “Improvements” referenced in this column refer to proposed Project design considerations discussed previously in Section 5.8.5.
- <sup>e</sup> Volume-to-Capacity ratio is greater than 1.00
As indicated in the above table, two off-site Study Area intersections are projected to operate at unacceptable LOS under the E+A+C+P scenario during the peak hours.

- Van Buren Boulevard at Arlington Avenue is projected to operate at LOS E in the PM peak hour without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

- Van Buren Boulevard at California Avenue is projected to operate at LOS F in the PM peak hour without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

As previously discussed and shown in Table 5.8-H – Intersection Analysis, Existing plus Ambient Growth (2012) plus Project Conditions, these two intersections are projected to operate at an unacceptable LOS under the E+A+P scenario.

GP 2025 Buildout Scenario
In order to determine the Project’s impacts on the Study Area intersections under the GP 2025 Buildout scenario with Project-related trips (GP 2025 Buildout+P), it is necessary to know the expected LOS for the Study Area intersections at GP 2025 Buildout without Project-related traffic (GP 2025 Buildout). According to the City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR), the future GP 2025 LOS conditions are based on the application of the trip generation rates to the existing conditions model, which is based on land use and socioeconomic data prepared by the Southern California Association of Governments (SCAG) for the entire region (GP 2025 FPEIR, p. 5.15-24). The ADTs and intersection LOS for the GP 2025 Buildout scenario are shown on Figure 5.8-11 – General Plan Buildout Average Daily Traffic; and Table 5.8-M – Intersection Analysis, GP 2025 Conditions without Project, respectively.
Figure 5.8-11. General Plan Buildout Average Daily Traffic


Not to Scale
Table 5.8-M – Intersection Analysis, GP 2025 Conditions without Project

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>Delay (seconds)</th>
<th>Level of Service</th>
</tr>
</thead>
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<td></td>
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<td>AM</td>
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<tr>
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<td>without improvements</td>
<td>TS</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>with feasible improvementsd</td>
<td>TS</td>
<td>55.5</td>
<td>63.7</td>
</tr>
<tr>
<td>with improvementsd</td>
<td>TS</td>
<td>40.4</td>
<td>52.7</td>
</tr>
<tr>
<td>Cypress Avenue/Jackson Street</td>
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</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>86.7</td>
<td>-</td>
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<tr>
<td>with improvements</td>
<td>TS</td>
<td>35.6</td>
<td>46.2</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>18.8</td>
<td>41.9</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>16.2</td>
<td>22.3</td>
</tr>
<tr>
<td>N. Project Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>CSS</td>
<td>14.9</td>
<td>28.9</td>
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<tr>
<td>with improvements</td>
<td>CSS</td>
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<td>Audrey Avenue</td>
<td></td>
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<td>without improvements</td>
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<td>11.3</td>
<td>33.4</td>
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<td>with improvements</td>
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<td>10.3</td>
<td>18.3</td>
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<td>S. Project Driveway</td>
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<tr>
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<td>CSS</td>
<td>15.5</td>
<td>-</td>
</tr>
<tr>
<td>with improvements</td>
<td>CSS</td>
<td>12.2</td>
<td>28.3</td>
</tr>
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<td>Wells Avenue/Colorado Avenue</td>
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</tr>
<tr>
<td>without improvements</td>
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<td>41.2</td>
<td>-</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>30.9</td>
<td>50.1</td>
</tr>
<tr>
<td>California Avenue</td>
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<tr>
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<td>-</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>28.1</td>
<td>49.9</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
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<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>40.1</td>
<td>61.3</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>39.2</td>
<td>51.8</td>
</tr>
</tbody>
</table>

Notes:

b TS = Traffic Signal; CSS Cross-Street Stop
c Delay and LOS were calculated in the TIA using Traffix (version 8.0, 2008) for signalized and unsignalized intersections. Per the *2000 Highway Capacity Manual*, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.
d In addition to the physical geometric improvements accounted for at this location, the GP 2025 requires that the westbound crosswalk (on the north leg of the intersection) be removed in order to achieve an operation of LOS E.
e” - “ = delay high, intersection unstable, LOS F.
f Volume-to-capacity ratio is greater than 1.00, LOS F.
As indicated above, under the GP 2025-Buildout condition, the following Study Area intersections are projected to operate at an unacceptable LOS during the peak hours, utilizing existing geometry:

- **Van Buren Boulevard at Arlington Avenue** is projected to operate at LOS F during the AM and PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS E).

- **Van Buren Boulevard at Cypress Avenue/Jackson Street** is projected to operate at LOS F during the AM and PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

- **Van Buren Boulevard at the S. Project Driveway** is projected to operate at LOS F during the PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

- **Van Buren Boulevard at Wells Avenue/Colorado Avenue** is projected to operate at LOS F during the PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

- **Van Buren Boulevard at California Avenue** is projected to operate at LOS F during the PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

- **Van Buren Boulevard at Magnolia Avenue** is projected to operate at LOS F during the PM peak hours without any improvements; however, with the buildout of the GP 2025 circulation network including the improvements to Van Buren Boulevard, this intersection will operate at an acceptable LOS (LOS D).

It is important to note that the widening of Van Buren Boulevard to its full-width capacity as a Scenic Boulevard, Special Boulevard, Parkway, and 120-foot Arterial, which includes the construction of six lanes, divided roadway, as envisioned in the GP 2025 is anticipated to significantly reduce the delay and improve the LOS at all of the Study Area intersections, as shown on Table 5.8-M – Intersection Analysis, GP 2025 Conditions without Project and Table 5.8-N – Intersection Analysis, GP 2025 Buildout with Project.
The GP 2025 Buildout – With Project (GP 2025 + P)  
Intersection LOS with existing intersection geometrics for the GP 2025 Buildout with Project-related traffic (GP 2025 + P) for the Study Area intersections are presented in Table 5.8-N – Intersection Analysis, GP 2025 Buildout with Project.

Table 5.8-N – Intersection Analysis, GP 2025 Buildout with Project*  

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>Delay (seconds)</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
</tr>
<tr>
<td>Arlington Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>- e</td>
<td>- e</td>
</tr>
<tr>
<td>with feasible improvements</td>
<td>TS</td>
<td>55.6</td>
<td>64.7</td>
</tr>
<tr>
<td>with improvements</td>
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<td>53.5</td>
</tr>
<tr>
<td>Cypress Avenue/Jackson Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>87.1</td>
<td>- e</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>35.6</td>
<td>46.7</td>
</tr>
<tr>
<td>Philbin Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>18.9</td>
<td>44.3</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>16.2</td>
<td>22.6</td>
</tr>
<tr>
<td>N. Project Driveway</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td>TS</td>
<td>7.4</td>
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<td>with proposed improvements</td>
<td>CSS</td>
<td>11.9</td>
<td>17.0</td>
</tr>
<tr>
<td>Audrey Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without proposed improvements</td>
<td>TS</td>
<td>7.5</td>
<td>16.2</td>
</tr>
<tr>
<td>with proposed improvements</td>
<td>TS</td>
<td>18.9</td>
<td>44.3</td>
</tr>
<tr>
<td>Wells Avenue/Colorado Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>41.7</td>
<td>- e</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>31.0</td>
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<td>California Avenue</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>without improvements</td>
<td>TS</td>
<td>38.2</td>
<td>- e</td>
</tr>
<tr>
<td>with improvements</td>
<td>TS</td>
<td>28.2</td>
<td>51.5</td>
</tr>
</tbody>
</table>
### Table 5.8-1

| Intersection with Van Buren Boulevard | Traffic Control Status | Delay (seconds)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM</td>
</tr>
<tr>
<td>Magnolia Avenue</td>
<td>TS</td>
<td>40.1</td>
</tr>
<tr>
<td>without improvements</td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>with improvements</td>
<td></td>
<td>D</td>
</tr>
</tbody>
</table>

**Notes:**
- b TS = Traffic Signal; CSS = Cross-Street Stop; TS = New Traffic Signal
- c Delay and LOS were calculated in the TIA using Traffix (version 8.0, 2008) for signalized and unsignalized intersections. Per the 2000 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.
- d In addition to the physical geometric improvements accounted for at this location, the GP 2025 requires that the westbound crosswalk (on the north leg of the intersection) be removed in order to achieve an operation of LOS E.
- e ".." = delay high, intersection unstable, LOS F.
- f Volume-to-capacity ratio is greater than 1.00, LOS F.

Under GP 2025 Buildout+P scenario, all of the Study Area intersections are projected to operate at unacceptable LOS during the peak hours, utilizing existing geometry, with the exception of Van Buren Boulevard at Philbin Avenue.

**The GP 2025 Buildout – With Project (GP 2025 Buildout + P) Determination of Project Contribution**

**Table 5.8-0 – Determination of Project Contribution to GP 2025 Buildout plus Project Condition**

provides a summary of the Study Area intersection performance results for the GP 2025 Buildout and GP 2025 Buildout+P scenario in relation to the LOS thresholds and the significance criteria set forth in the *City of Riverside Public Works Department Traffic Impact Analysis Preparation Guide* as discussed in Section 5.8.4.5, above.
## Table 5.8-O – Determination of Project Contribution to GP 2025 Buildout plus Project Condition

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Status</th>
<th>GP 2025 Buildout</th>
<th>GP 2025 Buildout + P</th>
<th>Change in Delay (seconds)</th>
<th>Is this a Considerable Contribution?</th>
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<tbody>
<tr>
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<td></td>
<td>Delay (seconds)</td>
<td>LOS</td>
<td>Delay (seconds)</td>
<td>LOS</td>
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<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
<td>PM</td>
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<td>-</td>
<td>-</td>
<td>F</td>
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<tr>
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<td>with feasible improvements</td>
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</tr>
<tr>
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<td>with improvements</td>
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<td>40.4</td>
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<td>with improvements</td>
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<td>46.2</td>
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<tr>
<td>Phibbin Avenue</td>
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<td>TS</td>
<td>18.8</td>
<td>41.9</td>
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<td>with improvements</td>
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<td>22.3</td>
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<tr>
<td>N. Project Driveway</td>
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<td>14.9</td>
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<td>11.3</td>
<td>33.4</td>
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<td></td>
<td>improvements</td>
<td>TS</td>
<td>18.3</td>
<td>18.3</td>
<td>B</td>
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<tr>
<td>S. Project Driveway</td>
<td>without proposed</td>
<td>CSS</td>
<td>15.5</td>
<td>-</td>
<td>C</td>
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<td>improvements</td>
<td>CSS</td>
<td>12.2</td>
<td>28.3</td>
<td>B</td>
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<tr>
<td>Wells Avenue/Colorado Avenue</td>
<td>without improvements</td>
<td>TS</td>
<td>41.2</td>
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<tr>
<td></td>
<td>with improvements</td>
<td>TS</td>
<td>30.9</td>
<td>50.1</td>
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<tr>
<td>California Avenue</td>
<td>without improvements</td>
<td>TS</td>
<td>38.1</td>
<td>-</td>
<td>D</td>
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</table>
### Table 5.8-O

<table>
<thead>
<tr>
<th>Intersection with Van Buren Boulevard</th>
<th>Traffic Control Statusa</th>
<th>AM Delay (seconds)</th>
<th>PM Delay (seconds)</th>
<th>LOS</th>
<th>AM Delay (seconds)</th>
<th>PM Delay (seconds)</th>
<th>LOS</th>
<th>Change in Delay (seconds)</th>
<th>Is this a Considerable Contribution?</th>
</tr>
</thead>
<tbody>
<tr>
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<td>49.9</td>
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<td>D</td>
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<tr>
<td>with improvements</td>
<td>TS</td>
<td>39.2</td>
<td>51.8</td>
<td>D</td>
<td>D</td>
<td>39.2</td>
<td>52.0</td>
<td>0.0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Notes:
b. TS = Traffic Signal; CSS = Cross-Street Stop; TS = new traffic signal
c. Delay and LOS were calculated in the TIA using Traffix (version 8.0, 2008) for signalized and unsignalized intersections. Per the 2000 Highway Capacity Manual, overall average intersection delay and LOS are shown for intersections with a traffic signal or all-way stop control. For intersections with cross-street stop control, the delay and LOS for the worst individual movement (or movements sharing a single lane) are shown.
d. In addition to the physical geometric improvements shown for this location, the GP 2025 requires that the westbound crosswalk (on the north leg of the intersection) be removed in order to achieve an operation of LOS E.
e. Additional Project-proposed improvements or improvements associated with the widening of Van Buren Boulevard are assumed at the Project driveways including roadway half-section and site access improvements.
f. “-.-” = delay high, intersection unstable, LOS F.
g. Volume-to-capacity ratio is greater than 1.00, LOS F.

As shown in Table 5.8-O, the GP 2025 Buildout +P scenario is not projected to degrade the operation of any Study Area intersections from acceptable (LOS A through LOS D) to unacceptable (LOS E or LOS F) when compared to the LOS for the GP 2025 Buildout scenario. Additionally, the change in delay under the GP 2025 Buildout+P scenario is less than significant per the significance criteria set forth in the *City of Riverside Public Works Department Traffic Impact Analysis Preparation Guide* (see Section 5.8.4.5), because none of the peak hour delays will be increased as set forth below:

- LOS A/B = 10.0 seconds
- LOS C = 8.0 seconds
- LOS D = 5.0 seconds
- LOS E = 2.0 seconds
- LOS F = 1.0 seconds

Further, the GP 2025 Buildout +P scenario is projected to result in improved LOS or decreased delay at the intersections of Van Buren Boulevard at Audrey Avenue and Van Buren Boulevard at S. Project Driveway.

### Conclusions

**Project Construction**

Although any construction-related impacts would be temporary, they are potentially significant without mitigation.
Traffic Load and Street Capacity
Implementation of the Project will introduce additional traffic to the Study Area. These new vehicular trips will result in less than significant impacts to the Study Area intersections under the E+P scenario, because the proposed Project includes improvements to the three intersections that provide direct access to the Project site: Van Buren Boulevard at N. Project Driveway, Van Buren Boulevard at Audrey Avenue, and Van Buren Boulevard at S. Project Driveway. Further, as shown in Table 5.8-G – Determination of Impact Significance,Existing (2009) plus Project Conditions, Project-related traffic is not projected to degrade the LOS operation at any of the Study Area intersections.

The addition of Project-related trips will contribute to a potentially significant impact without mitigation at the intersections of Van Buren Boulevard at Arlington Avenue and Van Buren Boulevard at California Avenue when combined with traffic from ambient growth (see Table 5.8-H – Intersection Analysis, Existing plus Ambient Growth (2012) plus Project Conditions (E+A+P)) and cumulative development projects (see Table 5.8-L – Intersection Analysis, Existing plus Ambient Growth (2012) plus Cumulative Projects plus Project Conditions (E+A+C+P)). However, under the GP 2025 Buildout scenario, five of the nine Study Area intersections will operate at LOS F without any improvements, although these intersection operations will not be degraded from acceptable to unacceptable when compared to the LOS for the GP 2025 Buildout scenario and all changes in delay under the GP 2025 Buildout +P scenario are considered less than significant (see Table 5.8-O – Determination of Project Contribution to GP 2025 Buildout plus Project Condition). Therefore, as shown in Table 5.8-O, the Project and cumulative development with ambient growth are not cumulatively considerable as they have already been anticipated and accounted for in the GP 2025 Buildout condition, and thus, the Project will result in a less than significant impact.

Conflict with a CMP, LOS, or Other Standards
The City strives for LOS D or better on all arterial streets whenever possible, except for certain key locations such as portions of Arlington Avenue/Alessandro Boulevard and Van Buren Boulevard, which may warrant a standard of LOS E (GP 2025, p. CCM-11). The Project will not directly cause an exceedance of any performance standards; and therefore, as discussed under the subheading Impacts to Traffic Load and Street Capacity, implementation of the Project combined with ambient growth and cumulative development projects are already anticipated and accounted for in the GP 2025, and thus, the Project will result in a less than significant impact.

5.8.7 Proposed Mitigation Measures
An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate the potential significant adverse impacts upon traffic or to reduce impacts to below the level of significance.

Potential impacts resulting from construction-related traffic will be less than significant with implementation of a City-approved Construction Traffic Management Plan, as required by mitigation measure MM TRANS 1. Potential vehicular congestion during construction in the Project’s parking lot
will be less than significant with on-site signing and striping as required by mitigation measure MM TRANS 2. Potential impacts associated with sight distance at Project access points (i.e., N. Project Driveway, Audrey Avenue, S. Project Driveway) will be less than significant with implementation of mitigation measure MM TRANS 3. Thus, on-site Project impacts will be less than significant with mitigation.

**MM TRANS 1:** If Project construction will require any lane closures, a Construction Traffic Management Plan shall be prepared by the Project Applicant and submitted to the City for approval in conjunction with detailed construction plans for the Project. The plan may include signage, flagmen, cones, or other acceptable measures to safely guide motorists, cyclists, and pedestrians if a lane closure is necessary. Such measures shall be designed to allow safe access of the Project site and safe passage along Van Buren Boulevard.

**MM TRANS 2:** On-site signing and striping shall be implemented in conjunction with detailed construction plans for the Project.

**MM TRANS 3:** Prior to the issuance of any building permit for the proposed Project, the Project Applicant shall demonstrate to the satisfaction of the City Public Works Department that the intersection sight distance at each Project access point complies with the standards set forth in section 405.1 of the Caltrans Highway Design Manual.

### 5.8.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented

Under existing conditions, none of the Study Area intersections exceed the applicable LOS (Table 5.8-B – Intersection Analysis, Existing (2009) Conditions); with inclusion of Project-specific traffic, all of the Study Area intersections will continue to operate at acceptable LOS (Table 5.8-F – Intersection Analysis, Existing (2009) plus Project Conditions).

With implementation of mitigation measures MM TRANS 1, MM TRANS 2, and MM TRANS 3, potential Project-specific impacts resulting from Project construction, on-site circulation, and sight distance will be less than significant.

### 5.8.9 Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented

The cumulative impact area for transportation/traffic impacts consists of the Study Area and the nine intersections located therein. Cumulative impacts to transportation/traffic could be significant if the addition of Project-related traffic, combined with ambient growth and the cumulative development projects (the E+A+C+P scenario) and/or Project related traffic combined with the traffic expected at buildout per the GP 2025 (the GP 2025 Buildout+P scenario), results in any study area intersection operating at LOS E or LOS F.
The addition of Project-related trips will contribute to a potentially significant impact without mitigation at the intersections of Van Buren Boulevard at Arlington Avenue and Van Buren Boulevard at California Avenue when combined with traffic from ambient growth (see Table 5.8-H – Intersection Analysis, Existing plus Ambient Growth (2012) plus Project Conditions (E+A+P)) and cumulative development projects (see Table 5.8-L – Intersection Analysis, Existing plus Ambient Growth (2012) plus Cumulative Projects plus Project Conditions (E+A+C+P)). However, under the GP 2025 Buildout scenario, five of the nine Study Area intersections will operate at LOS F without any improvements, although these intersection operations will not be degraded from acceptable to unacceptable when compared to the LOS for the GP 2025 Buildout scenario and all changes in delay under the GP 2025 Buildout +P scenario are considered less than significant (see Table 5.8-O – Determination of Project Contribution to GP 2025 Buildout plus Project Condition). Therefore, as shown in Table 5.8-O, the Project and cumulative development with ambient growth are not cumulatively considerable as they have already been anticipated and accounted for in the GP 2025 Buildout condition, and thus, the Project will result in a less than significant impact.

5.8.10 References
In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- City of Riverside, *Ordinance No. 7119*, adopted February 15, 2011. (Available at City of Riverside and at [http://aquarius.riversideca.gov/clerkdb/PDF/bby0ltqak3soze3r0s4lydzb/2/O-7119.pdf](http://aquarius.riversideca.gov/clerkdb/PDF/bby0ltqak3soze3r0s4lydzb/2/O-7119.pdf), accessed May 30, 201.) [Cited as Ord. 7119]
- Western Riverside Council of Governments, *Administrative Plan for the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program*, Revised August 4, 2008. (Available at [http://www.wrcog.cog.ca.us/content/administration.asp](http://www.wrcog.cog.ca.us/content/administration.asp), accessed June 27, 2011.) [Cited as TUMF AP]

5.9 Urban Decay

Urban decay, also known as physical degradation, is generally characterized by a chain reaction of store closures and long-term vacancies, ultimately degrading neighborhoods or commercial areas. This section describes the existing urban decay setting; evaluates the extent to which the Project will have competitive impacts in the specified trade area, and consequently, have the potential to result in urban decay; evaluates the potential economic impacts of the Project on existing retail facilities in the specified trade area; and considers the cumulative impacts, taking into account impacts from other planned and proposed retail projects in the specified trade area.

Pursuant to State CEQA Guidelines Section 15131(b), a project’s economic impacts on a community are considered significant only if they can be tied to direct physical changes in the market area (e.g., physical deterioration of existing retail centers/facilities). For purposes of this analysis, a retail market impact analysis was prepared for this Project titled, Retail Market Impact for Van Buren (Riverside) Walmart Expansion, prepared by The Natelson Dale Group, Inc., January 5, 2010 (hereinafter referred to as the Retail Market Impact Analysis), which is included as Appendix F to this DEIR. The Retail Market Impact Analysis utilizes the following causal chain to determine whether the Project’s market impacts would be significant enough to create a lasting physical change that results in urban decay:

- The project results in an economic impact so severe that stores might close as a result; and
- Building and/or properties, rather than being reused within a reasonable time, would remain vacant and such vacancies would cause the buildings and/or properties to deteriorate, and lead to the physical decline of the associated or nearby real estate.

The business closures and vacancies would have to be significant enough in scale (i.e., in terms of the total square footage affected and/or the loss of key “anchor” tenants) that they would be presumed to lead to significant physical deterioration. Physical deterioration includes, but is not limited to, abandoned buildings and commercial sites, boarded doors and windows, long-term unauthorized use of properties and parking lots, extensive gang or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees or shrubbery, extensive litter, uncontrolled weed growth, and homeless encampments.

As discussed below, the Project’s potential to result in an economic impact so severe that stores within the market area might close as a result and building and/or properties, rather than being used within a reasonable time, would remain vacant and such vacancies would cause the buildings and/or properties to deteriorate, and lead to the physical decline of the associated or nearby real estate is considered to be less than significant.
5.9.1 Setting

5.9.1.1 Existing Walmart
The existing, freestanding Walmart store located at 5200 Van Buren Boulevard in the City of Riverside (City), has an interior building area of approximately 125,827 square feet (SF) and a total area of 131,127 SF, which includes the 5,300-SF exterior Garden Center. The existing Walmart store also includes a Tire & Lube Express facility, located north of the Garden Center, on the eastern portion of the structure, adjacent to Van Buren Boulevard (Figure 3-4b – Site Plan).\(^1\) The majority of the interior space of the existing Walmart (99,301 SF) store is used for general merchandise sales; the remainder of the interior area (26,526 SF) is used for food sales, food sales support, stockroom/receiving, restaurant tenant, and ancillary uses, as shown in Table 5.9-A – Existing Walmart Detail.

<table>
<thead>
<tr>
<th>Store Area</th>
<th>Size (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Sales</td>
<td>359</td>
</tr>
<tr>
<td>Food Sales Support</td>
<td>371</td>
</tr>
<tr>
<td>Stockroom/Receiving</td>
<td>9,265</td>
</tr>
<tr>
<td>Ancillary</td>
<td>9,675</td>
</tr>
<tr>
<td>General Merchandise Sales</td>
<td>99,301</td>
</tr>
<tr>
<td>Restaurant Tenant</td>
<td>1,686</td>
</tr>
<tr>
<td>Tire &amp; Lube Express</td>
<td>5,170</td>
</tr>
<tr>
<td><strong>Total Interior Building</strong></td>
<td><strong>125,827</strong></td>
</tr>
<tr>
<td><strong>Exterior Garden Center</strong></td>
<td><strong>5,300</strong></td>
</tr>
<tr>
<td><strong>Total Area</strong></td>
<td><strong>131,127</strong></td>
</tr>
</tbody>
</table>

Notes:

5.9.1.2 Trade Area
The Trade Area is the geographical area that would be serviced by the expanded Walmart store, as shown on Figure 5.9-1 – Trade Area Boundary. A freestanding supermarket would typically have a primary trade area of three miles or less. However, because the Project proposes a grocery expansion as a component of an existing Walmart store and not a freestanding supermarket, this analysis uses the Trade Area for the Walmart store. The Trade Area of the existing Walmart store is likely to be significantly larger than the trade area of a single, freestanding grocery store, in part because of the wide variety of merchandise offered by Walmart.

\(^1\) Other characteristics of the existing Walmart, such as quantity of parking stalls, landscaping, etc., do not affect, and are not relevant to, this section. A complete discussion of the existing conditions is available in Section 3, Project Description, in this DEIR.
Sources: County of Riverside, 2010;

Figure 5.9-1 Trade Area Boundary
Walmart Expansion DEIR

Albert A. WEBB Associates
The Project-specific Trade Area is based on anticipated shopping patterns of residents, taking into account the location of competitive existing retailers (including the proximity of other Walmart stores) and transportation corridors. The Project’s entire Trade Area is located within the City and does not extend into neighboring jurisdictions. The Trade Area boundary includes La Sierra Avenue, Victoria Avenue to the southwest; the Hidden Valley Wildlife Area, Jurupa Avenue, and Arlington Avenue to the north; Magnolia Avenue, Victoria Avenue, and Washington Street to the east and southeast; and the border of the City to the south (Figure 5.9-1).

Trade Area Census Tracts
The Trade Area includes all or a portion of 29 census tracts. For those census tracts where only a portion of the tract falls within the Trade Area, only the households within the boundary of the Trade Area are included in the demographic estimates. The Trade Area is constructed of census tracts because of the availability of existing household estimates, and household projections at the census tract geography level from the Southern California Association of Governments (SCAG). The census tracts in the Trade Area are identified in the following table.

<table>
<thead>
<tr>
<th>Census Tracts</th>
<th>Trade Area</th>
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<tbody>
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Notes:


Supermarkets within the Trade Area
There are currently 17 supermarkets in the Trade Area (Table 5.9-C – Inventory of Existing Supermarkets in Trade Area). With three exceptions, all of the stores listed in Table 5.9-C meet the standard size definition of a supermarket in terms of total size (i.e., larger than 20,000 SF of gross leasable area). Three smaller stores are also included in the list: Fresh & Easy (13,966 SF), Maxi Foods (15,000 SF), and Smart & Final (17,500 SF). Although these stores are not technically supermarkets (due both to their smaller size and more limited merchandise mix), it is recognized that to some degree they compete with supermarkets and are therefore part of the competitive environment of the Trade Area. Thus, in order to remain analytically conservative, they have been included as part of the supermarket impact analysis. (TNDG, p. 19)

2 The nearest existing Walmart store is outside of the specified trade area boundary evaluated in this analysis. Thus, the Project is not anticipated to have any impact on other Walmart stores’ sales.
Table 5.9-C – Inventory of Existing Supermarkets in Trade Area

<table>
<thead>
<tr>
<th>Store Name</th>
<th>Location</th>
<th>Size (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albertsons</td>
<td>2975 Van Buren Boulevard</td>
<td>41,000</td>
</tr>
<tr>
<td>Albertsons</td>
<td>5202 Arlington Avenue</td>
<td>28,000</td>
</tr>
<tr>
<td>Cardenas Market</td>
<td>6350 Van Buren Boulevard</td>
<td>35,000</td>
</tr>
<tr>
<td>El Tapatio</td>
<td>5800 Van Buren Boulevard</td>
<td>31,300</td>
</tr>
<tr>
<td>Food for Less b</td>
<td>4250 Van Buren Boulevard</td>
<td>88,800</td>
</tr>
<tr>
<td>Fresh &amp; Easy</td>
<td>4090 Madison Avenue</td>
<td>13,966</td>
</tr>
<tr>
<td>Maxi Foods b</td>
<td>8616 California Avenue</td>
<td>15,000</td>
</tr>
<tr>
<td>Ralph’s b</td>
<td>3350 La Sierra Avenue</td>
<td>43,800</td>
</tr>
<tr>
<td>Ralph’s</td>
<td>6155 Magnolia Avenue</td>
<td>46,300</td>
</tr>
<tr>
<td>Smart &amp; Final b</td>
<td>4039 Tyler Street</td>
<td>17,500</td>
</tr>
<tr>
<td>Stater Bros</td>
<td>10370 Arlington Avenue</td>
<td>25,000</td>
</tr>
<tr>
<td>Stater Bros</td>
<td>2861 Mary Street</td>
<td>24,400</td>
</tr>
<tr>
<td>Stater Bros</td>
<td>3420 La Sierra Avenue</td>
<td>37,500</td>
</tr>
<tr>
<td>Stater Bros</td>
<td>4680 La Sierra Avenue</td>
<td>23,800</td>
</tr>
<tr>
<td>Stater Bros</td>
<td>6160 Arlington Avenue</td>
<td>26,300</td>
</tr>
<tr>
<td>Stater Bros</td>
<td>9225 Magnolia Avenue</td>
<td>25,000</td>
</tr>
<tr>
<td>Vons</td>
<td>3840 La Sierra Avenue</td>
<td>36,300</td>
</tr>
</tbody>
</table>

TOTAL 548,966

Notes:

b These stores do not technically meet the definition of a supermarket but are included in this list because, to some degree, these stores are part of the competitive environment in the Trade Area.

Existing Conditions in the Trade Area

An inventory of existing retail space in the Trade Area was prepared in order to provide a quantitative and qualitative measure of the existing baseline conditions in the Trade Area. A summary of the survey results are included in this section. Detailed survey findings are presented in Appendix B of the Retail Market Impact Analysis, which is included in Appendix F to this DEIR. Table 5.9-D – Inventory of Existing Retail Development in Trade Area presents a summary of the retail inventory.
Table 5.9-D – Inventory of Existing Retail Development in Trade Area\(^{a,b}\)

<table>
<thead>
<tr>
<th>Retail Category</th>
<th>Size (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparel</td>
<td>272,983</td>
</tr>
<tr>
<td>General Merchandise</td>
<td>840,042</td>
</tr>
<tr>
<td>Furniture/Appliances</td>
<td>161,547</td>
</tr>
<tr>
<td>Specialty</td>
<td>713,508</td>
</tr>
<tr>
<td>Food</td>
<td>696,765</td>
</tr>
<tr>
<td>Eating and Drinking</td>
<td>628,148</td>
</tr>
<tr>
<td>Building Materials/Hardware</td>
<td>366,529</td>
</tr>
<tr>
<td>Auto Parts</td>
<td>131,487</td>
</tr>
<tr>
<td>Service Stations</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Services Space</td>
<td>529,486</td>
</tr>
<tr>
<td>Vacant Space</td>
<td>494,257</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,834,752</strong></td>
</tr>
</tbody>
</table>

Notes:


\(^{b}\) Excludes the Galleria at Tyler, which is a major regional mall and draws market support outside of the Trade Area.

The retail inventory of the Trade Area is comprised predominantly of freestanding street-front retailers and small unanchored strip centers along major traffic corridors with additional larger centers anchored primarily by drug stores and/or grocery stores. There is one regional mall, the Galleria Mall at Tyler, and a relatively small number of power centers. (TNDG, p. 6)

**Trade Area Vacancy Rate**

As of January 2010, the vacancy rate of non-regional mall space in the Trade Area is approximately 10.2 percent.\(^{3}\) When the occupied and vacant space in the Galleria at Tyler is included, the vacancy rate is increased to 11.2 percent. These vacancy rates are above what would be considered to be typical of a healthy retail market, where ideal rates would range from 5 percent to 10 percent for a market dominated by freestanding retail and smaller shopping centers. (TNDG, p. 6)

The previous El Sol Ranch Market space, which contains approximately 13,224 SF and is located at Jurupa Avenue and Grand Avenue, is the only known vacant grocery store in the Trade Area. The other

---

\(^{3}\) The Galleria Mall at Tyler is excluded from the retail inventory because, as a major regional mall, it draws market support from well beyond the Trade Area boundary evaluated in this analysis. Thus, although the mall is located within the Trade Area boundary, given the regional orientation of this center, the mall’s occupancy rate reflects market conditions over a much larger regional trade area than the Trade Area evaluated in this analysis.
large vacancy in the Trade Area is the former Macy's space, which encompasses 157,384 SF and is located within the Galleria at Tyler. (TNDG, pp. 6–7)

The following strip malls in the Trade Area have vacancies:

- a 16,624 SF unnamed mall located at Hole Avenue and Magnolia Avenue: 70.2 percent vacant,
- a 15,336-SF unnamed mall located at Magnolia Avenue and Banbury Drive: 64.5 percent vacant, and
- a 12,400-SF unnamed mall located at 6215 Magnolia Avenue: 100 percent vacant. (TNDG, p. 7)

Malls with high levels of vacancy are considered at higher risk for urban decay. These high-vacancy strip malls, which are dated and not suited to contemporary retail uses, are identified as part of the existing baseline conditions in the Trade Area, even though they are not the types of facilities that would likely be directly impacted by the Project. In addition, the need to reinvest or redevelop these properties, which are not suited to contemporary retail uses, is an existing condition and will exist with or without the Project. (TNDG, p. 7)

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4 The Retail Market Impact Analysis for the Proposed Expansion of the Van Buren (Riverside) Walmart identifies the previous Mervyn's space, with 58,200 SF located at 3520 Tyler Street as vacant. Subsequent to the preparation of the retail inventory this space has been occupied by Kohl's department store and is no longer vacant.

5 In 2006, the parent of company of Macy's, Federated Department Stores, acquired the Robinsons-May chain. After this acquisition, the existing Macy's store in the Galleria at Tyler relocated to the Robinsons-May store at the mall's south end.
Existing Households, Income Levels, and Retail Demand in the Trade Area
Household and income characteristics are the primary determinants of the potential dollars available for purchases of goods and services in the Trade Area. The analysis assumes that Trade Area residents will, on average, spend 42.6 percent of their income on retail purchases. The number of households in the trade area, income, and retail demand in the Trade Area are presented in Table 5.9-E – Existing Households, Income, and Retail Demand in the Trade Area.

Table 5.9-E – Existing Households, Income, and Retail Demand in the Trade Area

<table>
<thead>
<tr>
<th>Trade Area</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Households</td>
<td>40,460</td>
</tr>
<tr>
<td>Household Income</td>
<td>$73,853</td>
</tr>
<tr>
<td>Total Trade Area Income b</td>
<td>$2,988,084</td>
</tr>
<tr>
<td>Trade Area Retail Demand c</td>
<td>$1,272,924</td>
</tr>
</tbody>
</table>

Notes:
- b Total Trade Area Income is the product of the Number of Households multiplied by the Household Income.
- c Trade Area Retail Demand equals 42.6% of Trade Area Income.

Distribution of Retail Expenditures and Existing Grocery Demand in the Trade Area
The projected retail demand from Trade Area residents (shown in Table 5.9-E, above) may be assigned to various categories based on retail expenditure patterns observed in California counties with similar income characteristics as the Trade Area. The objective in assigning retail demand is to determine the demand for grocery sales in the Trade Area. As shown in Table 5.9-F – Distribution of Retail Sales by Category in Trade Area, retail demand is assigned to several categories based on the type of retail item. Grocery sales are captured in the Convenience Goods category as “Food/Liquor” and represent 24 percent of retail sales, which is based on the most recent full year of taxable sales data (2007) from the State Board of Equalization for Riverside and comparable trade areas.

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6 Based on data from the National Consumer Expenditure Survey and the California State Board of Equalization, this factor has been adjusted to account for the fact that the share of income spent on retail goods varies based on household income levels in a trade area. The factor of 42.2 percent has been derived based on data from the most recent Consumer Expenditure Survey (2007) and the most recent full year of taxable sales data from the State Board of Equalization (2007).
### Table 5.9-F – Distribution of Retail Sales and Existing Retail Demand by Category in Trade Area

<table>
<thead>
<tr>
<th>Retail Category</th>
<th>Distribution</th>
<th>Existing Retail Demand by Category (in thousands of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shopper Goods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparel</td>
<td>3%</td>
<td>$38,188</td>
</tr>
<tr>
<td>General Merchandise</td>
<td>14.5%</td>
<td>$184,574</td>
</tr>
<tr>
<td>Furniture/Appliances</td>
<td>2.5%</td>
<td>$31,823</td>
</tr>
<tr>
<td>Specialty</td>
<td>13%</td>
<td>$165,480</td>
</tr>
<tr>
<td><strong>Subtotal Shopper Goods</strong></td>
<td>33%</td>
<td>$420,065</td>
</tr>
<tr>
<td><strong>Convenience Goods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food/Liquor</td>
<td>24%</td>
<td>$305,502</td>
</tr>
<tr>
<td>Eating and Drinking</td>
<td>9%</td>
<td>$114,563</td>
</tr>
<tr>
<td><strong>Subtotal Convenience Goods</strong></td>
<td>33%</td>
<td>$434,324</td>
</tr>
<tr>
<td><strong>Heavy Commercial Goods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Materials/Hardware</td>
<td>8%</td>
<td>$101,834</td>
</tr>
<tr>
<td>Auto Dealers</td>
<td>15%</td>
<td>$190,393</td>
</tr>
<tr>
<td>Service Stations</td>
<td>11%</td>
<td>$140,022</td>
</tr>
<tr>
<td><strong>Subtotal Heavy Commercial Goods</strong></td>
<td>34%</td>
<td>$432,794</td>
</tr>
<tr>
<td><strong>TOTAL ALL RETAIL CATEGORIES</strong></td>
<td>100%</td>
<td>$1,272,924</td>
</tr>
</tbody>
</table>

**Notes:**


* Existing Retail Demand by category is the Total Area Retail Demand from Table 5.9-E multiplied by the Distribution percentage above. All amounts shown are in 2009 dollars.

### Allocation of Grocery Demand to Major Supermarkets

Based on available sales tax data, the *Retail Market Impact Analysis* estimates approximately 84 percent of the overall sales in the Food/Liquor category are captured by the 17 existing supermarkets in the Trade Area (Table 5.9-C – Inventory of Existing Supermarkets in Trade Area). The remaining 16 percent of sales in the Food/Liquor category are captured by small convenience and specialty markets. (TNDG, p. 19) This means of the $305,502 thousand Retail Demand for Food/Liquor shown in Table 5.9-F, approximately $256,622 thousand is expended at the 17 existing supermarkets (84 percent of the $305,502,000 Food/Liquor Demand).

The 17 supermarkets in the Trade Area have a combined floor area of approximately 548,966 SF (Table 5.9-C). As shown in Table 5.9-G – Existing Demand for Supermarket Sales and Estimate of Sales per SF

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of Existing Supermarkets in Trade Area, there is currently sufficient demand to support average supermarket sales volumes in the Trade Area of $467/SF at all 17 supermarkets.\textsuperscript{7}

Table 5.9-G – Existing Demand for Supermarket Sales and Estimate of Sales per SF of Existing Supermarkets in Trade Area\textsuperscript{a}

<table>
<thead>
<tr>
<th>Description</th>
<th>2009 Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Food Sales Demand\textsuperscript{b} (in thousands of dollars)</td>
<td>$305,502</td>
</tr>
<tr>
<td>Supermarket Share @ 84% (in thousands of dollars)</td>
<td>$256,621</td>
</tr>
<tr>
<td>Existing Supermarket Size (SF)\textsuperscript{c}</td>
<td>548,966</td>
</tr>
<tr>
<td>Sales-per-SF for Existing Supermarkets\textsuperscript{d}</td>
<td>$467</td>
</tr>
</tbody>
</table>

Notes:
\textsuperscript{b} Food/Liquor Demand as shown in Table 5.9-I.
\textsuperscript{c} Table 5.9-G
\textsuperscript{d} Calculated by dividing the estimate of supermarket demand (in dollars) by the SF of existing supermarket space.

The existing demand of $467/SF is very close to the industry median for supermarkets in the western United States, which is approximately $475/SF. This comparison suggests that the Trade Area’s existing supermarkets are performing approximately in line with the regional median sales per SF estimate.\textsuperscript{8} (TNDG, p. 8)

5.9.2 Comments Received in Response to the Initial Study/Notice of Preparation
No comments were received regarding urban decay or the potential for diversion of sales in response to the Initial Study/Notice of Preparation.

5.9.3 Thresholds of Significance
State CEQA Guidelines Section 15131 permits inclusion of economic or social information in an EIR when determining environmental effects resulting from a project’s implementation. Pursuant to State CEQA Guidelines Section 15131(b), a project’s economic impacts on a community are considered significant only if they can be tied to direct physical changes in the trade area, i.e., physical deterioration of existing retail centers/facilities. Thus, the Project would have a significant impact on urban decay if the Project would result in:

\textsuperscript{7} For this calculation, the Retail Market Impact Analysis utilized the assumption that supermarket sales account for 84 percent of sales in the overall food category. This factor has been derived by The Natelson Dale Group, Inc., based on numerous analyses of supermarket supply and demand in comparable communities throughout California, and based on data reviewed from the State Board of Equalization for the City and comparable trade areas, Claritas, and selected supermarket chains.

\textsuperscript{8} According to the 2008 edition of the Urban Land Institute’s Dollars & Cents of Shopping Centers, based on a weighted average from the sample of supermarkets in neighborhood and community shopping centers, the median sales volume for supermarkets in the western United States in 2006 was approximately $475.
• An economic impact so severe that stores might close as a result; and
• Building and/or properties, rather than being reused within a reasonable time, would remain vacant and such vacancies would cause the buildings and/or properties to deteriorate, and lead to the physical decline of the associated or nearby real estate.

The business closures and vacancies would have to be significant enough in scale (i.e., in terms of the total square footage affected and/or the loss of key “anchor” tenants) that they would be presumed to lead to significant physical deterioration. Physical deterioration includes, but is not limited to, abandoned buildings and commercial sites, boarded doors and windows, long-term unauthorized use of properties and parking lots, extensive gang or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees or shrubbery, extensive litter, uncontrolled weed growth, and homeless encampments.

5.9.4 Related Regulations
5.9.4.1 State Regulations
California Health and Safety Code
Sections 33031(a) and 33031(b) of the California Health and Safety Code describe the physical and economic conditions that cause blight as summarized below.

Physical Conditions that Cause Blight
• Buildings in which it is unsafe or unhealthy for persons to live or work. These conditions may be caused by serious building code violations, dilapidation and deterioration, defective design or physical construction, faulty or inadequate utilities, or other similar factors.
• Conditions that prevent or substantially hinder the viable use or capacity of buildings or lots. These conditions may be caused by substandard, defective, or obsolete design in the context of the present general plan, zoning, or other development standards.
• Adjacent or nearby incompatible land uses that prevent the development of those parcels or other portions of the project area.
• The existence of subdivided lots owned by multiple parties and whose physical development has been impaired by the lots’ irregular shapes and inadequate sizes, in the context of the present general plan, zoning standards, and market conditions.

Economic Conditions that Cause Blight
• Depreciated or stagnant property values.
• Impaired property values, due in significant part, to hazardous wastes on property.
• Abnormally high business vacancies, abnormally low lease rates, or an abnormally high number of abandoned buildings.
• A serious lack of necessary commercial facilities that are normally found in neighborhoods, including grocery stores, drug stores, banks, and other lending institutions.
- Serious residential overcrowding that has resulted in significant public health or safety problems.
- An excess of bars, liquor stores, or adult-oriented businesses that has resulted in significant public health, safety, or welfare problems.
- A high crime rate that constitutes a serious threat to public safety and welfare. (CHSC)

**California Environmental Quality Act**

CEQA requires that significant effects on the environment be analyzed, disclosed, and mitigated, if feasible, prior to the approval of discretionary land use approvals. The State *CEQA Guidelines* do not contain set standards of significance for economic impacts because, as stated in Section 15382, economic or social change alone is not considered a significant effect on the environment. However, physical changes that could result from economic or social effects of properties are within the scope of CEQA considerations. Section 15131 echoes this statement and establishes that, if included, these issues need only be mentioned to the extent necessary to “…trace a chain of cause and effect from a proposed decision.”

The State *CEQA Guidelines* require that both direct and reasonably foreseeable indirect physical changes be evaluated in an EIR. In the context of CEQA, urban decay is considered an indirect physical impact, and therefore, must be evaluated.

**5.9.4.2 Local Regulations**

**Riverside Municipal Code**

The City has established classifications of nuisances and owner responsibilities regarding the maintenance and rehabilitation of vacant and neglected buildings in Chapter 6.11 of the Riverside Municipal Code (RMC). Such vacant and neglected buildings have the potential to result in blight and contribute toward urban decay in residential and nonresidential areas of the City, which attracts vagrants and criminal activity, and other health and safety concerns. As a result, the City has determined it is the responsibility of property owners to prevent owned property from becoming a burden to the neighborhood and community and a threat to the public health, safety, and welfare.

Pursuant to RMC Section 6.11.030, classifications of nuisances include the following:

- Buildings or structures that are under construction or rehabilitation and are not completed during the term of a valid building permit or building permit extension issued by the Community Development Director, the Building Official, or their designees;
- Unoccupied buildings or structures that have been left unlocked or otherwise open or unsecured from intrusion by persons, animals or the elements;
- Buildings or structures for human use or occupancy that have been left vacant for more than 180 days, unless one of the following applies:
5.9 Urban Decay

- The building structure is the subject of an active building permit for repair or rehabilitation and the owner is progressing diligently to complete the repair or rehabilitation;
- The building or structure complies with all codes adopted by the City, does not otherwise constitute a public nuisance, is ready for use or occupancy and is actively being offered for sale, lease or rent;
- The building or structure, including the premises on which it is located, does not otherwise constitute a public nuisance and is not likely to become a public nuisance because it is being actively maintained and monitored. Actively maintained and monitored means the owner is doing the following:
  - Maintaining landscaping and plant materials that comply with RMC Chapter 6.14, Section 6.14.020 in good condition;
  - Maintaining the exterior of the building or structure, including, but not limited to, its paint and finishes, windows and doors, fences and walls, porches and patios;
  - Maintaining the interior of the building or structure free from litter, junk, trash, and debris;
  - Maintaining the exterior free of trash, debris and graffiti;
  - Maintaining of the building or structure in continuous compliance with all applicable codes and regulations, including Health and Safety Code section 17920.3;
  - Preventing criminal activity on the premises, including, but not limited to, use and sale of controlled substances, prostitution and criminal street gang activity.

(Ord. 6969 Section 1, 2007)

Property owners in violation of Chapter 16.11 are subject to administrative civil penalties. Further, if a structure is deemed a permanent nuisance by the Community Development Director, or his or her designees, the City has the authority to immediately call a contractor to abate any public nuisance that presents an immediate threat to public health or safety, and the City may recover all abatement costs as set forth in RMC Chapter 6.15.

5.9.5 Project Design Considerations

There are no Project design considerations specific to urban decay.

5.9.6 Environmental Impacts before Mitigation

This section summarizes the methodology used by the Retail Market Impact Analysis to determine the extent to which the proposed Walmart expansion would impact existing retail facilities in the Trade Area, followed by a discussion of Project impacts.
Section 5 Environmental Impact Analysis

5.9 Urban Decay

City of Riverside

Walmart Expansion DEIR

5.9.6.1 Methodology

In order to estimate impacts in the relevant Food/Liquor and other relevant retail categories, the Retail Market Impact Analysis defined a geographic Trade Area, which is specific to the existing Walmart store. The Retail Market Impact Analysis projected total resident purchasing power within the Trade Area, and uses this projection of total demand as the basis for determining the extent to which the proposed Walmart expansion could be supported in the Trade Area without negatively impacting existing businesses.

The methodology used in the Retail Market Impact Analysis includes the following steps:

- Estimate the current potential demand for retail sales in the Trade Area, based on existing demand;
- Forecast future (12-year) growth in the amount of supportable retail sales, based on projected increases in the Trade Area’s resident population;
- Estimate supermarket demand by determining the portion of food sales that occur at supermarkets versus all other types of food stores;
- Estimate net supermarket demand after accounting for the capture of available demand by the proposed Walmart expansion;
- Evaluate the impact of the proposed Walmart expansion on average sales-per-SF levels at the 17 existing supermarkets in the Trade Area; and
- Evaluate the cumulative impact of the proposed Walmart expansion combined with that of other planned supermarket projects on average sales-per-SF levels at the existing supermarkets in the specified trade area.

Proposed Expansion Detail

The Retail Market Impact Analysis assumed the proposed expansion will be completed in 2012. Since, as shown in Table 5.9-H – Existing Walmart and Project Expansion Detail, the grocery area is the only sales area of the store that is being substantially expanded, the subsequent Project-impact analysis focuses on the potential for the proposed 44,907-SF expanded grocery component of the Walmart to impact the 17 existing supermarkets in the Trade Area. This analysis also considers the potential impacts of the 479-SF expansion of the restaurant tenant area. Further, the Project impact analysis also evaluates the cumulative impacts associated with the Project when its economic impacts are considered together with the economic impacts of all major retail projects currently planned for development in the Trade Area at the time the Retail Market Impact Analysis was prepared.
Table 5.9-H – Existing Walmart and Project Expansion Detail

<table>
<thead>
<tr>
<th>Store Areas</th>
<th>Existing Size (SF)</th>
<th>Proposed Expansion (SF)</th>
<th>Expanded Walmart (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Sales</td>
<td>359</td>
<td>27,677</td>
<td>28,036</td>
</tr>
<tr>
<td>Food Sales Support</td>
<td>371</td>
<td>7,959</td>
<td>8,330</td>
</tr>
<tr>
<td>Stockroom/Receiving</td>
<td>9,265</td>
<td>5,903</td>
<td>15,168</td>
</tr>
<tr>
<td>Ancillary</td>
<td>9,675</td>
<td>3,368</td>
<td>13,043</td>
</tr>
<tr>
<td><strong>Expanded Grocery Area</strong></td>
<td></td>
<td></td>
<td><strong>44,907</strong></td>
</tr>
<tr>
<td>General Merchandise Sales</td>
<td>99,301</td>
<td>(14,737)</td>
<td>84,564</td>
</tr>
<tr>
<td>Restaurant Tenant</td>
<td>1,686</td>
<td>479</td>
<td>2,165</td>
</tr>
<tr>
<td>Tire &amp; Lube Express</td>
<td>5,170</td>
<td>(5,170)</td>
<td>0</td>
</tr>
<tr>
<td>Other(^b)</td>
<td>0</td>
<td>2,093</td>
<td>2,093</td>
</tr>
<tr>
<td><strong>Total Interior Building</strong></td>
<td>125,827</td>
<td>27,572</td>
<td>153,399</td>
</tr>
<tr>
<td>Exterior Garden Center</td>
<td>5,300</td>
<td>(5,300)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Area</strong></td>
<td>131,127</td>
<td><strong>22,272</strong></td>
<td><strong>153,399</strong></td>
</tr>
</tbody>
</table>

Notes:


\(^b\) Approximately 2,093 SF of the existing exterior Garden Center will be allocated among the store interior space; the specific uses of which are unknown.

The proposed expansion of the Walmart grocery area (shown as Food Sales in Table 5.9-H) is larger than the overall expansion of the store because the grocery expansion area will be accomplished both through conversion of floor area currently used for sales of general merchandise in non-grocery categories and through the actual net expansion of the store’s total floor area.

Projected Households, Income Levels, and Retail Demand in the Trade Area

The future-year projections for the number of households in the Trade Area are based on the latest adopted forecasts from SCAG. Specifically, the *Retail Market Impact Analysis* applied the percentage growth rates (for the relevant census tracts, as projected by SCAG) to the 2009 base-year household estimate (Table 5.9-E).

To determine projected household income levels, the estimate of existing baseline household income (shown previously in Table 5.9-E) was increased 20 percent. The reason for this increase factor is that the income estimates shown in Table 5.9-E are based on the “money income” definition of income utilized by the United States Census Bureau. This measure of income is narrower than the “personal income” definition used by the United States Department of Commerce’s Bureau of Economic Analysis. The broader definition includes additional income sources such as fringe benefits (health insurance, retirement funding), imputed income (interest, rent), and direct payments to medical providers by
governments.\textsuperscript{9} Personal income, therefore, represents a more complete gauge of a household’s economic status and is the preferred measure for purposes of projecting a household’s purchasing power (i.e., retail demand). (TNDG, p. 16)

**Table 5.9-I – Projected Number of Households, Income, and Retail Demand in the Trade Area** presents the number of households, income and retail demand projected for the Project’s Trade Area.

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Households</td>
<td>40,460</td>
<td>41,834</td>
<td>42,771</td>
<td>43,710</td>
<td>44,650</td>
<td>45,611</td>
<td>46,554</td>
</tr>
<tr>
<td>Total Trade Area Income (in thousands of 2009 dollars)</td>
<td>$2,988,084</td>
<td>$3,089,586</td>
<td>$3,158,784</td>
<td>$3,228,127</td>
<td>$3,297,557</td>
<td>$3,368,480</td>
<td>$3,438,133</td>
</tr>
<tr>
<td>Total Retail Demand (in thousands of 2009 dollars)</td>
<td>$1,272,924</td>
<td>$1,316,164</td>
<td>$1,345,642</td>
<td>$1,375,182</td>
<td>$1,404,759</td>
<td>$1,434,972</td>
<td>$1,464,645</td>
</tr>
</tbody>
</table>

**Notes:**

\textsuperscript{b} Assumed to be 42.6\% of the Total Trade Area Income.

As previously discussed, household and income characteristics are the primary determinants of the potential dollars available for purchases of goods and services in the Trade Area, and this analysis assumes that Trade Area residents will, on average, spend 42.6\% of their income on retail purchases (TNDG, p. 17).

### 5.9.6.2 Project Impacts

**Threshold:** *Result in an economic impact so severe that stores might close as a result; and building and/or properties, rather than being reused within a reasonable time, would remain vacant and such vacancies would cause the buildings and/or properties to deteriorate, and lead to the physical decline of the associated or nearby real estate.*

To ascertain if the proposed Walmart expansion would cause the closure of any of the Trade Area’s existing supermarkets, it is necessary to project the growth in grocery demand, identify what portion of

\textsuperscript{9} Per capita “personal income” is 22 percent higher than per capita “money income” in Riverside County, based on the latest (2005–2007) data published by the Bureau of Economic Analysis and the United States Census Bureau. To remain analytically conservative, the *Retail Market Impact Analysis* uses an adjustment factor of 20 percent.
grocery demand would be absorbed by the expanded Walmart, and determine if the remaining grocery demand is sufficient to support the 17 existing supermarkets in the Trade Area.

The analysis in this section also evaluates the potential for the 479-SF expansion of the restaurant tenant space proposed by the Project to impact existing restaurants.

Projected Grocery Sales (Food) and Eating and Drinking Demand in the Trade Area
The demand for grocery sales (Food) and restaurants (Eating and Drinking) in the Trade Area is presented in the following table.

Table 5.9-J – Projected Demand in Food and Eating and Drinking Categories in the Trade Area\(^a\)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Retail Demand(^b)</td>
<td>$1,272,924</td>
<td>$1,316,164</td>
<td>$1,345,642</td>
<td>$1,375,182</td>
<td>$1,404,759</td>
<td>$1,434,972</td>
<td>$1,464,645</td>
</tr>
<tr>
<td>Food (24%)(^c)</td>
<td>$305,502</td>
<td>$315,879</td>
<td>$322,954</td>
<td>$330,044</td>
<td>$337,142</td>
<td>$344,393</td>
<td>$351,515</td>
</tr>
<tr>
<td>Eating and Drinking (9%)(^c)</td>
<td>$114,563</td>
<td>$118,455</td>
<td>$121,108</td>
<td>$123,766</td>
<td>$126,428</td>
<td>$129,148</td>
<td>$131,818</td>
</tr>
</tbody>
</table>

Notes:
\(^b\) Assumed to be 42.6% of the Total Trade Area Income
\(^c\) Based on the most recent full year of taxable sales data (2007) from the State Board of Equalization for Riverside and comparable trade areas

As discussed in Section 5.9.1 (Setting, Distribution of Retail Expenditures and Existing Grocery Demand in the Trade Area), approximately 84 percent of purchases made in the Food category are made at supermarkets (Table 5.9-G – Existing Demand for Supermarket Sales and Estimate of Sales per SF of Existing Supermarkets in Trade Area).

Grocery Sales per SF for the Expanded Walmart
The national average for grocery sales in Walmart Supercenters is $852/SF of grocery sales area or the equivalent of $525/SF of total grocery space (which includes sales and non-sales areas) (TNDG, p. 8). Thus, based on the Project’s proposed 44,907-SF grocery expansion (see Table 5.9-H) divided by $525/SF of total grocery space, the expanded Walmart is projected to absorb approximately $23,581 thousand of the total food sales demand in the Trade Area (TNDG, p. 20; see Table 5.9-K – Projected Demand for Supermarket Sales and Estimate of Supermarket Sales-per-SF in the Trade Area).
Net Food Demand with Project Implementation

Table 5.9-K – Projected Demand for Supermarket Sales and Estimate of Supermarket Sales-per-SF in the Trade Area presents the projections of the total demand in the Food category until year 2022, the portion of the Food demand that would be absorbed by the expanded Walmart, and the net Food demand available to support the existing supermarkets in the Trade Area after implementation of the proposed Project.

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Food Sales Demand (in thousands of dollars)</td>
<td>$305,502</td>
<td>$315,879</td>
<td>$322,954</td>
<td>$330,044</td>
<td>$337,142</td>
<td>$344,393</td>
<td>$351,515</td>
</tr>
<tr>
<td>Supermarket Share of Food Demand (84%) (in thousands of dollars)</td>
<td>$256,621</td>
<td>$265,339</td>
<td>$271,281</td>
<td>$277,237</td>
<td>$283,199</td>
<td>$289,290</td>
<td>$295,272</td>
</tr>
<tr>
<td>Net Demand Available to Support Existing Supermarketsc (in thousands of dollars)</td>
<td>$256,621</td>
<td>$241,758</td>
<td>$247,701</td>
<td>$253,656</td>
<td>$259,619</td>
<td>$265,710</td>
<td>$271,692</td>
</tr>
<tr>
<td>SF of Existing Supermarkets in Trade Area d</td>
<td>548,966</td>
<td>548,966</td>
<td>548,966</td>
<td>548,966</td>
<td>548,966</td>
<td>548,966</td>
<td>548,966</td>
</tr>
<tr>
<td>Sales-per-SF for Existing Supermarkets e</td>
<td>$467</td>
<td>$440</td>
<td>$451</td>
<td>$462</td>
<td>$473</td>
<td>$484</td>
<td>$495</td>
</tr>
</tbody>
</table>

Notes:


b Expanded Walmart assuming absorption of $525/SF of total grocery area.

c Supermarket Share of Food Demand less Demand Absorbed by the Expanded Walmart.

d See Table 5.9-D for the inventory of existing supermarkets in the Trade Area.

e Calculated by dividing the estimate of supermarket demand (in dollars) by the SF of the existing supermarket space. Projections of future average sales volumes are net of the demand that will be absorbed by the expanded Walmart.

As shown in the above table, sales at existing supermarkets are projected to decrease to an average of $440/SF in 2012 (the assumed opening year for the expanded grocery area) as a result of the proposed Walmart expansion.
Impacts Associated with the Proposed Project’s Restaurant Space
The Project includes a 479 SF expansion of the Restaurant Tenant space (see Table 5.9-H — Existing Walmart and Project Expansion Detail). This expansion represents approximately 0.08 percent of the total 628,148 SF assigned to the Eating and Drinking Category in the Trade Area (see Table 5.9-D — Inventory of Existing Retail Development in Trade Area). If it is assumed that the expanded Restaurant tenant space were to achieve sales of $383/SF (the average sales for fast food restaurants), the total sales attributable to the proposed Project would represent approximately 0.06 percent to total estimated 2009 sales in the Eating and Drinking Category (see Table 5.9-J — Projected Demand in Food and Eating and Drinking Categories in the Trade Area). (TNDG, p. 9)

Conclusions

Supermarket Sales
Total demand for supermarket sales in the Trade Area is projected to increase from approximately $256.6 million in 2009 to approximately $265.3 million in 2012 (the assumed opening date of the Project), and is projected to reach approximately $295.3 million by 2022 (Table 5.9-K). As shown in Table 5.9-K, the immediate impact of the expanded Walmart will decrease sales to the 17 existing supermarkets in the Trade Area from $467/SF to $440/SF. The projected minimum average sales of $440/SF represents a decrease of approximately 5.8 percent from the combined sales volumes of $467/SF currently estimated for the 17 existing supermarkets in the Trade Area (see Table 5.9-G — Existing Demand for Supermarket Sales and Estimate of Sales per SF of Existing Supermarkets in Trade Area). Moreover, this initial impact in the Project’s assumed buildout in 2012 would be temporary as the sales per SF levels are projected to increase each year thereafter until surpassing their prior levels by 2018 (Table 5.9-K). It should be noted that the previously-cited western United States median regional sales figure of $475/SF (see Section 5.9.1) does not necessarily reflect a break-even threshold for all supermarkets (TNDG, p. 9). The $475/SF is the median sales figure, which by definition means half of all supermarkets in the United States are operating below this level. Some supermarkets operate successfully at substantially lower sales levels than the median (TNDG, p. 9). Thus, although the potential reduction in supermarket sales volumes projected would clearly be undesirable from the standpoint of existing supermarket owners, based on the above discussion it is not reasonably foreseeable that existing supermarkets would close, and potential impacts to existing supermarkets are considered less than significant.

Restaurant Expansion
The expansion of Walmart’s fast-food restaurant space is also not likely to have a significant impact on existing restaurant establishments because its projected sales are projected to represent only 0.06 percent of total estimated 2009 sales in the Eating and Drinking category in the Trade Area. Further, the small increase in the Restaurant Tenant’s space is not anticipated to significantly increase sales

10 All projections and dollar values are reported in 2009 dollars.
11 Retail Maxim, July 2008, average for fast food restaurants
volumes for the restaurant; rather, it will enable the restaurant to operate more efficiently and to provide more convenient seating for the establishment’s customers. (TNDG, pp. 9–10)

For these reasons, potential impacts resulting from the restaurant expansion will be less than significant.

Potential for Urban Decay
As described previously in Section 5.9.1 (Setting, Existing Conditions in the Trade Area, Trade Area Vacancy Rate), there is one vacant grocery store space in the Trade Area, the approximately 13,200-SF unit that was previously occupied by El Sol Ranch Market. This space represents approximately 47 percent of the space in an unnamed mall located at Jurupa Avenue and Grand Avenue. Based on industry standards, this unit would not be categorized as a supermarket due to its relatively small size. If this unit had been configured as a supermarket with an area of at least 25,000 SF, its future potential reuse options could be limited to similar supermarket uses. However, because of its size, the vacant unit has the potential to be re-occupied by retailers in a wide variety of retail categories. (TNDG, p. 12)

As also discussed in Section 5.9.1 (Setting, Existing Conditions in the Trade Area, Trade Area Vacancy Rate), several small strip malls were identified as having high vacancies that might put them at risk for urban decay. However, none of these malls are anchored by supermarket stores and none of the vacancies were spaces previously occupied by supermarkets. Additionally, these strip malls are dated—not suited to contemporary retail uses in their current condition—and are not the types of facilities that would likely be impacted by the proposed Walmart expansion. These vacancies and need for updating of these strip malls are existing conditions that will exist with or without the proposed Project. (TNDG, p. 7)

There are a wide variety of tenant types in the market that could potentially occupy the vacancies at these strip malls, none of which are likely to compete directly with the expanded Walmart. As the Walmart general merchandise component already exists and will be reduced in size as a result of the proposed Project, no additional impacts are anticipated in this area. (TNDG, p. 7)

Two large vacant spaces were identified in the Trade Area by the Retail Market Impact Analysis. These spaces were previously occupied by Mervyn’s and Macy’s (in the Galleria at Tyler). Subsequent to preparation of the Retail Market Impact Analysis, the former Mervyn’s space became occupied by Kohl’s. Macy’s space remains vacant. Given that the Macy’s space does not have an appropriate configuration for use as a supermarket, it is unlikely that the expanded Walmart will cause any delay in its ultimate reuse. Further, it is worthwhile to consider the reasons behind the vacancy. Macy’s moved from its original location in the mall to the former Robinsons-May store, after the merger of the two retailers. While this may be in part due to economic conditions nationwide, it is not indicative of any negative conditions particular to the Trade Area. Additionally, it is likely that the ownership of the Galleria at Tyler, will maintain the physical condition of the mall at all times as a new occupant for the vacant space is sought. (TNDG, p. 12)
Urban decay is a potential consequence of a downward spiral of store closures and long-term vacancies.\(^ {12} \) While urban decay is not defined under CEQA, it is assumed to be indicated by significant deterioration of structures and/or their surroundings. Such deterioration can occur when property owners reduce property maintenance activities below that required to keep their properties in good condition. Property owners are likely to make reductions in maintenance under conditions where they see little likelihood of future positive returns due to prolonged vacancy. (TNDG, p. 12)

Given the conclusion in the *Retail Market Impact Analysis* that no store closures are likely to occur as a result of the proposed Walmart expansion, it is unlikely that owners of existing unoccupied retail space will allow their properties to physically deteriorate solely as a result of the proposed Project. While there are some strip malls with high vacancies, and several large vacant spaces in the Trade Area, implementation of the Project is not anticipated to have any negative effect on the reuse of properties and will not contribute to their falling into a state of urban decay. In other words, the grocery and fast-food components of the proposed Project are not likely to cause a diversion of sales from existing retail facilities severe enough to result in closure of any existing supermarkets or restaurants in the Trade Area. Therefore, potential impacts regarding urban decay resulting from the Project will be less than significant. (TNDG, pp. 12–13)

### 5.9.7 Proposed Mitigation Measures

Pursuant to State CEQA Guidelines Section 15126.4, an EIR is required to describe feasible mitigation measures that could minimize significant adverse impacts. Since the proposed Project will result in less than significant impacts with respect to urban decay, no mitigation measures are proposed.

### 5.9.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented

Potential significant adverse impacts associated with urban decay were found to be less than significant without mitigation.

### 5.9.9 Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented

The geographic context for cumulative impacts relative to urban decay is the Project’s Trade Area as shown in Figure 5.9-1 – Trade Area Boundary. Whereas the analysis in Section 5.8.5 examines potential impacts strictly related to the Project, this section evaluates the cumulative impacts to the Trade Area based on all known pending supermarket development and/or expansion projects (including the proposed Project) in the Trade Area. In addition to the proposed Project, the *Retail Market Impact Analysis* identified two other planned and/or pending supermarket projects in the Trade Area as shown in Table 5.9-L – Cumulative Supermarket Projects in the Trade Area.

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As shown in the above table, there is approximately 65,618 SF of new grocery area planned for development within the Trade Area; of which 44,907 SF is attributable to the proposed Project.

The methodology for the cumulative impacts analysis utilizes the same approach as the Project-specific impact analysis. Potential sales are projected for the two cumulative projects, assuming a rate of $475/SF. Potential sales for the expanded Walmart grocery area is based on $525/SF. (TNDG, p. 11) As shown in Table 5.9-M – Potential Cumulative Sales Impacts to Existing Supermarkets in the Trade Area Supermarket Projects in the Trade Area, the proposed Fresh & Easy and Maxi Foods stores are projected to absorb $7,130 thousand and $2,708 thousand of the Food demand, respectively.

**Table 5.9-L – Cumulative Supermarket Projects in the Trade Area**

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Status</th>
<th>New Grocery Area (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walmart Expansion (Proposed Project)</td>
<td>Van Buren Boulevard at Audrey Avenue</td>
<td>Under Review</td>
<td>44,907</td>
</tr>
<tr>
<td>Fresh &amp; Easy</td>
<td>Van Buren Boulevard at Colorado Avenue</td>
<td>Approved, not constructed</td>
<td>15,011</td>
</tr>
<tr>
<td>Maxi Foods</td>
<td>California Avenue at Monroe Street</td>
<td>Approved, not constructed</td>
<td>5,700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>65,618</strong></td>
</tr>
</tbody>
</table>

Notes:


**Table 5.9-M – Potential Cumulative Sales Impacts to Existing Supermarkets in the Trade Area**

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Food Sales Demand (in thousands of dollars)</td>
<td>$305,502</td>
<td>$315,879</td>
<td>$322,954</td>
<td>$330,044</td>
<td>$337,142</td>
<td>$344,393</td>
<td>$351,515</td>
</tr>
<tr>
<td>Supermarket Share of Food Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
</tr>
<tr>
<td>Increment</td>
<td>N/A</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
</tr>
<tr>
<td>Supermarket Share of Food Demand (in 2009 dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
</tr>
<tr>
<td>Increment</td>
<td>$0</td>
<td>$8,717</td>
<td>$14,660</td>
<td>$20,615</td>
<td>$26,578</td>
<td>$32,669</td>
<td>$38,651</td>
</tr>
<tr>
<td>Less Demand Absorbed by the Expanded Walmart and Cumulative Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh &amp; Easy (in thousands of dollars)</td>
<td>N/A</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
</tr>
<tr>
<td>Maxi Foods (in thousands of dollars)</td>
<td>N/A</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
</tr>
</tbody>
</table>
As shown in the above table, after completion of the proposed Walmart expansion, development of a new Fresh & Easy store, and the expansion of the existing Maxi Foods store, sales volumes at the 17 existing supermarkets in the Trade Area will decrease from an average of $467/SF in the existing condition (2009) to an average of $422/SF in 2012, a decrease of 9.6 percent. The sales per SF levels for the existing supermarkets are projected to increase each year thereafter until surpassing their prior levels in 2022.

While implementation of the proposed Project combined with the cumulative projects (Fresh & Easy and Maxi Foods) are projected to result in a sustained reduction in average sales per SF at the existing supermarkets in the Trade Area, this reduction is not likely to be severe enough to result in the closure of existing stores (TDNG, p. 11). Additionally, there are a number of other factors to suggest that this cumulative impact analysis is inherently conservative in projecting reduced sales volumes.

The proposed Fresh & Easy store, at the intersection of Van Buren Boulevard and Colorado Avenue, has been put on hold indefinitely and at the time of preparation of the Retail Market Impact Analysis; there is no timeline for resuming the project. It is unknown if the store will ever be built and it appears unlikely that it will be built within the early years of the analytical timeline as assumed. (TNDG, p. 11)

Although the proposed Fresh & Easy store is included in this cumulative analysis as a future addition to the inventory of supermarkets in the Trade Area, Fresh & Easy is not generally considered to be a supermarket due to its small size and specialized merchandise mix. It is likely that the proposed Fresh & Easy store will not absorb demand only from the supermarket category, but will also absorb a significant portion of its sales from the convenience store category. Further, because Fresh & Easy stores focus on pre-prepared meals, it is also expected to absorb existing sales in the restaurant category. Thus, the...
impact of the proposed Fresh & Easy will be spread out and will not be felt only by the Trade Area’s existing supermarkets. (TDNG, p. 11)

The City has in place regulations regarding maintenance and rehabilitation of vacant and neglected buildings and/or properties encompassed in the RMC. In the event a commercial tenant vacated their space within the Trade Area for any reason, the applicable property owner is responsible to maintain the building and/or property in accordance with RMC Chapter 6.11, or that building and/or property may be declared by the City to be unlawful (RMC, Section 6.11.030). If the building and/or property is vacant for 180 days and meets the classification of a nuisance, the City may administer civil penalties against the property owner (RMC, Section 6.11.050). The City may also determine the building and/or property is a permanent nuisance and may immediately hire a contractor to address any maintenance issues to bring the property into compliance with the RMC (RMC, Section 6.11.060). The City may recover all abatement costs from the property owner and any subsequent attorney’s fees (RMC, Sections 6.15.041 and 6.15.042). Thus, City regulations will ensure the upkeep to prevent blight and urban decay of vacated commercial buildings and/or properties.

Further, large commercial spaces are generally highly desirable in the marketplace. If for any reason a commercial tenant occupying a large space vacated, the space is likely to be re-occupied. For example, the former Mervyn’s clothing department store located at 3520 Tyler Street was vacated when the company went out of business as a result of the recent recession and failing to adequately restructure under Chapter 11 bankruptcy protection (MW Article). The store officially closed in early 2009, and was re-occupied and improved by Kohl’s department stores, which opened its store in 2010 (PE Article). Even in an economic recession, the larger, vacated commercial space provides desirable opportunities for comparable businesses, and thus, such spaces are likely to be re-occupied in a reasonable amount of time.

Therefore, because no store closures are likely to occur, and if for any reason a commercial property and/or structure is vacated, City regulations will ensure its upkeep to prevent blight and urban decay, and the usual higher desirability for larger commercial spaces in the marketplace when vacancies do occur, potential cumulatively considerable impacts regarding urban decay resulting from the Project in conjunction with the related projects will be less than significant.
5.9.10 References

In addition to other documents, the following references were used in the preparation of this section of this DEIR:


5.10  Energy Conservation

This section describes the energy consumption and conservation efforts that will result from implementation of the Project. Preparation of this section is based on Appendix F of the State CEQA Guidelines, which provides a recommended framework for an EIR to discuss energy conservation. CEQA required EIRs to analyze energy impacts with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy pursuant to Public Resources Code Section 21100(b)(3). In addition, pursuant to Appendix F, energy conservation is to be weighed more in energy efficiency than its cost effectiveness for a project. Specifically, this section analyzes the Project’s energy impacts compared to the objectives of Appendix F, which are to decrease overall per capita energy consumption; decrease reliance on fossil fuels such as coal, natural gas, and oil; and increase reliance on renewable energy sources.

Pursuant to State CEQA Guidelines Appendix F, the following discussion addresses potential impacts related to:

- wasteful, inefficient, or unnecessary consumption of energy; increasing demand on available energy resources that are not renewable; and failing to comply with existing established energy standards.

As discussed below, the Project’s potential to result in the wasteful, inefficient, or unnecessary consumption of energy; increasing demand on available energy resources that are not renewable; and failing to comply with existing established energy standards is considered to be less than significant.

5.10.1  Setting

Non-renewable energy resources include fossil fuels. Fossil fuels, which consist of oil, coal, and natural gas and associated byproducts, provide the energy required for the vast majority of motorized vehicles and generation of electricity at power plants. Thus, the discussion of energy conservation most relevant to the Project is focused on Project-generated electricity demand, natural gas demand, and fuel consumption.

5.10.1.1  Electricity

The City of Riverside (City) operates its own electrical utility, known as the City of Riverside Public Utilities (RPU), which provides service to most of the City, including the Project site (GP 2025, p. PF-23). RPU operates 90 miles of transmission lines and over 1,000 miles of distribution lines, and as of 2006, the largest proportion of the local electrical supply was generated from the burning of coal (68 percent), followed by nuclear power (13 percent), natural gas combustion (3 percent), and hydroelectric power (3 percent) (GP 2025, p. PF-23). In 2006, in preparation for increasing population growth, RPU completed construction of the first two generators on the 16-acre Riverside Energy Resource Center (RERC), which generates 96 megawatts (MW) of electricity from state-of-the-art, clean burning natural gas-fired turbines during times of peak demand (RPU RERC). In 2011, RPU completed construction of the third

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1 One megawatt is enough energy to serve approximately 750 Southern California homes.
and fourth generators, which now allow RERC to produce a total of 192 MW (RPU NR1). RERC only serves RPU customers and contributes to the diversification of RPU’s power sources and to fully meeting the City’s most critical emergency power needs in the event of a major disaster (RPU RERC). Further, RPU has a number of major energy projects under development, which include the following: 1) redevelopment and improvement of an electrical substation in the Casa Blanca neighborhood; 2) new electric distribution circuits to support existing and future electric load requirements in the Canyon Crest and Alessandro Heights neighborhoods; 3) an electric system upgrade to improve transmission reliability and lessen reliance on imported energy from Southern California Edison’s Vista Substation in the City of Grand Terrace; and 4) a sub-transmission project to reinforce the eastern side of RPU’s electrical supply network and address critical infrastructure and capacity deficiencies (RPU MEP).

The City and RPU are dedicated to conserving energy generated by fossil fuels and increasing its renewable energy generation (GP 2025, p. OS-2). In 2003, RPU was providing 26 MW of energy from renewable resources (GP 2025, p. OS-53). As of 2004, over 5 million dollars per year is expended for programs related to conservation and education, renewable energy, research and development, and low-income assistance (GP 2025, p. PF-24). In 2005, the City began adding collected grease wastewater to the existing anaerobic digesters to generate methane gas, which is then fed into an on-site cogeneration facility that produces inexpensive electricity (GP 2025, PF-25). Additionally, as of 2010, 20 percent of RPU’s supply is generated from renewable energy sources, which include geothermal, wind, biomass/waste, small-scale hydroelectric, and solar power (RPU Update). In 2011, RPU’s renewable energy portfolio for its solar generation projects surpassed three MW (RPU NR2). Further, RPU anticipates increasing renewable resources to 25 percent of its supply by 2015 and to 33 percent by 2020, and further phasing out its reliance on coal-fired plants for electricity supply (RPU Update).

Achieving 33 percent by 2020 will put RPU in compliance with a renewable energy goal set by then-Governor Arnold Schwarzenegger in 2009 with Executive Order S-21-09 (CPUC EO).

Table 5.10-A – Electricity Consumption in RPU Service Area (2009), shows the electricity consumption by sector in the City with the latest data available from the California Energy Commission (CEC).

<table>
<thead>
<tr>
<th>Agricultural &amp; Water Pump</th>
<th>Commercial Building</th>
<th>Commercial Other</th>
<th>Industry</th>
<th>Mining &amp; Construction</th>
<th>Residential</th>
<th>Streetlight</th>
<th>Total Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>1,068</td>
<td>64</td>
<td>203</td>
<td>14</td>
<td>697</td>
<td>22</td>
<td>2,085</td>
</tr>
</tbody>
</table>

Notes:

b all units are million kilowatt-hours

As shown in the table above, RPU produced approximately 2.1 billion kilowatt-hours (kWh) in 2009, of which approximately 1.1 billion kWh were consumed by commercial buildings and 14 million kWh were consumed by mining and construction, those sectors which are relevant to the existing Walmart store and proposed expansion.
5.10.1.2 Natural Gas
The Southern California Gas Company (SCG) provides natural gas service to the City, including the Project site (GP 2025, p. OS-52). As a public utility, SCG is under the jurisdiction of California Public Utilities Commission (CPUC), but can also be affected by actions of federal regulatory agencies. SCG is the principal distributor of natural gas in Southern California, providing retail and wholesale customers with transportation, exchange and storage services, and also procurement services to most retail core customers (2010 CGR, p. 63). SCG is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery and electric generation customers in Southern California (2010 CGR, p. 63). California’s existing gas supply portfolio is regionally diverse and includes supplies from on- and off-shore California sources, southwestern United States supply sources, the Rocky Mountains, and Canada (2010 CGR, p. 11). The integrated SCG and San Diego Gas and Electric (SDG&E) natural gas transmission system has the capability to take approximately 3.9 billion cubic feet (Bcf) per day of supplies on a firm basis from various intrastate and interstate receipt points and deliver those supplies to storage fields and/or end-users, which is a capacity 40 percent greater than the combined SCG/SDG&E average demand during 2008 (CNGI, p. 3). Further, SCG estimates Southern California gas demand in 2015 will be approximately one Bcf less than in 2008 under average temperature conditions (CNGI, p. 3).

Natural gas demand statewide, including volumes not served by utility systems, is expected to grow at a modest rate of 0.07 percent from 2010 to 2030, and demand specific to the core commercial market is expected to grow at an annual rate of 0.22 percent (2010 CGR, p. 7). While gas-fired generation will continue to be the technology of choice to meet the ever-growing demand for electric power, overall gas demand for electric generation is expected to grow at a modest 0.35 percent per year for the next 21 years due to more efficient power plants, statewide efforts to minimize greenhouse gas emissions through aggressive programs pursuing demand-side reductions, and the acquisition of preferred resources that produce little or no carbon emissions (2010 CGR, p. 7). Gas demand for electric power generation is expected to be moderated by CPUC-mandated goals for electric energy efficiency programs and renewable power, with 20 percent of energy needs met with renewable power by 2012 and 33 percent by 2020 (2010 CGR, p. 9).

SCG projects gas demand for all of its market sectors to decrease at an annual average rate of approximately 0.212 percent from 2010 to 2030, and projects that demand will be virtually flat for the next 21 years due to modest economic growth, CPUC-mandated demand-side management goals and renewable electricity goals, decline in commercial and industrial demand, continued increased use of non-utility pipeline systems by enhanced oil recovery customers, and savings linked to advanced metering modules (2010 CGR, p. 66). The core commercial market demand in SCG’s service area is expected to remain flat with an average annual growth rate from 2010 to 2030 at 0.1 percent, and the noncore commercial market is expected to show substantial decreases by 2030 of approximately 50 percent (2010 CGR, p. 72). The core commercial market’s slow growth demand and the noncore commercial market’s demand decline is mainly the result of the aggressive CPUC-authorized energy efficiency programs targeted at each market (2010 CGR, p. 72).
SCG also implements energy efficiency programs. SCG’s conservation and energy efficiency activities are intended to encourage customers to install energy efficient equipment and weatherization measures, and adopt energy saving practices that result in reduced gas usage while still maintaining a comparable level of service (2010 CGR, p. 82). The overall annual energy efficiency cumulative savings goal is to increase the savings from approximately 2.5 Bcf in 2010 to 40 Bcf by 2030 (2010 CGR, p. 83). This savings goal is based on measures installed under SCG’s Energy Efficiency program portfolio (2010 CGR, p. 83).

Natural gas service must be provided in accordance with SCG’s policies and extension rules on file with CPUC at the time contractual agreements are made. The viability of natural gas is based on present conditions of gas supply and regulatory policies. CPUC has several ways of encouraging or requiring new infrastructure, such as incorporating market mechanisms and following litigation/settlement proceedings, such as the SCG storage expansion per the Biennial Cost Allocation Proceeding (IEPR). In Phase I of the Biennial Cost Allocation Proceeding, CPUC approved a settlement under which SCG will expand storage inventory to 7 Bcf and injection capacity to 0.1 Bcf per day between 2009 and 2014, which will allocate an adequate amount of SCG storage capacity of 79 Bcf to SCG and SDG&E core customers (IEPR).

Table 5.10-B – Natural Gas Consumption in SCG Service Area (2009), shows the natural gas consumption by sector in the City with the latest data available from CEC.

<table>
<thead>
<tr>
<th>Agricultural &amp; Water Pump</th>
<th>Commercial Building</th>
<th>Commercial Other</th>
<th>Industry</th>
<th>Mining &amp; Construction</th>
<th>Residential</th>
<th>Total Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>79</td>
<td>864</td>
<td>131</td>
<td>1,439</td>
<td>262</td>
<td>2,441</td>
<td>5,216</td>
</tr>
</tbody>
</table>

Notes:


b all numbers in million therms

As shown in the table above, SCG produced approximately 5.2 billion therms in 2009, of which approximately 131 million therms were consumed by commercial buildings and 262 million therms were consumed by mining and construction, those sectors most relevant to the existing Walmart store and the proposed expansion.
5.10.1.3 Transportation Fuel
It is common knowledge that fossil fuels are used to create almost all of the United States’ transportation fuels. Specifically, fossil fuels supply more than 99 percent of the country’s transportation fuels (USDOE ES). In 2007, an estimated 20 billion gallons of gasoline and diesel fuel was consumed in California, where there are nearly 26 million registered vehicles operating (CEC FTD). Under the low demand case, the CEC estimates that between 2007 and 2030, total annual gasoline consumption in California will fall 13.3 percent to 13.57 billion gallons per year, largely as a result of high fuel prices, efficiency gains, and competing fuel technologies (TEFA, p. 2). Under the high-demand case, the recovering economy and lower relative prices will lead to a gasoline demand peak in 2014 of 16.40 billion gallons per year, before consumption falls to a 2030 level of 14.32 billion gallons, 8.5 percent below 2007 levels (TEFA, p. 2). Further evidenced by trends in transportation, between 2001 and 2008, the number of all alternative-fueled vehicle types has increased in California at rates substantially greater than for gasoline vehicles (TEFA, p. 11). This growth is particularly pronounced for hybrid electric vehicles, which grew at 75 percent between 2001 and 2008 (TEFA, p. 11). Also, among 45 California transit agencies for which data was available from the American Public Transportation Association, public transit ridership increased by 2.2 percent, to 1.34 billion trips, between 2007 and 2008 (TEFA, p. 12).

As analyzed in Section 5.8 (Transportation/Traffic) of this DEIR, the existing Walmart store generates approximately 9,757 trip-ends per day. In addition, the Project site is currently served by a transit bus stop operated by the Riverside Transit Agency (RTA).

5.10.2 Comments Received in Response to the Initial Study/Notice of Preparation
No comments were received regarding energy consumption or conservation in response to the Initial Study/Notice of Preparation.

5.10.3 Thresholds of Significance
The City has not established local CEQA significance thresholds as described in State CEQA Guidelines Section 15064.7. According to CEQA Guidelines Appendix F, CEQA “requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code section 21100(b)(3)).” Moreover, “[p]otentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project.”

Pursuant to impact possibilities listed in Appendix F, a project may have a significant impact on energy consumption and conservation, if it would:

- result in the wasteful, inefficient, or unnecessary consumption of energy; substantially increase demand on available energy resources that are not renewable; or fail to comply with existing established energy standards.
5.10.4 Related Regulations

5.10.4.1 Federal Regulations

At the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy, and the United States Environmental Protection Agency (USEPA) are three agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. Major federal energy-related laws and plans are discussed below.

Federal Energy Policy and Conservation Act (EPCA)

The Federal Energy Policy and Conservation Act (EPCA) established fuel economy standards for on-road motor vehicles in the United States. The National Highway Traffic and Safety Administration, which is part of USDOT, is responsible for establishing additional vehicle standards and revising existing standards under the EPCA. As of model year 2011, fuel economy standards are a combined average of 27.3 miles per gallon. In should be noted that heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model; instead, compliance is determined on the basis of each manufacturer’s average fuel economy for the portion of their vehicles produced for sale in the United States. The Corporate Average Fuel Economy program, administered by USEPA, was created to determine vehicle manufacturers’ compliance with the fuel economy standards. USEPA calculates a value for each manufacturer, based on city and highway fuel economy test results and vehicles sales. On the basis on the information generated under the program, USDOT is authorized to assess penalties for noncompliance. In the course of over a 30-year history, this regulatory program has resulted in vastly improved fuel economy throughout the United States’ vehicle fleet, and also has protected against inefficient, wasteful, and unnecessary use of energy.

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 to address national and local interests in air quality and energy. The ISTEA contained factors that metropolitan planning organizations were required to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process for specific projects would then address these policies. Another requirement was to consider the consistency of transportation planning with federal, State, and local energy goals. Through this requirement, energy consumption was expected to become a decision criterion, along with cost and other values that determine the best transportation solution.
The Transportation Equity Act for the 21st Century (TEA-21)
The Transportation Equity Act for the 21st Century (TEA-21) builds upon the initiatives established in the ISTEA legislation discussed previously. 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.

5.10.4.2 State Regulations
At the State level, the CEC and CPUC are two agencies with authority over different aspects of energy. CPUC regulates privately-owned utilities in the energy, rail, telecommunications, and water sectors. CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes, and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting State fuel economy standards for new on-road motor vehicles. Major State energy-related laws and plans are discussed below.

California Energy Commission (CEC)
The CEC was formed by Assembly Bill (AB) 1575 and is the State’s primary energy policy and planning agency. AB 1575, which was adopted in 1975 in response to the oil crisis of the 1970s, also requires EIRs to consider wasteful, inefficient, and unnecessary consumption of energy and was the driving force behind the creation of Appendix F to the CEQA Guidelines. CEC was established to address the State’s energy challenges, and is responsible for the creation of the State Energy Plan. The State Energy Plan identifies the emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan recommends that the State assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. The State Energy Plan also identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicles miles traveled, and accommodating pedestrian and bicycle access.

California Public Utilities Commission (CPUC)
CPUC regulates investor-owned electric and natural gas utilities operating in the State, including SCG. The CPUC regulates the natural gas rates and natural gas services, including in-State transportation over the utilities’ transmission and distribution pipeline systems, storage, procurement, metering, and billing. CPUC policy on natural gas infrastructure and capacity is to: 1) allow gas utilities to gain better access to new sources of supply, develop a diverse supply portfolio, and have adequate storage capacity for core procurement requirements; 2) ensure adequate, diverse utility natural gas pipeline and storage infrastructure for utilities and consumers; 3) assure delivery of supplies with a high degree of certainty,
especially for core customers; 4) minimize transmission constraints; 5) provide access to a diverse portfolio of supplies; 6) reduce the likelihood of price spikes; 7) allow more gas to be stored when prices are low; 8) allow customers to match supplies with requirements; and 9) obtain fair access to utility transmission systems for suppliers and pipelines.

**Title 24 of the California Code of Regulations**

Energy consumption by new buildings in the State is regulated by Title 24 of the California Code of Regulations. These efficiency standards (commonly referred to as Title 24 standards) apply to new construction of both residential and nonresidential buildings and regulate insulation, glazing, lighting, shading, water and space heating systems, as well as parking ratios to promote alternative transportation. The purpose of Title 24, specifically Part 11, known as the 2010 California Green Building Standards (CALGreen) Code, is to encourage sustainable construction practices that reduce negative impacts on the environment through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State.

California’s building efficiency standards (along with those for energy efficient appliances) have saved more than $56 billion in electricity and natural gas costs since 1978. It is estimated that Title 24 standards will save an additional $23 billion by 2013. Building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that standards meet or exceed those contained in Title 24. Since Title 24 was adopted after AB 1575, it has generally been accepted throughout the State that compliance with Title 24, along with federal and State regulations, ensures that projects will not result in the inefficient, wasteful, and unnecessary consumption of energy. As with other uniform building codes, Title 24 is designed to provide certainty and uniformity throughout the State while ensuring that the efficient and non-wasteful consumption of energy is carried out through design features.

According to the CEC, reducing energy use is a benefit to all. Building owners save money, Californians have a more secure and healthy economy, the environment is less negatively impacted, and the electrical grid can operate in a more stable State. The 2008 Standards for residential and nonresidential buildings, which became effective January 1, 2010, are expected to reduce the growth in electricity use by 561 gigawatt-hours per year (gWh/y) and reduce the growth in gas use by 19.0 million therms per year. The savings attributable to new nonresidential buildings are 459 gWh/y of electricity savings and 11.5 million therms per year. Savings from the application of the 2008 Standards to building alterations accounts for savings of 270 gWh/y and 8.2 million therms per year. These savings are cumulative, doubling in two years, tripling in three, etc.

**California Integrated Waste Management Act of 1989**

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, AB 939 requires local governments to identify an implementation schedule to divert 50 percent of the total waste stream
from landfill disposal by 2000. AB 939 also requires local governments to promote source reduction, recycling, and safe disposal or transformation. Cities and counties are required to maintain the 50 percent diversion specified by AB 939 past 2000. The City met its 2000 waste diversion five years early and achieved a diversion rate of 57 percent in 2002 (Model Study).

AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of AB 939, including the previously-noted diversion goals and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California local government are required to submit annual reports to the California Department of Resources Recycling and Recovery (CalRecycle) to update it on their progress toward the AB 939 goals, i.e., source reduction, recycling and composting, and environmentally safe land disposal (Public Resources Code Section 40050 et seq). To date, implementation of AB 939 has proven to be a successful method of reducing landfill waste in the City.

The City has also adopted solid waste reduction strategies as part of the Riverside Green Action Plan to further advance diversion rates. Solid waste prevention and recycling can help reduce climate change impacts as less solid waste decreases the amount of heat-trapping greenhouse gas emissions linked to everyday trash. The City is committed, through programs like Clean Up Riverside’s Environment and Keep Riverside Clean and Beautiful to promote the basic principles of recycle, reduce, reuse. Two goals of the City regarding waste reduction are to implement programs to reduce waste, based on the 2007 per capita baseline, by 75 percent by 2020, and to implement educational programs throughout the community to encourage “green” practices. In the short-term, the City seeks to accomplish related tasks such as increase recycling Citywide by 15 percent by 2012, and develop measures to encourage that a minimum of 90 percent of recoverable waste from all construction sites be recycled throughout the City by 2015, beginning with 40 percent in 2010 and increasing by 10 percent each year thereafter (Riverside Green Action Plan is discussed further below).

5.10.4.3 Local Regulations

Riverside Green Action Plan

The City is committed to becoming a clean, green, and sustainable community. In 2007, the City Council approved the Sustainable Riverside Policy Statement (SRPS), which was framed by the City’s Clean and Green Task Force. The SRPS included a practical emphasis on how the City could implement cleaner, greener, and more sustainable programs. The City’s first Green Action Plan, a 38-point plan, identified seven focus areas: Energy, Greenhouse Gas Emissions, Waste Reduction, Urban Design, Urban Nature, Transportation, and Water. The Green Action Plan was essentially completed in 2009 when the California Department of Conservation chose the City as the first “Emerald City.” An eighth focus area has since been created addressing Healthy Communities. In all, the Green Action Plan encompasses 18 goals with specific associated tasks. The relevant focus areas and goals to which the Project will beneficially contribute are discussed below.
Energy

Goal 1: Increase the use of non-greenhouse gas emitting energy by 2020 to 70 percent with at least 50 percent coming from renewable sources.

Goal 3: Based on 2006 reports, reduce the City’s base electrical load by 10 percent by 2012 and reduce the City’s peak electrical load by 20 percent by 2020.

Waste Reduction

Goal 6: Implement programs to reduce waste, based on the 2007 per capita baseline, by 75 percent by 2020.

Urban Design

Goal 9: Meet the environmentally sensitive goals of the GP 2025 specified in the Mitigation Monitoring Program of the Environmental Impact Report, and the Implementation Plan following the timelines set forth in each.

City of Riverside General Plan 2025 (GP 2025)
The GP 2025 sets forth objectives and policies to promote minimizing the use of energy and instead generating electricity from renewable resources to ensure plentiful future supply and reducing the negative impacts on the environment. Specifically, the Open Space and Conservation Element focuses on conserving, among other items, energy resources. In addition, the Public Facilities and Infrastructure Element addresses energy conservation efforts and policies by the City and RPU. The City’s efforts to promote cleaner, green sources of energy can be traced back to the 1970s. Reducing energy usage through efficiency and utilizing renewable sources represents the most environmentally sound and cost-effective way to limit the negative consequences of consuming non-renewable energy resources and to protect the reliability of the electric power grid to ensure that adequate power is available to all residents, businesses, and institutions. The relevant GP 2025 objective and policies, which are intended to conserve energy in the City, are discussed below.

Open Space and Conservation Element (OS)

Objective OS-8: Encourage the efficient use of energy resources by residential and commercial users.

Policy OS-8.1: Support the development and use of non-polluting, renewable energy sources.

Policy OS-8.2: Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24, and encourage the installation of conservation devices in existing developments.

Policy OS-8.3: Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.

Policy OS-8.6: Require all new development to incorporate energy-efficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.
Policy OS-8.10: Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of non-renewable energy supplies.

Policy OS-8.12: Require bicycle parking in new non-residential development.

Public Facilities and Infrastructure Element (PF)

Policy PF-6.1: Continue to support the development of green power and expand the use of green power in the City’s energy portfolio.

Policy PF-6.3: Promote and encourage energy conservation.

Policy PF-6.4: Encourage energy-efficient development through its site plan and building design standard guidelines.

Policy PF-6.5: Promote green building design.

5.10.5 Project Design Considerations

Following the completion of the Project, the entire store will exceed the energy efficiency standards of Title 24. This will be accomplished by designing the expansion area of the building to an efficiency rating that is greater than the Title 24 requirement, and also by retrofitting certain features of the existing store in order to meet Title 24 requirements. To achieve this reduction in energy consumption, the expanded Walmart will incorporate, at a minimum, the following sustainability features or other features that are equally efficient.

Energy Efficiency

- Lighting
  - The entire store will include occupancy sensors in most non-sales areas, including restrooms, break rooms, and offices. The sensors automatically turn the lights off when the space is unoccupied.
  - Interior Lighting Retrofit Program: All lighting in the store, including the expansion area, will utilize T-8 fluorescent lamps and electronic ballasts, which are the most efficient lighting on the market.
  - All internally illuminated exterior building signage and many refrigerated food cases will use light emitting diodes (LEDs). In refrigerated food cases, LEDs perform well in the cold and produce less heat than fluorescent bulbs—heat which must be compensated for by the refrigeration equipment. LEDs also contain no mercury or lead.
    - LED technology is up to 52 percent more energy efficient than fluorescent lights.
    - Total estimated energy savings for LED lighting in the store’s grocery section is approximately 59,000 kilowatt-hours (kWh) per year, enough energy to power five single-family homes.
• Central Energy Management System
  o Walmart employs a centralized energy management system (EMS) to monitor and control the heating, air conditioning, refrigeration, and lighting systems for all stores from Walmart’s corporate headquarters in Bentonville, Arkansas. The EMS enables Walmart to constantly monitor and control the expanded store’s energy usage, analyze refrigeration temperatures, observe HVAC and lighting performance, and adjust system levels from a central location 24 hours per day, seven days per week. Energy usage for the entire store will be monitored and controlled in this manner.

• Heating, Ventilation and Air Conditioning (HVAC)
  o The store will employ one of the industry’s most efficient HVAC units available. The new HVAC units have EER (Energy Efficiency Ratio) ratings of approximately 12.1 to 14.3, which exceed the requirements of Title 24.

• Dehumidification
  o The building will include a dehumidifying system that allows Walmart to operate the store at a higher temperature, use less energy, and allow the refrigeration system to operate more efficiently.

• Food Displays
  o The building will include a film on the freezer doors that combats condensation and requires no energy, unlike heating systems that are typically used to combat condensation.

• White Roofs
  o The existing store currently utilizes a white roof. After the expansion, the entire store will feature a white membrane roof instead of the typical darker colored roof materials employed in commercial construction. The white membrane roof’s higher reflectivity helps reduce building energy consumption and reduces the heat island effect, as compared to buildings utilizing darker roofing colors. The high solar reflectivity of this membrane results in lowering the “cooling” load by about 10 percent as compared to comparable stores with darker colored membranes.

• Refrigeration
  o Walmart uses non ozone-depleting refrigerants, such as R407a for refrigeration equipment and R410a refrigerant for air conditioning. The existing store currently utilizes this technology and the expansion area will also incorporate it.
  o The store’s refrigeration equipment will be roof mounted in close proximity to the refrigerated cases. This reduces the amount of copper refrigerant piping, insulation and refrigerant charge needed, as well as the potential for leaks.
Heat Reclamation

- The store will reclaim waste heat from on-site refrigeration equipment to supply approximately 70 percent of the hot water needs for the store.

Water Conservation

It is estimated that Walmart’s water conservation measures could save up to 530,000 gallons of water annually at this store location.

- Walmart will install high-efficiency urinals that use only 1/8 gallon (one pint) of water per flush.
  - This fixture reduces water use by 87 percent compared to the conventional one gallon per flush urinal.

- All restroom sinks will use sensor-activated, 1/2 gallon per minute, high-efficiency faucets.
  - These faucets reduce water usage by approximately 75 percent compared to mandated 1992 USEPA Standards.
  - During use, water flows through turbines built into the faucets to generate the electricity needed to operate the motion sensors.

- All restroom toilets will be highly efficient and reduce water use.
  - The fixture uses 20 percent less water compared to mandated USEPA Standards of 1.6 gallon per flush fixtures.
  - The toilets utilize built-in water turbines to generate the power required to activate the flush mechanism. These turbines save energy and material by eliminating electrical conduits required to power automatic flush valve sensors.

Walmart will also be required to incorporate measures to reduce outdoor water use in compliance with Chapter 19.570 of the Riverside Municipal Code, Water Efficient Landscaping and Irrigation (RMC, Ch. 19.570), such measures include:

- Limit or eliminate the use of high water use plant materials such as lawn.
- Prepare a soils/agronomic management report to determine on-site soil texture, pH, infiltration rates.
- Hydorzone plant materials prior to designing the irrigation system to minimize water usage.
- Incorporate separate valve systems for trees in the event of severe drought.
- Specify high efficiency irrigation systems (drip, micro spray, bubbler irrigation), where feasible, to irrigate plant material.
- Specify dual or multiple program automatic controllers to operate the irrigation valves.
- Specify master control valve/flow sensor and rain sensing assembly as part of a complete irrigation system.
- Prepare an irrigation audit following installation of the system to review operational characteristics.

Materials and Finishes

- The newly-constructed expansion area will be built using cement mixes that include up to 15–20 percent fly ash, a waste product of coal-fired electrical generation, or 25–30 percent slag, a by-product of the steel manufacturing process. By incorporating these waste product materials into its cement mixes, Walmart offsets the greenhouse gases emitted in the cement manufacturing process.

- The expansion area will use Non-Reinforced Thermoplastic Panel (NRP) in lieu of Fiber Reinforced Plastic (FRP) sheets on the walls in areas where plastic sheeting is appropriate, including food preparation areas, utility and janitorial areas, and associate break rooms. NRP can be recycled, has better impact resistance and, like FRP, is easy to keep clean.

- The expansion area will use plant-based oil extracted from a renewable resource as a concrete form release agent (a product sprayed on concrete forms to allow ease of removal after the concrete has set). This release agent is non-petroleum based, non-toxic, and a biodegradable agent.

- For the store’s exterior and interior field paint coatings, Walmart will use low volatile organic compound (VOC) paint.

- Paint products required for the Project will be primarily purchased in 55-gallon drums and 275-gallon totes, reducing the number of one-gallon and five-gallon buckets needed. These plastic buckets are filled from the drums and totes and then returned to the paint supplier for cleaning and reuse once construction is complete.

- Recycled Building Materials:
  - Construction of the expansion area will use steel containing approximately 85–90 percent recycled structural steel, which utilizes less energy in the mining and manufacturing process than does new steel.
  - All of the plastic baseboards and much of the plastic shelving included in the expansion area will be composed of recycled plastic.

- With regard to construction and demolition (C&D) recycling, Walmart will employ a C&D program during Project construction in order to capture and recycle as much of the metals, woods, floor and ceiling tiles, concretes, asphalts, and other materials generated as part of Walmart’s demolition and construction process as possible. Walmart will work with a waste management company to fully research all available C&D recycling facilities in the area, and its C&D program will seek to include the widest possible range of materials recovery options.
5.10.6 Environmental Impacts before Mitigation

**Threshold:** Result in the wasteful, inefficient, or unnecessary consumption of energy; substantially increase demand on available energy resources that are not renewable; or fail to comply with existing established energy standards.

**Construction**

Constructed-related energy consumption will result from Project construction and the use of secondary facilities. A secondary facility is defined as any facility that would produce any construction materials that would be used during the construction and maintenance of the Project. Energy consumed for Project construction will be that used during demolition of the existing Tire & Lube Express and exterior Garden Center, and the construction of the existing Walmart’s proposed expansion area, façade redesign, and parking lot modifications, as well as for the transportation of building materials and equipment to and from the Project site.

Implementation of the Project will generate construction and demolition waste. Construction and demolition debris includes concrete, asphalt, wood, drywall, metals, and other miscellaneous and composite materials. Much of this material will be recycled and salvaged to the maximum extent feasible to divert from the landfill. The Project, as with the City, will exceed AB 939 requirements, in diverting over 50 percent of the construction and demolition waste to be reprocessed/recycled/reused. A list of recycling facilities that recycle cardboard, carpet, drywall, glass, inert materials, brick, metal, wood, and other miscellaneous construction debris, is kept and maintained by the City of Riverside Public Works Department (CURE List). It is anticipated that these construction debris recycling facilities will be utilized at the discretion of the Project Applicant. The recycling of construction and demolition debris will contribute to the Project avoiding wasteful, inefficient, and unnecessary consumption of energy as energy would be subsequently required to replace the need for these materials.

The construction period for the Project is estimated at 14 months, beginning no earlier than May 2012. Given the nature of the Project construction, any energy consumption from construction and transportation of build materials and equipment to and from the Project site will be relatively minimal. In addition, it is assumed that secondary facilities, such as those that would produce construction materials for the Project, would utilize all reasonable energy conservation practices in order to minimize the costs associated with energy use. As such, it can be assumed that construction-related energy used by secondary facilities during the construction of the Project will not result in a wasteful, inefficient, and unnecessary usage of energy; substantially increase demand on available nonrenewable energy resources; or fail to comply with existing established energy standards during the construction phase. Therefore, impacts during construction will be less than significant.
Operation

Electricity

The Project’s proposed expansion is a net total of 22,272 square feet, resulting in an approximately 153,399-square-foot store. Table 5.10-C – Project Electricity Consumption shows that the Project will consume 348,748 kWh per year, or approximately 0.3 million kWh per year.

Table 5.10-C – Project Electricity Consumption

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Electricity Use (kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free-standing discount store</td>
<td>348,748</td>
</tr>
<tr>
<td>Total</td>
<td>348,748</td>
</tr>
</tbody>
</table>

Notes:


As shown previously in Table 5.10-A – Electricity Consumption in RPU Service Area (2009), RPU produced approximately 2,085 million kWh of electricity in 2009, of which 1,068 million kWh were consumed by commercial buildings. Without factoring reductions for the Project design considerations previously discussed in Section 5.10-5, the Project’s electricity consumption represents approximately 0.01 percent of RPU’s total usage, and approximately 0.03 percent of the electricity supplied to commercial buildings. As such, the current available supply is adequate to accommodate the needs of the Project. Also, as the Project will be an expansion of an existing building, necessary infrastructure is in place and there is no need for new distribution infrastructure or capacity enhancing alterations to existing facilities. Further, as discussed previously, RPU is satisfactorily meeting its obligations to its current and future customers, which includes proactively planning future major energy projects. RPU has initiated strong efforts toward renewable energy sources and conservation measures, and is on track to meet the Governor’s goal of 33 percent renewable energy by 2020.

Electricity usage within the City was analyzed in the GP 2025 FPEIR. The GP 2025 FPEIR found that impacts resulting in the need for new power capacity or supplies, or substantial alterations to existing systems were less than significant under the typical General Plan 2025 buildout scenario, in which the Project is included. Since the Project site lies within RPU’s service area and development of this service area was identified in the GP 2025 FPEIR, the Project will not have an effect on local energy supplies or resources nor will it require additional capacity.
Natural Gas

Table 5.10-D – Project Natural Gas Consumption shows that the Project will consume 51,666.4 kBTU of natural gas on an annual basis.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Natural Gas Use (kBTU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free-standing discount store</td>
<td>51,666.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51,666.4</strong></td>
</tr>
</tbody>
</table>

Notes:


5.2 Energy by Land Use – Natural Gas

As shown previously in Table 5.10-B – Natural Gas Consumption in SCG Service Area (2009), SCG produced approximately 5.2 billion therms (or 521 billion kBTU) in 2009, of which approximately 131 million therms (or 13.1 billion kBTU) were consumed by commercial buildings.\(^2\) Without factoring reductions for the Project design considerations discussed previously, the Project’s natural gas consumption represents an extremely small percentage of SCG’s total usage, and approximately 0.0004 percent of the natural gas supplied to commercial buildings. As such, the current available supply is adequate to accommodate needs of the Project. Also, as the Project will be an expansion of an existing building, there is already a natural gas connection point and there is no need for expansion of distribution infrastructure or capacity enhancing alterations to existing facilities. Further, as discussed previously, SCG is satisfactorily meeting its obligations to its current and future customers. In fact, growth for SCG is anticipated to remain virtually flat for the next 21 years, in part due to aggressive energy conservation measures encouraged by SCG and mandated by CPUC, of which the Project will be a beneficial contributor. As such, SCG’s existing infrastructure and storage supplies are well-prepared for the long-term forecasts.

As discussion in Section 5.8 (Transportation/Traffic) in this DEIR, the Project is estimated to generate approximately 1,657 daily vehicular trips. Although the Project is not required to comply with the new CALGreen standards, which pertain to new construction only and does not include additions to existing structures, the Project site will promote and accommodate alternative transportation with its bicycle stall parking, which meet the requirements set forth in CALGreen, Section 5.106.4.1; and “clean air vehicle” parking, for which the Project will designate a portion of its total parking towards the goals set forth by CALGreen, Section 5.106.5.2. As discussed previously, vehicle fuel efficiency is regulated at the federal level. In addition, a bus stop served by RTA along Van Buren Boulevard at Audrey Avenue will continue to serve the Project site. Combined, these features will contribute toward offsetting and reducing fuel consumption. In addition, the Project is located in an urbanized area generally consisting of residential uses. The added sales space will introduce new inventory, specifically grocery foods, that will contribute to the Walmart store as a place for one-stop shopping. The diverse and affordable

\(^2\) For reference on the unit conversion: 1 therm equals 100 kBTU.
inventory available for purchase will reduce the need for Walmart’s existing and future customers within its Trade Area to travel to additional stores for groceries, thus further offsetting and reducing fuel consumption and conserving resources.  

Finally, in order to conserve energy and reduce impacts to the environment, the Applicant will incorporate the Project design considerations listed in Section 5.10.5 Project Design Considerations. Also, the requirements of the California Building Standards Code, including CEC’s 2008 Building Energy Efficiency Standards, which went into effect January 1, 2010, will be applied to the Project. Changes to the latest standards reflect CEC’s intent to provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy; to pursue an energy efficient policy that meets California’s needs; to act on the findings of California’s Integrated Energy Policy Report; and to meet the Executive Order S-20-04 in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards (CEC BEES). Pursuant to the California Building Standards Code and the Energy Efficiency Standards, the City’s Community Development Department Building & Safety Division will review the design components of the Project’s energy conservation measures when the Project’s building plans are submitted. As a result of the Project’s exceedance of Title 24 standards, direct energy consumption by the Project will not result in a significant impact. Therefore, as the Project will not result in the wasteful, inefficient, or unnecessary consumption of energy; substantially increase demand on available nonrenewable energy resources; or fail to comply with existing establishing energy standards, impacts will be less than significant.

5.10.7 Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Development of the proposed Project with incorporation of the energy efficient and conserving features discussed previously under Section 5.10.5, Project Design Considerations will not result in any significant impacts that will require mitigation. Specifically, impacts regarding energy conservation were found to be less than significant; therefore, no mitigation measures are necessary.

5.10.8 Summary of Project-Specific Environmental Effects after Mitigation Measures are Implemented

Implementation of the proposed Project with incorporation of the Project design considerations discussed previously under Section 5.10.5, Project Design Considerations, will not result in any potentially significant impacts. Specifically, impacts regarding energy conservation were found to be less than significant; therefore, no mitigation measures are necessary.

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3 For the discussion of Walmart’s Trade Area, including boundaries and characteristics, see Section 5.9 Urban Decay.
5.10.9 **Summary of Cumulative Environmental Effects after Mitigation Measures are Implemented**

The cumulative impact area for impacts related to energy conservation is RPU’s service area for electricity and SCG’s service area for natural gas. Implementation of the Project, combined with the cumulative development projects, will increase demands for electricity, natural gas, and transportation fuels. Cumulative development projects must also abide by the same statues, regulations, and programs that mandate or encourage energy conservation. Utility providers are also required to plan for necessary upgrades and expansion to their systems to ensure that adequate service will be provided for other projects. Specifically, RPU assesses existing and future electricity needs every two years, based on land use designations within the City, and SCG regularly updates its infrastructure reports as required by law. In addition, there is no evidence to suggest that RPU or SCG will not be able to serve their service areas in the coming years. Further, the substantial reliance on fossil fuel byproducts for transportation fuel is a national and statewide issue; however, as new projects are constructed in California under the regulations of Title 24, and the CALGreen Code for new structures, more development will accommodate alternative transportation. Gearing development standards in this direction will likely contribute toward shifting transportation habitats and perspectives favoring sustainable options. Therefore, cumulative impacts are **less than significant**.

5.10.10 **References**

In addition to other documents, the following references were used in the preparation of this section of the DEIR:


Section 5.10 - City of Riverside Energy Conservation


Section 6 – Other CEQA Topics

The State CEQA Guidelines set forth several general content requirements for a Draft Environmental Impact Report (DEIR), including certain potential impacts which must be addressed. Those impact areas applicable to this Project include the potential for the Project to cause cumulative impacts (Section 15130); unavoidable adverse impacts (Section 15126(b)); growth inducing impacts (Section 15126(d)); or significant irreversible changes caused by a project (Section 15126.2(c)). Section 15125(d) of the State CEQA Guidelines also requires an EIR to discuss any inconsistencies between the proposed Project and applicable general and regional plans. This section addresses each of these general requirements.

6.1 Cumulative Impact Analysis

6.1.1 Introduction

The California Environmental Quality Act (CEQA) requires that an EIR examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to a project alone (State CEQA Guidelines Section 15130(b)).

As stated in Section 15130(a) of the State CEQA Guidelines, an EIR “shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” “Cumulatively considerable” means that “the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130” (State CEQA Guidelines, Section 15065(c)). Section 15355 of the State CEQA Guidelines states that “cumulative impacts” occur from “...the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

The EIR must examine “reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project” (State CEQA Guidelines Sections 15130(a)(3) and 15130(b)(5)). A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through mitigation fee payment programs.

6.1.2 Assessment of Cumulative Impacts

State CEQA Guidelines Section 15130(b)(1) requires that a discussion of cumulative impacts be based on either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency (“the list method”); or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated
regional or area-wide conditions contributing to the cumulative impact ("summary of projections method").

This EIR utilizes the “list method” approach in the cumulative analysis, and therefore focuses on whether the impacts of the proposed Project are cumulatively considerable within the context of combined impacts caused by other past, present, or future projects. The cumulative impact scenario considers other projects proposed within the Project area that have the potential to contribute to cumulatively considerable impacts. Based on discussions with City staff, the projects identified in Table 6-A – Cumulative Development Projects are located in the Project area and may have the potential to contribute to cumulative effects. The location of the cumulative development projects in relation to the Project site is shown in Figure 6-1 – Cumulative Development Location Map.

### Table 6-A – Cumulative Development Projects

<table>
<thead>
<tr>
<th>No. on Figure 6-1</th>
<th>Project</th>
<th>Land Use</th>
<th>Project Size</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California Baptist University</td>
<td>Student Housing Facility</td>
<td>662 Beds</td>
<td>Approved</td>
</tr>
<tr>
<td>2</td>
<td>Magnolia Avenue Baptist Church</td>
<td>Church</td>
<td>62,800 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>3</td>
<td>Fresh &amp; Easy</td>
<td>Supermarket</td>
<td>15,011 SF</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commercial Retail</td>
<td>4,520 SF</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Magnolia Square</td>
<td>Commercial Retail</td>
<td>40,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apartments</td>
<td>315 DU</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cinnamon Creek</td>
<td>Apartments</td>
<td>95 DU</td>
<td>Approved</td>
</tr>
<tr>
<td>6</td>
<td>Telacu Housing</td>
<td>Apartments</td>
<td>75 DU</td>
<td>Approved</td>
</tr>
<tr>
<td>7</td>
<td>Snowberry Creek</td>
<td>Apartments</td>
<td>224 DU</td>
<td>Approved</td>
</tr>
<tr>
<td>8</td>
<td>Leilani Alejandro</td>
<td>Office</td>
<td>3,742 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>9</td>
<td>Bruce Karish</td>
<td>Warehouse</td>
<td>89,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>10</td>
<td>William Fox Group</td>
<td>Warehouse</td>
<td>90,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>11</td>
<td>Walgreens</td>
<td>Drugstore</td>
<td>15,000 SF</td>
<td>Approved</td>
</tr>
<tr>
<td>12</td>
<td>Maxi-Foods Supermarket</td>
<td>Supermarket</td>
<td>5,385 SF</td>
<td>Approved</td>
</tr>
</tbody>
</table>

The geographic scope (or cumulative impact area) used for each environmental issue is different depending upon the potential area of effect. For example, the geographic scope for air quality would be the South Coast Air Basin (Basin), while the geographic scope for cumulative aesthetics impacts would be the viewshed, and the geographic scope for traffic/circulation would be the intersections in the Project vicinity that could be affected by the cumulative projects.
Figure 6-1. Cumulative Development Location Map

Legend
Development Locations
1 - California Baptist University
2 - Magnolia Avenue Baptist Church
3 - Fresh and Easy
4 - Magnolia Square
5 - Cinnamon Creek Apartments
6 - Telacu Housing
7 - Snowberry Creek Apartments
8 - Leilani Alejandro (Office)
9 - Bruce Karish (Warehouse)
10 - William Fox Group (Warehouse)
11 - Walgreens
12 - Maxi-Foods Supermarket

Source: City of Riverside, Community Development Dept., 2011
Cumulative impacts to forest land would occur if the Project and cumulative development projects would result in the conversion of forest land to other uses. The Project site and cumulative development projects are located within a developed area of the City and none of these sites consist of forest land, nor are any of the cumulative development sites zoned to allow tree crops for commercial purposes. Therefore, no potentially significant cumulative effects related to forest resources will result from the proposed Project.

### 6.1.5 Air Quality

Due to the defining geographic and meteorological characteristics of the Basin, the cumulative area for air quality impacts is the Basin itself. As discussed in Section 5.2.4 (Air Quality, Related Regulations, Criteria Air Pollutants), the portion of the Basin within which the City is located is designated as a non-attainment area for NO\textsubscript{2} under State standards, and for ozone, PM-10 and PM-2.5 under both State and federal standards.

Project emissions within the context of SCAQMD’s regional emissions thresholds provide an indicator of potential cumulative impacts within the Basin. Cumulative localized impacts for pollutants are also considered and reflect Project air pollutant emissions in the context of ambient conditions in the Project vicinity.

As discussed in Section 5.2.6 (Air Quality, Environmental Impacts before Mitigation), Section 5.2.8 (Summary of Environmental Effects after Mitigation Measures are Implemented), and the *Air Quality and Greenhouse Gas Impact Analysis for the Walmart Expansion Project* (included as Appendix B to this DEIR), the Project’s short-term and long-term emissions are below regional and local SCAQMD thresholds.

The SCAQMD, through its *Cumulative Impact Requirements Pursuant to the California Environmental Quality Act* guidance (SCAQMD 2003, p. 3), states that projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. Based on SCAQMD’s regulatory jurisdiction over regional air quality, it is reasonable to rely on its thresholds to determine whether there is a cumulative air quality impact. Additionally, as explained above, the proposed Project is consistent with the GP 2025 and thus the AQMP; therefore, the proposed Project would not interfere with SCAQMD’s plan to bring the South Coast Air Basin into attainment with the NAAQS and CAAQS. On this basis, Project-related generation of criteria air pollutants or their precursors is not considerable, and the cumulative effects of the Project are less than significant.

### 6.1.6 Biological Resources

The geographic context by which the Project’s cumulative impact on biological resources is measured, encompasses western Riverside County. As discussed in Section 5.3.6 (Biological Resources, Environmental Impacts before Mitigation), although the Project site has been disturbed and is nearly entirely covered with structures or pavement, the non-native trees that occur in the parking lot areas (planned to be removed and replaced as part of the Project) may support nests utilized by birds.
protected under the Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations Section 10.13) or the California Fish and Game Code. Potential impacts to nesting birds resulting from Project-related construction will be less than significant with the implementation of mitigation measure **MM BIO 1**, which requires site grading or tree removal during the non-breeding season or a pre-construction survey to check for nesting birds prior to any tree removal. If nesting birds are present, **MM BIO 1** requires avoidance of the area until a qualified biologist has determined the young have fledged. The cumulative development project sites are also within urbanized areas and may contain habitat that supports nesting birds; thus, the potential exists for direct and indirect construction-related disturbance to nesting birds from the cumulative development projects. However, it is reasonable to assume that the cumulative development projects will implement mitigation measures in compliance with MBTA (Code of Federal Regulations Section 10.13) and California Fish and Game Code (Sections 3503, 3503.5, and 3800) that will reduce potential impacts to nesting birds; therefore, cumulative impacts to nesting birds are considered less than significant.

The Project site and four of the cumulative development projects (Cinnamon Creek Apartments, Snowberry Creek Apartments, Bruce Karish’s warehouse, and the William Fox Group’s warehouse) are located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey Area as shown on Figure 5.4-8 – MSHCP Burrowing Owl Survey Area of the City of Riverside General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR). The Project site and cumulative development project sites are not within a Criteria Cell.

As stated in Section 5.3.4.4 (Biological Resources, Related Regulations, MSHCP and Ordinance No. 6709 – MSHCP Fee Program Ordinance), the overall biological goal of the MSHCP is to conserve covered species and their habitats, as well as to maintain biological diversity and ecological processes while allowing for future economic growth within a rapidly urbanizing region. Because the City is a signatory to the MSHCP, all projects within the City are required to comply with the MSHCP and conduct biological habitat assessments/focused surveys as necessary and to pay the local development mitigation fee (LDMF). Compliance with the MSHCP provides mitigation for direct, indirect, and cumulative impacts to covered species. However, the existing Project site is disturbed with development of the existing Walmart, associated parking lot, and non-native buffer and ornamental landscaping. As such, there are no federally endangered or threatened species living or existing in their habitat on site and there is minimal opportunity for such occurrence on site.

Through adherence to mitigation measure **MM BIO 1** and the payment of the LDMF in support of the MSHCP, implementation of the proposed Project will comply with the MSHCP and will not result in any significant impacts. Therefore, **no potentially significant cumulative effects** related to biological resources will result from the proposed Project.

### 6.1.7 Cultural Resources

The geographic scope for cumulative impacts to cultural resources is defined by the cultural setting and territory of the prehistoric and historic people who occupied the area of southern California in which the
City is located. Western Riverside County was part of the territory of the Cahuilla and perhaps Luiseño people. Cumulative projects in the Project area and other development in western Riverside County could result in the progressive loss of as-yet unrecorded archaeological resources. This loss, without proper mitigation, would be an adverse cumulative impact.

The Project site was significantly disturbed and previously graded at the time the Walmart store was constructed in the early 1990s. Because implementation of the Project will not entail any ground-disturbing activity beyond the areas previously graded, implementation of the proposed Project will have a less than significant impact to historic, archaeological, and paleontological resources.

Site preparation and construction activities associated with the cumulative development projects may result in cumulative impacts to cultural resources if any of these resources are present and no documentation, consultation, or preservation were being implemented throughout the region. However, since all local jurisdictions, including Riverside, are subject to local, State and federal laws, including CEQA, cumulative impacts to cultural resources should not occur. By utilizing the site development permit process and the CEQA process for individual projects, the consultation requirements of Senate Bill (SB) 18 for General Plan Amendments and Specific Plans, and GP 2025 objectives and policies, potential cumulative impacts to cultural resources are reduced to less than significant. Moreover, in June 2011, the City consulted with Mr. Joseph Ontiveros of the Soboba Band of Luiseño Indians regarding the Project, wherein no concerns were indicated by the tribe. Therefore, no potentially significant cumulative effects related to cultural resources will result from the proposed Project.

6.1.8 Geology and Soils

Geologic hazards such as liquefaction or rock slides are localized by nature, as they are related to the soils and geologic character of a particular site and thus are not cumulative. Cumulative impacts could occur related to an earthquake, if the magnitude of the quake and location of the fault(s) traversed the region. Impacts due to seismic activity would be cumulative if State and local building and development codes and regulations were not being implemented throughout the region, resulting in structural collapse.

Pursuant to City requirements and the current edition of the California Green Building Standards Code requirements, the proposed Project, the cumulative development projects, and all new development in the City will be required to incorporate appropriate design and construction measures to guard against ground-shaking hazards. Further, all projects and structures will be constructed in compliance with existing seismic safety regulations of the California Uniform Building Code, which requires the use of site-specific engineering and construction standards identified for each class of seismic hazard. In addition, the City requires geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. Proposals for development or redevelopment projects which do not provide for mitigation of seismic or geologic hazards to the satisfaction of responsible agencies will not be approved. Since all local jurisdictions in
the region are subject to local, State, and federal laws, including CEQA, cumulative impacts related to seismic safety are less than significant. Therefore, **no potentially significant cumulative effects** related to geology and soils will result from the proposed Project or cumulative development projects.

### 6.1.9 Greenhouse Gas Emissions

Greenhouse gases (GHG) are those gases that will contribute to global climate change; therefore, the cumulative impact area for GHG emissions is the earth’s atmosphere. Implementation of the proposed Project along with the cumulative development projects will contribute GHG emissions to the atmosphere.

The Project’s annual GHG emissions are below the applicable draft threshold developed by SCAQMD for commercial projects, and do not generate a significant amount of GHG emissions. To further lessen the impacts related to global climate change and GHG production, the Project has been designed to increase energy efficiency and reduce water consumption which also reduces energy. As discussed in Section 5.4.5 (Greenhouse Gas Emissions, Project Design Considerations) and described in Section 3.2.1.6 (Project Description, Project Characteristics, Sustainability Features), following completion of the proposed Project, the entire Walmart store will exceed the energy efficiency standards of Title 24. Considering the Project’s small contribution to GHG emissions and Project design features which reduce energy usage, the Project does not incrementally contribute to a cumulatively significant effect from GHG emissions. Therefore, **no potentially significant cumulative effects** related to GHG emissions will result from the proposed Project.

### 6.1.10 Hazards and Hazardous Materials

The geographic context for cumulative impacts relative to the use of hazardous materials is the City. The proposed Project, along with several of the cumulative development projects, may use and/or store hazardous materials and universal wastes. Riverside Municipal Code, Chapter 9.48 requires businesses to disclose storage and handling of hazardous materials and hazardous waste, to establish and implement emergency response plans, and to cooperate in periodic reporting and inspections.

The Phase I Environmental Site Assessment (included as Appendix C.1 to this DEIR) prepared for the Project (Phase I), resulted in no *recognized environmental conditions* being identified on the Project site that affects or may affect development or use of the Project site, or otherwise warrants additional investigation. However, business environmental risks were identified including potential universal wastes. When decommissioned/discarded, certain items located on the Project site would be considered a “universal waste.” Occurrences of on-site universal wastes included the beverage refrigerators that are located within the northern exterior refrigeration unit enclosure. In addition, hazardous building materials were not identified as being present on the Project site; however, the following items, when decommissioned and/or disposed of, are considered a hazardous waste: fluorescent lights and/or high-intensity discharge lights; HVAC and refrigeration units, etc.; lead-acid batteries, waste oil, and antifreeze; and improper storage of hazardous materials. According to the
Phase I, the beverage refrigerators items have subsequently been removed by the vendors and the improper storage of hazardous materials have been stored properly.

The existing Walmart will continue to include the use of hazardous materials in small quantities for routine cleaning, maintenance, and landscaping, as well as products for purchase. Products available for purchase that may be considered hazardous include cleaning supplies, paints, lawn care products, insecticides, etc. The quantities, and their associated secure packaging, of these products stored on site do not constitute or create a significant hazard to the public or environment. Additionally, all potentially hazardous materials would be contained, stored, and used in accordance with the manufacturers’ instructions and handled in compliance with the applicable standards and regulations, such as those administered by United States Department of Labor’s Occupational Safety and Health Administration (OSHA), California Department of Industrial Relations’ Division of Occupational Safety and Health (Cal/OSHA), and the Riverside Fire Department (RFD).

Implementation of the proposed Project with incorporation of the Project design considerations discussed previously in Section 5.5.5 (Hazards and Hazardous Materials, Project Design Considerations) will not result in any significant impacts that will require mitigation. With respect to the cumulative development projects, each of these projects will be required to evaluate its own project-specific potential impacts, including those associated with the release of hazardous materials into the environment, or from exposure to a health hazard, in excess of regulatory standards; exposure of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or the location of a listed hazardous materials site, etc. Since hazardous materials and risk of upset conditions are largely site-specific, this would occur for each individual project affected, in conjunction with development proposals on these properties. Further, local municipalities are required to follow federal, State, and local laws and regulations regarding hazardous materials and other hazards.

In light of the existing regulatory framework governing the storage and use of hazardous materials and waste, the Project’s cumulative impact related to hazard and hazardous materials is less than significant, and the Project’s contribution is not considerable. Therefore, through compliance with federal, State, and local laws and regulations pertaining to hazards and hazardous materials, cumulatively considerable impacts are reduced to a level that is less than significant.

The proposed Project and several of the cumulative projects, as listed in Table 6-B – Cumulative Development Projects and Riverside Municipal Airport Safety Zones, are located within Airport Safety Zones of the Riverside Municipal Airport (RMA). The Riverside County Airport Land Use Compatibility Plan (RCALUCP) sets forth what types and intensity of uses are suitable within each of these zones. Proposed development (such as the Project and those cumulative development projects within the safety zones) which does not meet all criteria set forth in the RCALUCP is subject to review by the Riverside County Airport Land Use Commission (ALUC). ALUC may, as part of its review, impose height, use, and lighting restrictions on development to reduce the potential impacts to aircraft associated with use of the RMA to less than significant levels. On May 2, 2011, ALUC determined the Project to be conditionally consistent with the granting of a risk-reduction intensity bonus by the City. These
conditions of approval would minimize Project-specific and cumulative effects. Therefore, implementation of the proposed Project consistent with the Project design considerations described in Section 5.5.5, would not contribute to cumulatively considerable impacts associated with operations at RMA, and would not result in a safety hazard to people meeting or working in the Project area, and potential cumulative impacts would be less than significant. Therefore, **no potentially significant cumulative effects** related to hazards and hazardous materials will result from the proposed Project.

### Table 6-B – Cumulative Development Projects and Riverside Municipal Airport Compatibility Zones

<table>
<thead>
<tr>
<th>No. on Figure 6-1</th>
<th>Project</th>
<th>Land Use</th>
<th>RMA Safety Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California Baptist University</td>
<td>Student Housing Facility</td>
<td>Zone E</td>
</tr>
<tr>
<td>2</td>
<td>Magnolia Avenue Baptist Church</td>
<td>Church</td>
<td>Zone D</td>
</tr>
<tr>
<td>3</td>
<td>Fresh &amp; Easy</td>
<td>Supermarket</td>
<td>Zone E</td>
</tr>
<tr>
<td>4</td>
<td>Magnolia Square</td>
<td>Commercial Retail</td>
<td>Not within a Safety Zone</td>
</tr>
<tr>
<td>5</td>
<td>Cinnamon Creek</td>
<td>Apartments</td>
<td>Zone E</td>
</tr>
<tr>
<td>6</td>
<td>Telacu Housing</td>
<td>Senior Apartments</td>
<td>Not within a Safety Zone</td>
</tr>
<tr>
<td>7</td>
<td>Snowberry Creek</td>
<td>Senior Apartments</td>
<td>Zone D</td>
</tr>
<tr>
<td>8</td>
<td>Leilani Alejandro</td>
<td>Office</td>
<td>Not within a Safety Zone</td>
</tr>
<tr>
<td>9</td>
<td>Bruce Karish</td>
<td>Warehouse</td>
<td>Zone B-2</td>
</tr>
<tr>
<td>10</td>
<td>William Fox Group</td>
<td>Warehouse</td>
<td>Zone C</td>
</tr>
<tr>
<td>11</td>
<td>Walgreens</td>
<td>Drugstore</td>
<td>Not within a Safety Zone</td>
</tr>
<tr>
<td>12</td>
<td>Maxi-Foods Supermarket</td>
<td>Supermarket</td>
<td>Zone D</td>
</tr>
</tbody>
</table>

#### 6.1.11 Hydrology and Water Quality

The cumulative impact area for hydrology and water quality impacts is the Santa Ana River watershed hydrologic unit. The City is located within the Santa Ana Region (Region 8) of the Regional Water Quality Control Board (RWQCB) and Reach 3 of the Santa Ana River is the receiving water body for runoff from the Project site.

Cumulative impacts to water quality could be significant with the addition of substantial increases in development and temporary construction activities in the Santa Ana River watershed. These cumulative effects include increasing the amount of flow, sedimentation, and urban pollutants that are transmitted via storm flows to the Santa Ana River.
Cumulative impacts to water quality may occur with the addition of substantial increases in development and temporary construction activities in the Santa Ana River watershed. Best management practices (BMPs) would be implemented during construction and long-term operation of the Project in compliance with the National Pollutant Discharge Elimination Systems (NPDES) General Permit for Construction Activities and the Municipal Separate Storm Sewer Systems (MS4) Permit to minimize potential impacts to water quality.

The proposed Project would not result in a measurable increase in the amount of waterborne pollutants with the implementation of the BMPs identified in Preliminary Project-Specific Water Quality Management Plan (WQMP) and the Storm Water Pollution Prevention Plan (SWPPP) that would be prepared prior to Project construction. Therefore, Project construction and operation would not considerably contribute to a significant cumulative impact.

The proposed Project, along with all of the cumulative development projects, would be required to obtain an NPDES permit and to comply with any provisions of that permit, thus reducing their potential for water quality impacts. As noted in Section 5.6.5 (Hydrology and Water Quality, Project Design Considerations), the WQMP identifies three porous landscape detention (PLD) facilities intended to remove or treat Project-related urban pollutants and slow down storm flows such that the Pre- and Post-Project hydrologic conditions are essentially unchanged as required by the RWQCB and the City. Because the hydrologic conditions are essentially unchanged, the Project would avoid impacting water quality and the capacity of downstream drainage facilities. Therefore, Project-related impacts to water quality and hydrology would not be cumulatively considerable.

The increase in the amount of impermeable surfaces within the watershed resulting from the proposed Project and cumulative projects has the potential to affect groundwater recharge. However, because the Project and cumulative projects are not located within a groundwater recharge area, there would be no cumulative impacts in this regard. Additionally, the Project incorporates water conservation features as discussed in Section 5.6.5.2, which could result in a savings in the amount of water used in the Project area. Further, Walmart, along with the cumulative projects, will also incorporate measures to reduce outdoor water use regarding water efficient landscaping and irrigation in compliance with Chapter 19.570 of the Riverside Municipal Code. Therefore, cumulative impacts to water quality and hydrology resulting from implementation of the proposed Project would not be considerable.

The proposed Project is the expansion of an existing retail facility that would not introduce a significant amount of new impervious surfaces and would use existing public storm drain facilities that have adequate capacity. Therefore, implementation of the Project would not alter the existing drainage pattern of the site or require the construction of new storm drain facilities. No substantial erosion or siltation is expected, with implementation of BMPs identified in the WQMP and preparation and implementation of a SWPPP that includes erosion control BMPs. For these reasons, the Project’s contribution relative to cumulative impacts on storm drains and drainage would not be considerable.
The Project site is not located within a flood hazard area or dam inundation zone; therefore, the project would not contribute to cumulative flood or dam inundation hazards.

Implementation of the final Project-specific WQMP, SWPPP, and NPDES permit requirements would eliminate or reduce potential significant adverse impacts related to hydrology and water quality to less than significant. Therefore, no potentially significant cumulative effects related to hydrology and water quality will result from the proposed Project.

6.1.12 Land Use and Planning
The geographic scope for land use and planning is the City. The proposed Project will expand the existing Walmart store within the Project site. Resulting activities at the expanded Walmart will be similar to the activities currently taking place at the Project site. Therefore, the proposed Project will not create any land use conflicts with surrounding land uses. The proposed Project is consistent with the GP 2025 and will be required to comply with all applicable Zoning Code requirements. The proposed Project is consistent with the GP 2025 and zoning. It is reasonable to assume that the cumulative development projects are also consistent with the GP 2025 and Zoning Code, or will obtain the necessary variances including the imposition of conditions of approval.

For these reasons, the proposed Project and the cumulative development projects will not result in significant changes to land use or planning. Therefore, no potentially significant cumulative effects related to land use and planning will result from the proposed Project.

6.1.13 Mineral Resources
Mineral resources are considered a State wide resource; therefore, the geographic scope for mineral resources is the State. A cumulative impact on mineral resources would occur if the proposed Project and cumulative development projects would contribute to the loss of availability of significant aggregate reserves. The Project site and cumulative development projects are located within a mineral resource zone for which there is insufficient data to determine if there are significant mineral deposits (MRZ-4). However, given the current zoning designations and relatively small size of the Project site and the sites for the cumulative development projects, the amount of existing commercial and residential development surrounding the Project site and cumulative development sites, it is highly unlikely that any surface mining or mineral resource recovery operation could feasibly take place. Therefore, no potentially significant cumulative effects related to mineral resources will result from the proposed Project.
### 6.1.14 Noise

The geographic scope for noise impacts is the immediate vicinity of the Project site because noise by definition is a localized phenomenon, and drastically reduces in magnitude as the distance from the noise sources increases. Consequently, only those cumulative development projects within the immediate vicinity of the proposed Project will be likely to contribute to cumulative noise impacts resulting from construction or operation. Of the 12 cumulative projects, only two are within 0.25 mile of the Project site, Fresh & Easy and the Cinnamon Creek Apartments (shown as numbers 3 and 5, respectively on Figure 6-1 – Cumulative Development Location Map).

As discussed in Section 5.7.6 (Noise, Environmental Impacts before Mitigation, Impacts Resulting from Project Construction) potential impacts from Project-related construction are anticipated to be less than significant; however, mitigation measures will be incorporated to assure construction-related noise impacts remain less than significant. Potential cumulative impacts from construction noise could result if construction of the Fresh & Easy store, the Cinnamon Creek Apartments, and the proposed Project occurred simultaneously. However, given that it is unlikely that all three projects would be under construction at the same time, the high ambient noise level in the area due to traffic from Van Buren Boulevard, and incorporation of construction-related mitigation measures for the Project (Fresh & Easy and Cinnamon Creek Apartments may also have incorporated construction noise mitigation measures), potential cumulative impacts from construction noise are considered less than significant.

The expansion of the existing Walmart at its current location will not contribute cumulatively to any significant sources of noise in the Project site vicinity since noise in the area from on-site Project operations will increase only marginally over that of the existing Walmart store, and the worst case scenario in which a potentially perceptible and substantial noise increase could occur will be avoided by the incorporation of mitigation measure MM NOI 6. Further, the expansion of the existing Walmart at its current location will not have significant cumulative contributions to off-site noise increases. As shown in Table 5.7-L, the Project will only contribute a 0.2 dBA increase on one area roadway; all other roadways are either 0.1 or less, all of which are well below the threshold of detection for human hearing. Moreover, as shown in Table 5.7-M – GP 2025 Conditions Plus Project, the Project’s contribution to GP 2025 conditions are also less than one-half of a decibel with only a Project-specific increase of 0.3 dBA along Jackson Street, east of Van Buren Boulevard, all of which are well below the threshold of detection for human hearing. Therefore, no potentially significant cumulative effects related to noise will result from the proposed Project.

### 6.1.15 Population and Housing

The cumulative impact area for population and housing is the City. Implementation of the proposed Project and cumulative development projects could contribute to significant cumulative impacts to population and housing if they would induce substantial population growth or displace substantial numbers of existing housing units requiring the construction of replacement housing. Implementation of the proposed Project will not entail the development of new housing or the displacement of any existing housing. Three of the cumulative development projects are apartment projects, the latter two of which
are age-restricted senior apartments (Cinnamon Creek Apartments, Telacu Housing, and Snowberry Creek Apartments) and the Magnolia Square project has an apartment component. Collectively, these four cumulative development projects would be responsible for the development of 709 apartment units. California Baptist University’s student housing facility will provide housing for 662 students. These new residential units do not represent a significant number of new housing units to the City; therefore, **direct cumulative impacts to housing and population are less than significant**.

Implementation of the proposed Project will result in 85 new jobs to the City, consisting of staff positions for the expanded Walmart, plus temporary construction jobs. The cumulative development projects will also create employment opportunities during construction, and the non-residential cumulative projects may generate additional employment opportunities. Data provided by the California Employment Development Department indicates that, as of April 2011, the City had an unemployment rate of 13.6 percent or 21,500 unemployed persons (EDD). Given the nature of the job opportunities and availability of labor, it is reasonable to assume that any new jobs created by the proposed Project and cumulative development projects would not result in indirect population growth. For these reasons, **indirect cumulative impacts to housing and population are less than significant**, and the proposed Project will not contribute to a cumulatively considerable impact on housing and population. Therefore, **no potentially significant cumulative effects** related to population and housing will result from the proposed Project.

### 6.1.16 Public Services

Public services include fire protection, police protection, schools, parks, and other public facilities. The cumulative impact area for public services is the service area of each of the service providers. For example, the cumulative impact area for fire and police protection and parks is the City; whereas the cumulative impact area for schools would be the school district. The proposed Project, combined with the cumulative development impact projects, could result in new service calls to the Riverside Police Department (RPD) and RFD. The proposed Project is a relatively small expansion of the existing Walmart store, and the cumulative development projects are infill projects, which were accounted for in the GP 2025 and other City planning efforts.

The proposed Project, in conjunction with the cumulative development projects, will contribute toward an increased demand for fire protection services. An increased demand has the potential to result in new or expanded fire station facilities that may cause significant environmental impacts. The proposed Project and the cumulative development projects will be required to pay the “Fire Station Development Fee” per Riverside Municipal Code Chapter 16.52 prior to the issuance of a building permit for new construction for the purpose of providing RFD resources to purchase land and construct or expand fire stations as well as to acquire additional equipment and fire station furnishings. The 12 identified cumulative development projects are not likely to directly result in the need for new construction or expansion of existing fire station facilities; however, if in the future, RFD determines new construction or expansion of existing fire station facilities is necessary to serve the City’s continued growth, payment of said fee will provide RFD the resources for such activity. A CEQA analysis to determine the level of
environmental impact resulting from the construction or expansion of fire station facilities is proper when actual plans for such facilities are proposed. Moreover, the cumulative increased demand is absorbed in the GP 2025 policies that strive for a sufficient number of fire stations and that RFD should maintain/meet a 5-minute response time in urbanized areas (GP 2025, p. PS-29). Therefore, cumulative impacts to fire protection are less than significant.

The proposed Project, in conjunction with the cumulative development projects, will contribute toward an increased demand for police protection services. An increased demand has the potential to result in the need for additional police officers; however, it is not anticipated that new or expanded police facilities will be required. While the proposed Project could lead to an incremental increase in the number of potential calls placed with the police department, the Project will not cause substantial adverse physical impacts requiring new or physically altered police protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The Project’s potential incremental increase and the cumulative development projects’ increase demand for police protection services are absorbed in the GP 2025 policies wherein RPD endeavors to provide proactive community policing, specifically to provide a minimum response time of 7 minutes on all Priority 1 calls, and 12 minutes on all Priority 2 calls (GP 2025, pp. PS-30–PS-32). Of the larger cumulative projects that qualify, the City also requires Crime Prevention Through Environmental Design (CPTED) for projects requiring a Site Plan Review Permit and any large development projects, which involves review by RPD and the City Planning Division against CPTED principles (GP 2025 FPEIR, p. 5.13-38). Adherence of qualifying projects to CPTED will reduce cumulative impacts on police protection services. Moreover, staffing for RPD is based on the business and residential growth and evaluated by RPD on a project-by-project basis (GP 2025 FPEIR, p. 5.13-29). RPD also anticipates that its decentralized policing center plan, which involves an emphasis on providing “satellite” policing centers distributed throughout the City, will allow the GP 2025 response times to be achieved (GP 2025 FPEIR, pp. 5.13-29–5.13-30). Therefore, cumulative impacts to police protection are less than significant.

The proposed Project, in conjunction with the cumulative development projects, will contribute toward an increased demand for parks and other public services. An increased demand has the potential to result in new or expanded facilities that may cause significant environmental impacts. As discussed in Section 6.1.15 (Population and Housing), the proposed Project and the non-residential cumulative development projects are not likely to result in a substantial direct or indirect increase in population or housing, and as such would not increase the demand for park services wherein new or expanded park facilities would be necessary or required. The four cumulative development projects with residential components will add 709 apartment units to the City and housing for 662 students at California Baptist University, which will introduce new park users to the City, and thus, increase the demand for park services. The proposed Project and cumulative development projects will be required to pay the “Regional Parks and Reserve Parks Development Fee” per Riverside Municipal Code Chapter 16.44 and the “Local Park Development Fee” per Riverside Municipal Code Chapter 16.60 in effect prior to final inspection, which will offset potential impacts to park facilities. While the 12 identified cumulative development projects will not likely increase demand for park services wherein new or expanded park
facilities would be necessary or required, payment of said fees will provide the resources for such activity if, in the future, new or expanded park facilities are necessary to serve the City’s continued growth. A CEQA analysis to determine the level of environmental impact resulting from the construction or expansion of park facilities is proper when actual plans for such facilities are proposed.

Non-residential projects, including the proposed Project, do not increase school-age children or impact schools. However, cumulative residential development projects will be required to pay school mitigation fees to affected school districts as permitted by State law by Proposition 1A and Senate Bill 50, codified in California Government Code Sections 65995.5–65995.7 and 66000 et seq. For CEQA purposes, pursuant to State law, payment of these associated fees reduces school facilities impacts to a less than significant level. Moreover, impacts on school services are absorbed in the GP 2025 policies, which encourage accommodating growth needs, growing smarter, and housing strategies to best utilize existing infrastructure and services such as schools (GP 2025, pp. LU-26; E-12—E-13; AQ-26–AQ-27). Thus, cumulative impacts to park services and schools are less than significant.

Therefore, no potentially significant cumulative effects related to public services will result from the proposed Project.

6.1.17 Recreation

Park and recreation services are provided by the City Parks, Recreation, and Community Services Department; therefore, the geographic scope for cumulative impacts to recreation is the City. As discussed in Section 6.1.15 (Population and Housing), the proposed Project and the non-residential cumulative development projects are not likely to result in a substantial direct or indirect increase in population or housing, and as such, would not increase the demand for park and recreation services. The four cumulative development projects with residential components will add 709 apartment units to the City and housing for 662 students at California Baptist University, which will introduce new park users to the City; thus, increasing the demand for park and recreation services. The proposed Project and cumulative development projects will be required to pay the “Regional Parks and Reserve Parks Development Fee” per Riverside Municipal Code Chapter 16.44 and the “Local Park Development Fee” per Riverside Municipal Code Chapter 16.60 in effect prior to final inspection, which will offset potential impacts to park and recreation facilities. Therefore, no potentially significant cumulative effects related to recreation will result from the proposed Project.

6.1.18 Transportation/Traffic

The cumulative impact area for transportation/traffic impacts consists of the study area (hereinafter referred to as the Study Area) identified in the Wal-Mart Expansion, Traffic Impact Analysis, City of Riverside, California, prepared by Urban Crossroads, October 2010, and the nine intersections located therein as shown on Figure 5.8-1 – Study Area Map. Cumulative impacts to transportation/traffic could be significant if the addition of Project-related traffic, combined with ambient growth and the cumulative development projects (the E+A+C+P scenario) and/or Project-related traffic combined with the traffic expected at buildout per the GP 2025 (the GP 2025 Buildout+P scenario), results in any study.
area intersection operating at LOS E or LOS F, except at some key locations, such as City arterial roadways which are used as a freeway bypass by regional through traffic and at heavily traveled freeway interchanges, LOS E may be acceptable as determined on a case-by-case basis (GP 2025, p. CCM-11). Included among the locations that may warrant the LOS E standard are portions of Arlington Avenue/ Alessandro Boulevard and Van Buren Boulevard throughout the City (GP 2025, p. CCM-11).

The addition of Project-related trips will contribute to a potentially significant impact without mitigation at the intersections of Van Buren Boulevard at Arlington Avenue and Van Buren Boulevard at California Avenue when combined with traffic from ambient growth (see Table 5.8-H – Intersection Analysis, Existing plus Ambient Growth (2012) plus Project Conditions (E+A+P)) and cumulative development projects (see Table 5.8-L – Intersection Analysis, Existing plus Ambient Growth (2012) plus Cumulative Projects plus Project Conditions (E+A+C+P)). However, under the GP 2025 Buildout scenario, five of the nine Study Area intersections will operate at LOS F without any improvements, although these intersection operations will not be degraded from acceptable to unacceptable when compared to the LOS for the GP 2025 Buildout scenario and all changes in delay under the GP 2025 Buildout +P scenario are considered less than significant (see Table 5.8-O – Determination of Project Contribution to GP 2025 Buildout plus Project Condition). Therefore, as shown in Table 5.8-O, the Project and cumulative development with ambient growth are not cumulatively considerable as they have already been anticipated and accounted for in the GP 2025 Buildout condition. Therefore, no potentially significant cumulative effects related to transportation/traffic will result from the proposed Project.

### 6.1.19 Utilities and Service Systems

Utilities and service systems include water, wastewater, storm drains, landfills, and solid waste disposal services. Drainage is discussed in Section 6.1.11 (Hydrology and Water Quality), above.

Water and wastewater services to the proposed Project and cumulative development projects will be provided by the Riverside Public Utilities Department (RPU) and the City’s Public Works Department, respectively; thus, the geographic scope for these services is the City. As described in Section 3.2.1.6 (Project Description, Project Characteristics, Sustainability Features), the proposed Project will include high-efficiency urinals and toilets, and sensor-activated sinks in the restroom to conserve water, thus reducing the amount of water required and the amount of wastewater generated. New landscaping at the Project site will be water efficient in compliance with the City’s water Efficient Landscaping and Irrigation Ordinance. However, the proposed Project, when combined with the cumulative development projects, will increase the demand water service from RPU.

According to the City’s 2010 Urban Water Management Plan (2010 UWMP), RPU will be able to provide a sufficient amount of water to its service area based on current and projected future water use (UWMP 2010, pp. ES-1 and ES-3). According to the 2010 UWMP, annual water demand would increase by approximately 44 percent between 2010 and 2035, from approximately 83,257 acre-feet (AF) in 2010 to approximately 119,800 AF in 2035 (UWMP 2010, p. ES-1). However, the 2010 UWMP estimates the available total water supply to exceed demand through 2035. Year 2035 water supply projections from
all water sources (i.e., groundwater, imported water, and recycled water) are projected to total 143,226 AF per year (AF/year). This results in a surplus of 23,426 AF/year in 2035. Thus, RPU has the ability to serve the proposed Project, as well as the cumulative development projects for the next 25 years. Because cumulative water supplies exceed water demand, **cumulative impacts to water supply are less than significant** and the proposed Project will not contribute to a cumulatively considerable impact on water supply.

The City’s Public Works Department operates a comprehensive wastewater collection, treatment, and disposal system. Wastewater generated by the proposed Project and the cumulative development projects will be collected in facilities owned and maintained by the Public Works Department and conveyed to the Riverside Regional Water Quality Control Plant (RWQCP). The RWQCP has a capacity of 40 million gallons per day (MGD) with a planned expansion to treat 52.2 MGD. The planned expansion will provide sufficient capacity to treat the wastewater generated by the proposed Project, cumulative development projects, and buildout in the City per the GP 2025. For these reasons, **cumulative impacts to wastewater collection and treatment are less than significant** and the proposed Project will not contribute to a cumulatively considerable impact in this regard.

The geographic context for cumulative impacts regarding solid waste collection and disposal is Riverside County. Development of the proposed Project and cumulative development projects will increase the amount of solid waste entering the waste stream. All non-hazardous solid waste collected in the City is transported to the Robert A. Nelson Transfer Station, which is owned by the County of Riverside and operated under a 20-year franchise agreement by a private company. Waste is then transferred to the Badlands landfill for disposal; however, local trash haulers may use other Riverside County landfills. All Riverside County landfills are Class II disposal sites that are permitted to receive non-hazardous municipal solid waste.

The Badlands Landfill currently has a permitted maximum disposal capacity of 4,000 tons per day (CalRecycle, Badlands) and received approximately 1,687 tons of waste per day in March 2011 (CalRecycle, Tonnage). The proposed Project is projected to generate approximately 134 pounds\(^1\) (or 0.067 tons) of solid waste per day, which constitutes approximately 0.003 percent\(^2\) of the remaining daily capacity\(^3\) at the Badlands Landfill. As shown in **Table 6-C – Estimated Solid Waste Generation from the Cumulative Development Projects**, the cumulative development projects are estimated to generate approximately 5.84 tons of solid waste per day, which constitutes approximately 0.252 percent of the remaining daily capacity at the Badlands Landfill. Combined, the solid waste generated by the proposed Project and the cumulative development projects, constitutes approximately 0.255 percent of the

\(^1\) 22,272 SF multiplied by the Commercial, Light Industrial, and Office Solid waste generation factor of 6 pounds per day per 1,000 SF

\(^2\) 0.067 tons divided by the 2,312.8 (the remaining daily capacity of the Badlands Landfill)

\(^3\) Remaining daily capacity is 2,312.8 tons per day (4,000 tons per day permitted capacity less 1,687 average daily landfilled tonnage)
remaining capacity at the Badlands Landfill. Therefore, no potentially significant cumulative effects related to utilities and service systems will result from the proposed Project.

**Table 6-C – Estimated Solid Waste Generation from the Cumulative Development Projects**

<table>
<thead>
<tr>
<th>No. on Figure 6-1</th>
<th>Project</th>
<th>Land Use</th>
<th>Project Size</th>
<th>Generation Factor Used</th>
<th>Solid Waste Factor (lbs/day)</th>
<th>Estimated Solid Waste Used in Tons per Day</th>
<th>Portion of Remaining Badlands Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California Baptist University</td>
<td>Student Housing Facility</td>
<td>662 Beds</td>
<td>Multi-Family Residential</td>
<td>7/bed</td>
<td>2.317</td>
<td>0.100%</td>
</tr>
<tr>
<td>2</td>
<td>Magnolia Avenue Baptist Church</td>
<td>Church</td>
<td>62,800 SF</td>
<td>Community Facilities</td>
<td>8/TSF</td>
<td>0.251</td>
<td>0.011%</td>
</tr>
<tr>
<td>3</td>
<td>Fresh &amp; Easy</td>
<td>Supermarket Commercial Retail</td>
<td>15,011 SF</td>
<td>Commercial, Light Industrial, and Office</td>
<td>6/TSF</td>
<td>0.045</td>
<td>0.002%</td>
</tr>
<tr>
<td>4</td>
<td>Magnolia Square</td>
<td>Commercial Retail</td>
<td>40,000 SF</td>
<td>Commercial, Light Industrial, and Office</td>
<td>6/TSF</td>
<td>0.12</td>
<td>0.005%</td>
</tr>
<tr>
<td></td>
<td>Apartments</td>
<td>Multi-Family Residential</td>
<td>315 DU</td>
<td>7/DU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cinnamon Creek</td>
<td>Apartments</td>
<td>95 DU</td>
<td>Multi-Family Residential</td>
<td>7/DU</td>
<td>0.333</td>
<td>0.014%</td>
</tr>
<tr>
<td>6</td>
<td>Telacu Housing</td>
<td>Apartments</td>
<td>75 DU</td>
<td>Multi-Family Residential</td>
<td>7/DU</td>
<td>0.262</td>
<td>0.011%</td>
</tr>
<tr>
<td>7</td>
<td>Snowberry Creek</td>
<td>Apartments</td>
<td>224 DU</td>
<td>Multi-Family Residential</td>
<td>7/DU</td>
<td>0.784</td>
<td>0.034%</td>
</tr>
<tr>
<td>8</td>
<td>Leilani Alejandro</td>
<td>Office</td>
<td>3,742 SF</td>
<td>Commercial, Light Industrial, and Office</td>
<td>6/TSF</td>
<td>0.011</td>
<td>0.0005%</td>
</tr>
<tr>
<td>9</td>
<td>Bruce Karish</td>
<td>Warehouse</td>
<td>89,000 SF</td>
<td>Commercial, Light Industrial, and Office</td>
<td>6/TSF</td>
<td>0.267</td>
<td>0.012%</td>
</tr>
</tbody>
</table>
### Table 6-D – Cumulative Supermarket Projects in the Trade Area

<table>
<thead>
<tr>
<th>No. on Figure 6-1</th>
<th>Project</th>
<th>Land Use</th>
<th>Project Size</th>
<th>Generation Factor Used</th>
<th>Solid Waste Factor(^a) (lbs/day)</th>
<th>Estimated Solid Waste Used in Tons per Day</th>
<th>Portion of Remaining Badlands Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>William Fox Group</td>
<td>Warehouse</td>
<td>90,000 SF</td>
<td>Commercial, Light Industrial, and Office</td>
<td>6/TSF</td>
<td>0.270</td>
<td>0.012%</td>
</tr>
<tr>
<td>11</td>
<td>Walgreens</td>
<td>Drugstore</td>
<td>15,000 SF</td>
<td>Commercial, Light Industrial, and Office</td>
<td>6/TSF</td>
<td>0.045</td>
<td>0.002%</td>
</tr>
<tr>
<td>12</td>
<td>Maxi-Foods Supermarket</td>
<td>Supermarket</td>
<td>5,385 SF</td>
<td>Commercial, Light Industrial, and Office</td>
<td>6/TSF</td>
<td>0.016</td>
<td>0.001%</td>
</tr>
<tr>
<td></td>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>5.835</strong></td>
<td><strong>0.252%</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**


DU = dwelling units; TSF = thousand square feet

\(^b\) Used Multi-Family Residential generation factor

### 6.1.20 Urban Decay

The geographic context for cumulative impacts relative to urban decay is the Project’s Trade Area as shown in **Figure 5.9-1 – Trade Area Boundary**. Cumulative impacts to the Trade Area are evaluated based on all known pending supermarket development and/or expansion projects (including the proposed Project) in the Trade Area. In addition to the proposed Project, the *Retail Market Impact Analysis for Van Buren (Riverside) Walmart Expansion*, prepared by The Natelson Dale Group, Inc., January 5, 2010 (hereinafter referred to as the *Retail Market Impact Analysis*) identified two other planned and/or pending supermarket projects in the Trade Area as shown in **Table 6-D – Cumulative Supermarket Projects in the Trade Area**.
Table 6-D – Cumulative Supermarket Projects in the Trade Area

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Status</th>
<th>New Grocery Area (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walmart Expansion</td>
<td>Van Buren Boulevard at Audrey Avenue</td>
<td>Under Review</td>
<td>44,907</td>
</tr>
<tr>
<td>(Proposed Project)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh &amp; Easy</td>
<td>Van Buren Boulevard at Colorado Avenue</td>
<td>Approved</td>
<td>15,011</td>
</tr>
<tr>
<td>Maxi Foods</td>
<td>California Avenue at Monroe Street</td>
<td>Approved</td>
<td>5,700</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>65,618</strong></td>
</tr>
</tbody>
</table>

Notes:


As shown in the above table, there is approximately 65,618 SF of new grocery area planned for development within the Trade Area; of which 44,907 SF is attributable to the proposed Project.

The methodology for the cumulative impacts analysis utilizes the same approach as the Project-specific impact analysis. Potential sales are projected for the two cumulative projects, assuming a rate of $475/SF. Potential sales for the expanded Walmart grocery area is based on $525/SF. (TNDG, p. 11) As shown in Table 6-E – Potential Cumulative Sales Impacts to Existing Supermarkets in the Trade Area

Supermarket Projects in the Trade Area, the proposed Fresh & Easy and Maxi Foods stores are projected to absorb $7,130 thousand and $2,708 thousand of the Food demand, respectively.

Table 6-E – Potential Cumulative Sales Impacts to Existing Supermarkets in the Trade Area

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Food Sales Demand</td>
<td>$305,502</td>
<td>$315,879</td>
<td>$322,954</td>
<td>$330,044</td>
<td>$337,142</td>
<td>$344,393</td>
<td>$351,515</td>
</tr>
<tr>
<td>Supermarket Share of Food Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
</tr>
<tr>
<td>Increment</td>
<td>N/A</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
<td>84%</td>
</tr>
<tr>
<td>Supermarket Share of Food Demand (in 2009 dollars)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing (in thousands of dollars)</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
<td>$256,621</td>
</tr>
<tr>
<td>Increment (in thousands of dollars)</td>
<td>$0</td>
<td>$8,717</td>
<td>$14,660</td>
<td>$20,615</td>
<td>$26,578</td>
<td>$32,669</td>
<td>$38,651</td>
</tr>
<tr>
<td>Less Demand Absorbed by the Expanded Walmart and Cumulative Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh &amp; Easy (in thousands of dollars)</td>
<td>N/A</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
<td>($7,130)</td>
</tr>
<tr>
<td>Maxi Foods (in thousands of dollars)</td>
<td>N/A</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
<td>($2,708)</td>
</tr>
</tbody>
</table>
As shown in the above table, after completion of the proposed Walmart expansion, development of a new Fresh & Easy store, and the expansion of the existing Maxi Foods store, sales volumes at the 17 existing supermarkets in the Trade Area will decrease from an average of $467/SF in the existing condition (2009) to an average of $422/SF in 2012, a decrease of 9.6 percent. The sales per SF levels for the existing supermarkets are projected to increase each year thereafter until surpassing their prior levels in 2022.

While implementation of the proposed Project combined with the cumulative projects (Fresh & Easy and Maxi Foods) are projected to result in a sustained reduction in average sales per SF at the existing supermarkets in the Trade Area, this reduction is not likely to be severe enough to result in the closure of existing stores (TDNG, p. 11). Additionally, there are a number of other factors to suggest that this cumulative impact analysis is inherently conservative in projecting reduced sales volumes.

The proposed Fresh & Easy store, at the intersection of Van Buren Boulevard and Colorado Avenue, has been put on hold indefinitely and at the time of preparation of the Retail Market Impact Analysis, there is no timeline for resuming the project. It is unknown if the store will ever be built and it appears unlikely that it will be built within the early years of the analytical timeline as assumed. (TNDG, p. 11)

Although the proposed Fresh & Easy store is included in this cumulative analysis as a future addition to the inventory of supermarkets in the Trade Area, Fresh & Easy is not generally considered to be a supermarket due to its small size and specialized merchandise mix. It is likely that the proposed Fresh & Easy store will not absorb demand only from the supermarket category, but will also absorb a significant portion of its sales from the convenience store category. Further, because Fresh & Easy stores focus on pre-prepared meals, it is also expected to absorb existing sales in the restaurant category. Thus, the
impact of the proposed Fresh & Easy will be spread out and will not be felt only by the Trade Area’s existing supermarkets. (TDNG, p. 11)

The City has in place regulations regarding maintenance and rehabilitation of vacant and neglected buildings and/or properties encompassed in the Riverside Municipal Code. In the event a commercial tenant vacated their space within the Trade Area for any reason, the applicable property owner is responsible to maintain the building and/or property in accordance with Riverside Municipal Code Chapter 6.11, or that building and/or property may be declared by the City to be unlawful (Riverside Municipal Code Section 6.11.030). If the building and/or property is vacant for 180 days and meets the classification of a nuisance, the City may administer civil penalties against the property owner (Riverside Municipal Code Section 6.11.050). The City may also determine the building and/or property is a permanent nuisance and may immediately hire a contractor to address any maintenance issues to bring the property into compliance with the Riverside Municipal Code (Riverside Municipal Code Section 6.11.060). The City may recover all abatement costs from the property owner and any subsequent attorney’s fees (Riverside Municipal Code Section 6.15.041 and Section 6.15.042). Thus, City regulations will ensure the upkeep to prevent blight and urban decay of vacated commercial buildings and/or properties.

Further, large commercial spaces are generally highly desirable in the marketplace. If for any reason a commercial tenant occupying a large space vacated, the space is likely to be re-occupied. For example, the former Mervyn’s clothing department store located at 3520 Tyler Street was vacated when the company went out of business as a result of the recent recession and failing to adequately restructure under Chapter 11 bankruptcy protection (MW Article). The store officially closed in early 2009, and was re-occupied and improved by Kohl’s department stores, which opened its store in 2010 (PE Article). Even in an economic recession, the larger, vacated commercial space provides desirable opportunities for comparable businesses, and thus, such spaces are likely to be re-occupied in a reasonable amount of time.

No store closures are likely to occur, and if for any reason a commercial property and/or structure is vacated, City regulations will ensure its upkeep to prevent blight and urban decay. Moreover, there is typically a higher desirability for larger commercial spaces in the marketplace when vacancies do occur. Therefore, no potentially significant cumulative effects related to urban decay will result from the proposed Project.

### 6.1.21 Energy Conservation

Electricity and natural gas services are provided to the proposed Project and the cumulative development projects by RPU and the Southern California Gas Company (SCG), respectively. Therefore the geographic context for cumulative impacts to electricity is the City and the geographical context for cumulative impacts to natural gas is the service area of SCG. SCG’s service area encompasses most of central and southern California.
Energy consumption by new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of both residential and non-residential buildings and regulate insulation, glazing, lighting, shading, and water- and space-heating systems. Building efficiency standards are enforced through the local building permit process. The City has adopted building standards consistent with Title 24.

The proposed Project will comply with, and in some cases exceed Title 24 standards for insulation, glazing, lighting, shading, and water and space-heating systems in all new construction. Through the use of modern energy-efficient construction materials and practices, incorporation of the Sustainability Features described in Section 3.2.1.6 (Project Description, Sustainability Features), in addition to compliance with Title 24 standards, the proposed Project will be consistent with the State’s energy conservation standards and, therefore would not conflict with adopted energy conservation plan.

The cumulative development projects must abide by the City’s building standards and the provisions of Title 24, and in some instances may exceed the Title 24 guidelines for new construction. It is also reasonable to assume that one or more of the cumulative development projects will use energy-efficient construction materials and practices.

Both RPU and SCG have adequate energy supplies to serve the proposed Project, the cumulative development projects, and to meet existing demand in future years. RPU and SCG are both developing additional energy supplies to serve anticipated development in future years.

Therefore, no potentially significant cumulative effects related to energy conservation will result from the proposed Project.

6.2 Significant Unavoidable Adverse Impacts

This topic is intended to address any significant impacts that cannot be mitigated to below a level of significance (State CEQA Guidelines Section 15126.2). As discussed in detail throughout Section 5.0 Environmental Impact Analysis of this DEIR, the proposed Project will not result in any Project-specific or cumulatively significant unavoidable adverse impacts related to aesthetics, air quality, biological resources, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation/traffic, urban decay, or energy conservation. Additionally, the Initial Study prepared for the proposed Project (included as Appendix A to this DEIR) determined that no significant impacts will occur to the following issue areas: agricultural and forest resources, cultural resources, geology and soils, land use and planning, mineral resources, population and housing, public services, recreation, and utilities and service systems.
6.3 Growth Inducing Impacts

According to State CEQA Guidelines Section 15126.2 (d), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria:

- A project would remove obstacles to population growth;
- Increases in the population may tax existing community service facilities, causing significant environmental effects; or
- A project would encourage and facilitate other activities that could significantly affect the environment.

As discussed in Section 3.0 Project Description of this DEIR, the Project will expand an existing retail structure by 22,272 SF, provide a place for grocery sales, remove an existing tire and car service facility, relocate an existing garden center, and construct two new loading docks with associated 10-foot masonry sound-blocking wall. The Project site is located in an urbanized area that is predominantly developed with only select parcels available for infill development. As such, the Project will not require the extension of infrastructure or utilities and will not remove obstacles to population growth. Further, the Project itself will not impact population growth through the creation of households.

Implementation of the proposed Project will result in 85 new “permanent” jobs to the City plus temporary construction jobs. As of April 2011, the City had an unemployment rate of 13.6 percent or 21,500 unemployed persons (EDD). Given the nature of the job opportunities and an available labor force, it is expected that any new jobs created by the proposed Project will not result in indirect population growth in the area.

6.4 Significant Irreversible Environmental Changes which would be Involved in the Proposed Project Should it be Implemented

The intent of this section of this DEIR is to discuss primary and secondary impacts of the proposed Project that result in significant irreversible changes in the environment. State CEQA Guidelines Section 15126.2(c) identifies, as examples, such things as use of nonrenewable natural resources, irreversible changes in land use, and irreversible damage to the environment resulting from environmental accidents associated with a project.

As discussed in Section 3.0 Project Description of this DEIR, the proposed Project will expand an existing retail structure by 22,272 SF. The Project site is located in an urbanized area and is developed and nearly completely covered by the existing retail structure and associated parking lot with minor ornamental landscaped squares dispersed throughout the parking lot. The Project development will be contained within the existing developed site, and will not result in a significant long-term change in land use in the Project area.
Nonrenewable resources such as gravel and steel will be consumed during Project construction. Energy, fossil fuels, oils, and natural gas will be irreversibly committed during construction. These same resources are used for vehicles traveling to and from the Project site and energy used to operate the site. The continued use of these resources associated with Project operations represents a long-term obligation. The energy consumed in construction and operation of the Project may be considered a permanent investment. However, the Project will incorporate sustainable features in its building materials to reduce impacts to nonrenewable resources. Relevant features include the use of recycled building materials in the proposed expansion area, and to capture and recycle as much of the metals, woods, floor and ceiling tiles, concretes, asphalts, and other materials generated as part of the demolition and construction process as possible. Further, the Project will incorporate energy efficiency features in an effort to conserve energy over the life of its operation. Therefore, the long-term effect of the proposed Project will not change the development intensity of the area and the Project will not result in significant irreversible environmental changes.

### 6.5 Consistency with Regional Plans

Section 15125(d) of the State CEQA Guidelines also requires an EIR to “to discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.” The regional plans applicable to the proposed Project are: the GP 2025, RCALUCP, the MSHCP, the TUMF, and the Air Quality Management Plan (AQMP). The following table identifies the location in which each of these plans is discussed in the DEIR.

<table>
<thead>
<tr>
<th>Plan</th>
<th>Location of Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP 2025</td>
<td>Environmental impact analysis section for each environmental issue under the heading “Related Regulations”</td>
</tr>
<tr>
<td>MSHCP</td>
<td>Section 5.3.4.4 (Biological Resources, Related Regulations, MSHCP and Ordinance No. 6709 – MSHCP Fee Program Ordinance)</td>
</tr>
<tr>
<td>RCALUCP</td>
<td>Section 5.5.4.3 (Hazards and Hazardous Materials, County Regulations, Riverside County Airport Land Use Compatibility Plan)</td>
</tr>
<tr>
<td>TUMF</td>
<td>Section 5.8.4.2 (Transportation/Traffic, Related Regulations, Western Riverside County Transportation Uniform Mitigation Fee)</td>
</tr>
<tr>
<td>AQMP</td>
<td>Section 5.2.4.1 (Air Quality, Related Regulations, Criteria Air Pollutants)</td>
</tr>
</tbody>
</table>

The Project site is not within a specific plan. The Project does not entail the construction of new housing or the need for replacement housing; thus no discussion of any housing plan is required.
6.6 References

In addition to other documents, the following references were used in the preparation of this section of the DEIR:


- The Natelson Dale Group, Inc., *Retail Market Impact Analysis for Van Buren (Riverside) Walmart Expansion*, January 5, 2010. (Included as Appendix F to this DEIR.) [Cited as TNDG]

- Urban Crossroads, *Wal-Mart Expansion Traffic Impact Analysis*, October 18, 2010. (Included as Appendix E to this DEIR.) [Cited as Urban Crossroads]
Section 7 – ALTERNATIVES TO THE PROPOSED PROJECT

The following discussion considers alternatives to implementation of the project. The discussion examines the potential environmental impacts resulting from each alternative. Through comparisons of these alternatives to the project, the relative advantage(s) of each can be weighed and analyzed.

State CEQA Guidelines Section 15126.6 identifies the parameters within which consideration and discussion of alternatives to the proposed project should occur. As stated in this section of the guidelines, alternatives must focus on those that are potentially feasible and which attain most of the basic objectives of the project.

7.1 Project Objectives

As stated previously in Section 3.2.2 of the DEIR, the objectives of the proposed Project are:

- Positively contribute to the local economy.
- Create new job opportunities for local residents.
- Maximize affordable grocery shopping options for residents of the City and the immediate surrounding area.
- Provide a retail establishment that serves local residents and visitors with essential goods and services, in a safe and secure, 24-hour shopping environment.
- Provide regional commercial retail activities that would complement existing local retail activities and enhance commercial retail opportunities available in the City of Riverside.
- Promote economic growth and development that is consistent with the policies of the City of Riverside General Plan 2025.
- Develop a project consistent with the City of Riverside Municipal Code.
- Generate tax revenues to accrue to the various agencies within the Project area.
- Provide payments or physical improvements to mitigate for Project-related impacts on public services and infrastructure.
- Expand and develop retail uses near regional roadway and freeway facilities, and near other commercial uses to minimize travel lengths and utilize existing infrastructure to the extent possible.
- Ensure that commercial development has sufficient on-site parking to minimize impacts to the surrounding area and ensure that adequate parking is provided for customers and employees.
- Implement parking lot layout modifications to reduce nuisance and safety impacts related to vehicular traffic.
• Implement a high-quality architectural design that complements the existing design characteristics of the surrounding commercial uses and improves the aesthetics of the existing store.

7.2 Significant Unavoidable Impacts
There are no significant unavoidable impacts associated with implementation of the proposed Project.

7.3 Less Than Significant Impacts
The Project’s potential impacts to the following environmental topics considered in the DEIR are less than significant: Aesthetics, Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Urban Decay, and Energy Conservation. The Project’s potential impacts to Biological Resources, Noise, and Transportation/Traffic will be reduced to a less than significant level with the incorporation of mitigation measures identified in this DEIR.

7.4 Rationale for Alternative Selection
State CEQA Guidelines Section 15126.6(a) requires that an EIR “…describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” According to this section of the State CEQA Guidelines, “…an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.” An EIR is not required to consider alternatives which are infeasible. The City, as lead agency, is responsible for selecting a range of project alternatives for examination, and there is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the “rule of reason” (CEQA Guidelines Section 15126.6 (a)). Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to an alternative. (CEQA Guidelines Section 15126.6 (f)(1)).

With respect to the selection of alternatives to be considered in an EIR, State CEQA Guidelines Section 15126.6(b) states “…the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” That is, each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed Project. The proposed Project was found to have less than significant impacts in the following areas: Aesthetics, Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Urban Decay, and Energy Conservation. With respect to Biological Resources, Noise, and Transportation/Traffic, potential impacts can be reduced to a less than significant level with the incorporation of mitigation measures identified in the DEIR.
The rationale for selecting the alternatives to be evaluated, and a discussion of the “no project” alternative are also required (State CEQA Guidelines, Section 15126.6(e)). Since there are no potentially significant impacts associated with the Project, the only alternative that must be considered is the “no project” alternative. Nonetheless, in addition to the “no project” alternative, this DEIR evaluates two other alternatives: “Closure and Alternate Site Location” and “Smaller Expansion with On-Site Relocation of the Tire & Lube Express.”

7.5 Alternatives Rejected from Further Consideration
Section 15126.6(c) of the State CEQA Guidelines specify that an EIR should identify alternatives that were considered by the lead agency, but were rejected during the scoping process and identify the reasons for eliminating the alternatives from further consideration. Section 15126.6(c) further indicates that a lead agency may eliminate an alternative from detailed consideration in an EIR if it fails to meet the basic project objectives, is infeasible, or does not avoid significant environmental impacts. Three such alternatives were considered and rejected by the City, as discussed below. Please note none of these alternatives that were considered and rejected would result in fewer environmental impacts than the proposed Project.

7.5.1.1 Closure and New Store Location Outside of the Trade Area
Under this alternative, the Closure and New Store Location Outside of the Trade Area alternative would vacate the existing Walmart store, leaving its 125,827-square-foot (SF) structure with a Tire & Lube Express facility and exterior 5,300-SF Garden Center unoccupied. The landscaping would remain in its existing condition and be maintained as required by the Riverside Municipal Code. Construction of a new store or demolition of and remodeling an existing structure would entail more construction and site preparation than the proposed Project, and as such would result in greater short-term construction related impacts to air quality and noise. Construction of a new store outside of the Trade Area would introduce a substantial amount of new traffic on area roadways when compared to the net increase in trips to the existing Walmart store. Additionally, due to the location and size of the existing Walmart store and because there is no potential tenant identified to occupy the structure once vacant, it may be difficult to find a new occupant or to redevelop the space, which may contribute to urban decay. Finally, this alternative does not fulfill a basic Project objective of providing the Trade Area with an affordable shopping alternative. For these reasons, this alternative was eliminated from further study in this DEIR.

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1 Trade Area refers to the geographic area identified in the Retail Market Impact for Van Buren (Riverside) Walmart Expansion, prepared by The Natelson Dale Group, Inc., January 5, 2010 (hereinafter referred to as the Retail Market Impact Analysis), which is included as Appendix F to this DEIR.
7.5.1.2 Closure and New Store Location at an Existing Vacant Shopping Center or Building Within the Trade Area

Under this alternative, the Closure and New Store Location at an Existing Vacant Shopping Center or Building Within the Trade Area alternative would vacate the existing Walmart store, leaving its 125,827-SF structure with a Tire & Lube Express facility and exterior 5,300-SF Garden Center unoccupied. The landscaping would remain in its existing condition and would be maintained as required by the Riverside Municipal Code.

Construction of a new store or demolition of and remodeling an existing structure would entail more construction and site preparation than the proposed Project, and as such would result in greater short-term construction related impacts to air quality and noise. Construction of a new store at a different site within the Trade Area would introduce a substantial amount of new traffic on roadways in proximity to the new location when compared to the net increase in trips to the existing Walmart store. Additionally, due to the location and size of the existing Walmart store and because there is no potential tenant identified to occupy the structure once vacant, it may be difficult to find a new occupant or to redevelop the space, which may contribute to urban decay. Finally, there are no suitably sized vacant shopping centers or buildings within the Trade Area to accommodate a new Walmart store location. (TNDG, Appendix B). There is one large vacant space in the Trade Area; the former Macy’s store in the Galleria at Tyler. However, this space does not have the appropriate configuration for use as a supermarket (TNDG, p. 12). For these reasons, this alternative was eliminated from further study in this DEIR.

7.5.1.3 Stand-Alone Grocery Store at a Separate Location within the Trade Area

Under this alternative, the Stand-Alone Grocery at a Separate Location within the Trade Area alternative would leave the existing Walmart store, Garden Center and Tire & Lube Express in their current condition with current operations continuing, and would construct an approximately 45,000 SF grocery store at a different site within the Trade Area. Construction of a stand-alone grocery store at a separate location within the Trade Area would entail more construction and site preparation than the proposed Project, and as such would result in greater short-term construction related impacts to air quality and noise. This alternative would also increase the travel lengths and number of total trip ends of patrons who would be traveling to two separate locations to conduct business. Longer travel lengths would result in additional traffic and air quality impacts when compared to the proposed Project. None of the beneficial impacts to area aesthetics will be realized if the existing Walmart store is left as is, nor will any of the Project’s proposed energy efficient design considerations, which include energy efficient lighting, water efficient fixtures, and a central energy management system be realized. Finally, this alternative would not fulfill the basic Project objectives of expanding the existing Walmart store or minimizing travel lengths and using existing infrastructure to the maximum extent possible. For these reasons, this alternative was eliminated from further study in this DEIR.
7.6 Description of Alternatives Evaluated in the DEIR

This section of the DEIR presents the analysis of three alternatives in comparison to the potential environmental effects associated with the proposed Project. In accordance with State CEQA Guidelines Section 15126.6(d), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the proposed Project. Following a description of each alternative is a discussion of potential impacts to each of the environmental topics evaluated in this DEIR. A comparison of alternatives matrix is presented in Section 7.7.

7.6.1 Alternative 1 – No Project

Pursuant to State CEQA Guidelines Section 15126.6(e)(3)(B), the No Project Alternative for a development project on identifiable property is the circumstance under which the proposed Project does not proceed, and the discussion of the No Project Alternative must compare the environmental effects from the Project site remaining in its existing state, versus the environmental effects that would occur if the proposed Project is approved. Pursuant to State CEQA Guidelines Section 15126.6(e)(3)(C), the impacts of the No Project Alternative should also be evaluated by projecting what would reasonably be expected to occur in the foreseeable future if the proposed Project were not approved. Accordingly, the No Project Alternative is analyzed herein as the continued operation of the existing 125,827-SF Walmart store with a Tire & Lube Express facility, and exterior 5,300-SF Garden Center.

7.6.1.1 Evaluation of Alternative 1 (No Project)

Aesthetics

The No Project Alternative would retain the Project site’s and Walmart store’s existing conditions. There will be no exterior remodel of the Walmart store and none of the beneficial aesthetic improvements of the proposed Project would be realized, because the existing structure does not reflect or complement the Scenic and Special Boulevard and Parkway designations of Van Buren Boulevard. The parking lot design would remain in its existing condition, which would perpetuate the existing traffic congestion problem. The landscaping would remain in its existing condition, and the Project site would not achieve the Zoning Code-required shade tree ratio in its parking lot. The landscape beautification of the Van Buren Boulevard median from the S. Project Driveway to the N. Project Driveway would not be realized. Further, beneficial visual quality and character impacts on the surrounding locale would also not be realized. Therefore, although the No Project Alternative would likely result in a less than significant impact regarding aesthetics as compared to existing conditions, this alternative would not achieve one of the basic goals of the proposed Project, which is to implement a high-quality architectural design that complements the existing design characteristics of the surrounding commercial uses and improves the aesthetics of the existing store, and was also found to have a less than significant impact regarding aesthetics.
Air Quality
The No Project Alternative would retain the Project site’s existing conditions. Since no construction activity would occur, this alternative would not have any short-term impacts on air quality from the construction of the proposed expansion area and parking lot improvements. Also, no additional long-term operational impacts on air quality would result from increased land use intensity, increased motorized vehicle traffic or heavy truck deliveries. The No Project Alternative would not implement any of the sustainability features discussed in Section 3.2.1.6 regarding energy efficiency, resulting in less energy efficiency than would be realized with the Project. However, because the No Project Alternative would not increase size of the Walmart store, less energy would be used when compared to the Project. Therefore, the No Project Alternative will likely result in a less than significant impact regarding air quality, and may result in fewer air quality impacts than the proposed Project, which was also found to have a less than significant impact regarding air quality.

Biological Resources
The No Project Alternative would retain the Project site’s existing conditions. This alternative would not result in a change to the existing biological resources of the Project site. While the existing Project site is substantially disturbed from existing development, any potential for migratory birds nesting in on-site trees under the No Project Alternative would continue uninterrupted, whereas the Project will require mitigation to ensure that potential impacts to nesting habitats are avoided and less than significant, should construction take place during the nesting season. Therefore, the No Project Alternative would likely result in a less than significant impact regarding biological resources, and may result in fewer biological impacts than the proposed Project, which were found to be less than significant with mitigation.

Greenhouse Gas Emissions
The No Project Alternative would retain the Project site’s existing conditions. Under this alternative, impacts of the existing land use (including motorized vehicle trips generated to and from the Project site, producing greenhouse gas (GHG) emissions) would remain in its existing condition. As there would be no construction of the proposed expansion area and parking lot modifications, GHG emissions from construction-related activities would not occur under the No Project Alternative. Moreover, the incremental increases to GHG emissions from a larger store would also not occur under this alternative. Under the No Project Alternative, the Project’s proposed energy efficient design considerations, which include energy efficient lighting, central energy management system, and integration of sustainable materials and finishes as well as parking for bicycles and designated lower emission vehicles (see Section 3.2.1.6) would not be realized. Thus, the existing store under the No Project Alternative would use energy less efficiently, but the overall building’s energy demand would be reduced due to the smaller building size. Therefore, the No Project Alternative would likely result in a less than significant impact regarding GHG emissions, and would result in fewer GHG emissions when compared to the proposed Project, which was also found to have a less than significant impact with respect to GHG emissions.
Hazards and Hazardous Materials
The No Project Alternative would retain the Project site’s existing conditions. Potentially hazardous materials identified in the Project’s Phase I Environmental Site Assessment (Phase I, Appendix C.1 to this DEIR) include the presence of fluorescent lights and/or high-intensity lights, heating, ventilating, and air conditioning and refrigeration units, lead-acid batteries, waste oil, antifreeze, asbestos-containing building materials, universal wastes, etc. Under the No Project Alternative, potential contact with asbestos-containing materials from construction of the proposed expansion area would not occur. The potential environmental benefit of removing the existing Tire & Lube Express and its associated materials and underground storage tanks (USTs), and any subsequent remediation would also not be realized. Further, the existing Project site is consistent with the Riverside County Airport Land Use Compatibility Plan and would not require a safety design bonus, thus the risk-reduction measures of the Project design considerations would not be implemented. Therefore, the No Project Alternative would likely result in a less than significant impact regarding hazards and hazardous materials; however, because the Tire & Lube Express would continue in operation, long-term impacts would be worse than with the proposed Project, which was also found to have a less than significant impact regarding hazards and hazardous materials.

Hydrology and Water Quality
The No Project Alternative would retain the Project site’s existing conditions. Under this alternative, the existing hydrologic conditions including impacts to surface water quality from point and non-point sources would continue, and the existing storm drain facilities and storm flow patterns and capacity would remain. However, the potential environmental benefits of the Project’s proposal to install water conservation measures (see Section 3.2.1.6) and Best Management Practices (BMPs) for site design, source control, and treatment control, which include a catch basin and a series of porous landscape detention sedimentation/filtration facilities to treat for pollutants and slow down storm flows prior to discharging into existing public storm drains (see Section 5.6.5.1), would not be realized. Although the No Project Alternative would likely result in a less than significant impact regarding hydrology and water quality, long-term impacts would be worse than with the proposed Project, which was also found to have a less than significant impact regarding hydrology and water quality.

Noise
The No Project Alternative would retain the Project site’s existing conditions. The existing noise level, which is predominantly generated by the vehicles on the surrounding roadways, would remain. Since no construction activity would occur, related short-term noise impacts would not be realized and the precautionary mitigation measures would not be incorporated. The marginal noise increase from Project operation, which includes the addition of a new loading dock with two loading bays behind a masonry block wall, would also not be realized, and the worst case loading dock activity scenario of four refrigerator trucks simultaneously arriving and unloading would not be a potential impact requiring mitigation. Therefore, the No Project Alternative would likely result in a less than significant impact regarding noise; however, as the Project’s increase in noise levels incorporates precautionary mitigation measures to assure impacts are less than significant, impacts would be less than the proposed Project, which was found to have a less than significant impact with mitigation regarding noise.
Transportation/Traffic
The No Project Alternative would retain the Project site’s existing conditions. The existing traffic volumes and operational conditions would remain generally similar in the short-term, but would ultimately increase as ambient growth continues in the area. Trip generation and public transit service in the area are not expected to change under this alternative. The existing design of the parking lot and vehicular access points would remain, and the Project design consideration intended to address existing circulation and congestion problems experienced on-site and at off-site access points along Van Buren Boulevard would not be realized (see Section 5.8.5). The No Project Alternative would result in a greater ratio of parking spaces per square footage of store space than under the proposed Project; however, the proposed Project will meet the parking requirements of the Riverside Municipal Code. Although the proposed Project will introduce new vehicular trips to the area, this is a less than significant impact with mitigation. Therefore, because the No Project Alternative would maintain existing congestion problems on- and off-site, would not provide for bicycle and designated low emission vehicle parking, impacts to transportation/traffic under the No Project Alternative would be similar to the proposed Project, which was found to have a less than significant impact regarding transportation/traffic with mitigation.

Urban Decay
The No Project Alternative would retain the Project site’s existing conditions. Existing conditions within the Trade Area will generally remain in the short-term; however, ambient growth and constant development and redevelopment in the Trade Area will likely contribute toward changing dynamics in the long-term. The existing Walmart has been in operation for approximately 20 years and is well-established in its Trade Area, and as such, its continued operation in its existing condition will not contribute toward urban decay. While the existing Walmart does not include a grocery component, the addition of grocery in the proposed Project is not anticipated to result in potential for urban decay impacts. Although not significant, impacts regarding urban decay may be greater to sales per square foot at existing grocery stores within the Trade Area under this alternative. Therefore, the No Project Alternative would likely result in a less than significant impact regarding urban decay, and would result in similar impacts as the proposed Project, which was also found to have a less than significant impact regarding urban decay.

Energy Conservation
The No Project Alternative would retain the Project site’s existing conditions. The existing demand for electricity, natural gas, and Project-generated fuel consumption to and from the Project site would remain. The existing and proposed infrastructure which provides electricity and natural gas to the Project site, and oil supplies for transportation fuel would continue without any known issues. None of the proposed Project’s energy efficiency and conservation measures (see Section 3.2.1.6) would be realized. Although the proposed Project will consume more energy than the No Project Alternative, energy will be consumed more efficiently by the Project than under the No Project Alternative. Further, the Project’s proposal to promote alternative and low-emission transportation would also not be realized. Although the No Project Alternative would consume energy less efficiently than the proposed Project, the No Project Alternative will consume less energy overall than the proposed Project due to the smaller store size. Therefore, long-term energy conservation impacts would be less under the No
Project Alternative than under the proposed Project, which was also found to have a less than significant impact with respect to energy conservation.

**Relationship to Project Objectives**

Under the No Project Alternative, the existing Walmart store would not be expanded; there would be no interior or exterior remodel; the parking lot would not be improved; and the beautification of the Van Buren Boulevard median between the N. Project Driveway and the S. Project Driveway would not be realized. **Table 7-A – Summary of Alternative 1 – No Project Alternative Success at meeting Project Objectives** identifies the Project objectives and whether or not Alternative 1 meets each objective.

**Table 7-A – Summary of Alternative 1 (No Project Alternative) Success at Meeting Project Objectives**

<table>
<thead>
<tr>
<th>Project Objective</th>
<th>Alternative Meets Objective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively contribute to the local economy.</td>
<td>No; retail sales will not increase with Alternative 1; thus this alternative will not positively contribute to the local economy.</td>
</tr>
<tr>
<td>Create new job opportunities for local residents.</td>
<td>No; Alternative 1 will not result in new jobs.</td>
</tr>
<tr>
<td>Maximize affordable grocery shopping options for residents of the City and the immediate surrounding area.</td>
<td>No; Alternative 1 will not maximize affordable grocery shopping options.</td>
</tr>
<tr>
<td>Provide a retail establishment that serves local residents and visitors with essential goods and services, in a safe and secure, 24-hour shopping environment.</td>
<td>No. Alternative 1 will not provide 24-hour shopping.</td>
</tr>
<tr>
<td>Provide regional commercial retail activities that would complement existing local retail activities and enhance commercial retail opportunities available in the City of Riverside.</td>
<td>No; Alternative 1 will not enhance commercial retail opportunities in the City.</td>
</tr>
<tr>
<td>Promote economic growth and development that is consistent with the policies of the City of Riverside General Plan 2025.</td>
<td>No; Alternative 1 will not promote economic growth.</td>
</tr>
<tr>
<td>Develop a project consistent with the City of Riverside Municipal Code.</td>
<td>No, Alternative 1 will not develop a project consistent with the Riverside Municipal Code.</td>
</tr>
<tr>
<td>Generate tax revenues to accrue to the various agencies within the Project area.</td>
<td>No; Alternative 1 will not generate additional tax revenues.</td>
</tr>
<tr>
<td>Provide payments or physical improvements to mitigate for Project-related impacts on public services and infrastructure.</td>
<td>No; Alternative 1 will not provide payments or physical improvements.</td>
</tr>
<tr>
<td>Expand and develop retail uses near regional roadway and freeway facilities, and near other commercial uses to minimize travel lengths and utilize existing infrastructure to the extent possible.</td>
<td>No; Alternative 1 will not minimize travel lengths by expanding retail uses.</td>
</tr>
</tbody>
</table>
### Section 7.6.2 Alternative 2 – Closure and Alternate Site Location

Pursuant to State CEQA Guidelines Section 15126.6(f)(2), alternative site(s) should be evaluated, if any feasible sites exist, where significant impacts can be lessened. Accordingly, the Closure and Alternate Site Location Alternative will include the closure and vacation of the existing Walmart store at 5200 Van Buren Boulevard, and the new construction of an approximately 153,399 SF Walmart store with a 28,036-SF grocery sales area generally built to the Project’s specifications at an available alternate site in the City. The Alternate Site is located within the Project’s Trade Area near the northwest corner of the intersection of Tyler Street and Magnolia Avenue in the La Sierra neighborhood, approximately two miles southwest from the Project site. The Alternate Site includes approximately 16 acres of land, and was formerly anchored by a GEMCO\(^2\) retail store, the structure of which has since been demolished. The Walmart structure would be constructed on the pad previously occupied by GEMCO. The existing parking lot would be improved to comply with the Zoning Code’s requirements relative to parking spaces and shade trees; The Project’s landscaping plan would be modified to reflect the conditions of the Alternate Site and the immediately adjacent developments. The design of the east building elevation at the Alternative Site would not incorporate the enhanced design features proposed by the Project\(^3\) but because the Alternate Site is not adjacent to a Scenic or Special Boulevard, Parkway, or any roadway along its eastern boundary. Rather, the east building elevation under this alternative would be similar to the design proposed by the Project for the west and north building elevations.

### 7.6.2.1 Evaluation of Alternative 2 (Closure and Alternate Site Location)

#### Aesthetics

The Closure and Alternate Site Alternative would vacate the existing Walmart structure, leaving a 125,827-SF structure with a Tire & Lube Express facility and exterior 5,300-SF Garden Center unoccupied. The landscaping would remain in its existing condition and would be maintained as required by the Riverside Municipal Code. Due to the location and size of the existing Walmart store and because there is no potential tenant identified to occupy the structure once it is vacant, it may be

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\(^2\) GEMCO’s address at this location was 10471 Magnolia Avenue.

\(^3\) As discussed in Section 3 Project Description, the proposed Project incorporates an enhanced design on the east building elevation because Van Buren Boulevard is designated as a Scenic and Special Boulevard and Parkway in GP 2025.
difficult to find a new occupant or redevelop the space. As such, under this alternative, it is assumed that the existing structure would remain vacant for a considerable amount of time. Although the landscaping would be maintained as required by the Riverside Municipal Code, none of the beneficial aesthetic benefits associated with the modified building elevations and the landscape beautification of Van Buren Boulevard median from the S. Project Driveway to the N. Project Driveway will be realized. For these reasons, the Closure and Alternate Site Alternative would not result in a beneficial impact to the visual character of the Project site and surrounding locale.

The Alternate Site would be substantially improved from its existing condition as a vacant paved lot along a primary arterial, because the new Walmart store would incorporate contemporary visual appeal and would be subject to the City’s design review process. A new Walmart at the Alternate Site would not substantially degrade the existing visual character or quality of the Alternate Site or its surroundings, and would be expected to improve the visual character of the immediate area as a result of modification of the current vacant lot to include landscaping and architectural components of the proposed store. However, because this alternative would result in a vacant, unoccupied store at the Project site and would not implement the site improvements and landscaping in the Van Buren Boulevard median; impacts to aesthetics under the Closure and Alternate Site Alternative would be worse than under the proposed Project, which was found to have a less than significant impact regarding aesthetics.

Air Quality
The Closure and Alternate Site Alternative would vacate the existing Walmart structure, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. As the existing structure would be vacated, air quality impacts resulting from construction of the proposed expansion area would not be realized, and the operational air quality impacts, including heavy truck deliveries and motorized vehicle trips generated by operations at the existing Walmart would cease entirely at the existing location, with the possible exception of a private security patrol vehicle, which may contribute negligible emissions. However, any beneficial impacts to air quality as a result of the existing store closure would be offset by the construction and operational air quality impacts of the new Walmart store at the Alternate Site, as the construction of the new Walmart will require a greater degree of construction and equipment for site preparation and construction of a new store from the ground up. Because the new Walmart would be generally constructed to the same specifications regarding size and sustainability features as the proposed Project, operational air quality impacts would remain generally similar. The air quality impacts during the construction phase of the Closure and Alternate Site Alternative would likely require mitigation measures to prevent an exceedance of applicable South Coast Air Quality Management District thresholds and to limit the release of related particulate matter and ozone-precursor emissions. Although potentially significant air quality impacts resulting from the Closure and Alternate Site Alternative may be less than significant with mitigation, this alternative would likely result in worse construction-related air quality impacts than under the proposed Project, and would result in similar operational air quality impacts as would occur under the proposed Project, which was found to have a less than significant impact regarding air quality.
Biological Resources
The Closure and Alternate Site Alternative would vacate the existing Walmart store, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. As the existing structures would be vacated, potentially significant impacts to nesting bird species would not occur from Project construction. However, there are parking lot trees present at the Alternate Site, which if disturbed during the nesting season, would require a mitigation measure similar to mitigation measure MM BIO 1 (see Section 5.3.7). Due to the previous development of the Alternate Site, there are no biological resources present other than the parking lot trees. Therefore, the Closure and Alternate Site Alternative would result in a less than significant impact with mitigation incorporated, and would have similar impacts to biological resources as would occur under the proposed Project, which was also found to have a less than significant impact with mitigation.

Greenhouse Gas Emissions
The Closure and Alternate Site Alternative would vacate the existing Walmart store, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. Under this alternative, GHG emissions from the existing Project site (including energy consumption and motorized vehicle trips generated to and from the Project site) would cease with the possible exception of a private security patrol vehicle necessary at the vacated Walmart, which would produce negligible quantities of GHG. However, the substantial decrease in GHG emissions resulting from vacation of the existing Walmart would be offset by the GHG emissions generated by the new Walmart at the Alternate Site, because the new Walmart would be built to the same specifications as the proposed Project, and would include the same energy efficient design considerations (i.e. energy efficient lighting, central energy management system, and integration of sustainable materials and finishes as well as parking for bicycles and designated lower emission vehicles as discussed in Section 3.2.1.6). However, the construction required for the new Walmart would be more intensive in the length of the construction period and the equipment needed for site preparation and ground-up construction of a new building, which would produce a greater amount of construction-related GHG emissions than would occur under the Project. Although the Closure and Alternate Site Alternative would likely result in a less than significant impact to GHG with mitigation and/or incorporation of energy efficient design considerations, these impacts would be worse than under the proposed Project, which was found to have a less than significant impact regarding GHG emissions.

Hazards and Hazardous Materials
The Closure and Alternate Site Alternative would vacate the existing Walmart store, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. Since the existing structure would remain in place and no demolition would occur, the potential for handling and/or disposal of existing hazardous materials identified in the Project’s Phase I (included as Appendix C.1 to this DEIR) including fluorescent lights and/or high-intensity lights, heating, ventilating, and air conditioning and refrigeration units, lead-acid batteries, waste oil, antifreeze, asbestos-containing building materials, and universal wastes from construction of the expansion area will be avoided (see Section 5.5.6). The handling of the hazardous materials from store closure would likely be less than significant as such activity will be conducted in accordance with all applicable federal, State, and local
regulations. Moreover, under this alternative, the existing USTs associated with the Tire & Lube Express facility will remain in place, which may result in a potentially significant impact if any residual contents of these tanks begin to leak or otherwise contaminate the underlying soil. Further, the existing structure is consistent with the existing Riverside County Airport Land Use Compatibility Plan for Zone D and risk-reduction measures of the Project’s design considerations would not be necessary or realized. In sum, impacts with regards to hazards and hazardous materials at the Project site would be worse under the Closure and Alternate Site Alternative since there would be no remediation or removal of the known hazardous materials, which would instead remain in place within the vacant structure.

While operational hazards under this alternative would be similar to the Project, construction of a new Walmart at the identified Alternate Site will generally avoid the handling of hazardous building materials noted in the Project’s Phase I. However, the new construction will involve the handling and disposal of other hazardous materials, which will be conducted in accordance with all applicable federal, State, and local regulations. This alternative will require a longer construction period, more site preparation, and greater amounts of construction material and equipment. There are no recorded hazardous waste investigations, sites, leaks, or spills at the Alternate Site (EnviroStor).

The Alternate Site is outside the airport influence area of Riverside Municipal Airport and would not be subject to review for consistency with the Riverside County Airport Land Use Compatibility Plan. In this regard, potential impacts to Riverside Municipal Airport’s compatibility zones would be reduced as compared to the Project, as no conditions or risk-reduction design measures would be required for consistency with the Riverside County Airport Land Use Compatibility Plan.

Although the Closure and Alternate Site Alternative will likely result in a less than significant impact regarding hazards and hazardous materials, this alternative will result in worse impacts regarding hazardous materials than under the proposed Project, which was found to have a less than significant impact regarding hazards and hazardous materials, because the identified hazardous materials and the USTs on the Project site will remain in place.

**Hydrology and Water Quality**

The Closure and Alternate Site Alternative would vacate the existing Walmart store, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. The existing hydrologic conditions, existing storm drain facilities, and storm water flow patterns and capacity would remain. Construction of a new Walmart at the Alternate Site would require preparation and approval of a Project Specific Water Quality Management Plan (WQMP) in order to identify BMPs pursuant to the Clean Water Act, as well as the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), and compliance with the provisions of the National Pollutant Discharge Elimination Systems (NPDES) permit program (see Section 5.6.4). Due to the location and development history of the Alternate Site, compliance with the NPDES program would likely eliminate or reduce any potentially significant hydrology and water quality impacts to a less than significant level. The potential environmental benefits of the Project’s proposal to install water conservation measures and incorporate BMPs for site design, source control, and treatment control (which include a catch basin and a series of
porous landscape detention sedimentation/filtration facilities to treat for pollutants and slow down storm flows prior to discharging into existing public storm drains at the existing Project site, would not be realized. Therefore, the Closure and Alternate Site Alternative would likely result in a less than significant impact to hydrology and water quality, and impacts would be similar to those of the proposed Project, which was also found to have a less than significant impact regarding hydrology and water quality.

**Noise**

The Closure and Alternate Site Alternative would vacate the existing Walmart store, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. Noise from operations associated with the Walmart store at the Project site would cease. The ambient noise level at the Project site, which is predominantly generated by the vehicles on Van Buren Boulevard, would likely remain generally similar to the existing conditions; however, potentially perceptible noise impact from a worst case loading dock activity scenario would not be possible. Short-term noise impacts from construction-related activities, and marginal noise increases from operation of the proposed Project at the Project site would not be realized, and the mitigation measures prescribed for the Project would be unnecessary. Short-term noise impacts from construction and site preparation for a new Walmart at the Alternate Site would be greater than under the proposed Project, because the construction process will be longer and more intensive, and may require mitigation during construction on account of the residential uses adjacent to the Alternate Site to the west and north.

Operational noise impacts of a new Walmart at the Alternate Site would likely contribute toward a marginal increase to ambient noise resulting from loading dock operations and the new vehicular trips. The Alternate Site is located in a primarily commercial retail area of the City; however, residential uses are located to the west and north of the Alternate Site, similar to the surrounding land use characteristics at the Project site. While the Alternative Site is larger and may allow a new store to be a greater distance away from the existing adjacent residences than the distance between the Walmart and residential uses that exists at the Project site, it is likely that there would be operational noise impacts on these sensitive receptors. Such potential noise impacts may require mitigation measures such as siting the loading dock away from the sensitive receptors, incorporating the use of sound block walls, greater building setbacks, abundantly landscaped buffers, and even a similar operation mitigation measure to limit simultaneous truck deliveries after midnight as under the Project. While the incorporation of these types of mitigation measures are anticipated to reduce potential noise impacts to less than significant, the resulting building footprint may be too small for a viable store operation. Therefore, although the Closure and Alternate Site Alternative will likely result in less than significant noise impacts with mitigation incorporated, this alternative would have worse construction-related noise impacts than would occur under the proposed Project, which was found to have a less than significant impact with mitigation regarding noise.
Transportation/Traffic
The Closure and Alternate Site Alternative would vacate the existing Walmart store, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. The existing traffic volumes and operation conditions would substantially decrease, if not cease entirely. An on-site security patrol vehicle may be necessary, which would result in a single trip generation to the vacated Walmart site. Public transit service in the area would be expected to remain similar to existing conditions. Moreover, the parking lot improvements to address circulation and congestion problems both on- and off-site would not be realized, nor would these improvements be necessary. The elimination of the existing Project site’s trip generation may benefit surrounding roadway capacity in the short-term, but this reduction would be offset and eventually surpassed as ambient growth and additional development continues in the Project area.

Implementation of the Closure and Alternate Site Alternative would result in a new 153,399 SF Walmart with a 28,036 SF grocery sales area. Using the Project-specific trip generation rates identified in Table 5.8-C – Existing Walmart Store Trip Generation, this alternative is projected to generate approximately 11,414 average daily trips (ADTs) with 301 and 1,031 additional ADTs during the AM and PM peak hours, respectively as shown below in Table 7-B – Trip Generation for Alternate 2 (Closure and Alternate Site Alternative).

| Table 7-B – Trip Generation for Alternate 2 (Closure and Alternate Site Alternative) |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
|                                 | Quantity        | Unit            | AM              | PM              | Daily           |
|                                 |                 |                 | In  | Out | Total | In | Out | Total |         |
| Calculated Walmart Specific Trip Rates a | 1.19            | 0.77            | 1.96           | 3.43           | 3.29 | 6.72 | 74.41 |
| Size of Store under Alternative 2 | 153.399         | TSF b           | 183 | 118 | 301   | 526 | 505 | 1,031 | 11,414 |

Notes:

a Rates per Table 5.8-C – Existing Walmart Store Trip Generation

b TSF = thousand square feet

Customers and visitors to a new Walmart at the Alternative Site would use Magnolia Avenue and Tyler Street. Tyler Street between Magnolia Avenue and Indiana Avenue is one of the highest traffic volume locations in the City (GP 2025 FPEIR, Volume 2, p. 5.15-9). Under General Plan 2025 (GP 2025) buildout conditions, the intersection of Magnolia Avenue and Tyler Street is projected to operate at level of service (LOS) F4 without mitigation (GP 2025 FPEIR, Volume 2, p. 5.15-28) and Tyler Street between State Route 91 and Magnolia Avenue is projected to operate at LOS F (GP 2025 FPEIR, Volume 2, Figure 5.15-4).

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4 A discussion of the different levels of service or LOS is included in Section 5.8.1.3 of this DEIR.
The Alternate Site is well-served by existing public transit and will be in proximity to the Galleria at Tyler bus transfer station. Given the number of new ADTs that will be generated by this alternative, and the fact that these trips will take place on roadways expected to operate at LOS F under GP 2025 Buildout conditions without traffic generated from this alternative, traffic impacts from the Closure and Alternate Site Alternative would be greater than those that would occur under the proposed Project, which was found to have a less than significant impact regarding transportation/traffic with mitigation.

Urban Decay
The Closure and Alternate Site Alternative would vacate the existing Walmart structure, leaving a 125,827-SF structure, the Tire & Lube Express facility, and the exterior 5,300-SF Garden Center unoccupied. Due to the location and size of the existing Walmart store and because there is no potential tenant identified to occupy the structure once vacant, it may be difficult to find a new occupant or redevelop the space. If this does not occur in a reasonable time, the buildings and Project site could deteriorate, and lead to the physical decline of adjacent properties. Although Chapter 16.11 of the Riverside Municipal Code gives the City the authority to abate any public nuisance that presents an immediate threat to the public health or safety, even a well maintained vacant property could still result in the perception of physical decline in an area. Thus, with regard to the potential for the Closure and Alternate Site Alternative to result in an economic impact so severe that other stores might close as a result; the vacation of the existing store and construction of a new Walmart at the Alternate Site is reasonably expected to have a similar impact on businesses in the Trade Area, as determined by the existing Walmart’s location, as would occur under the proposed Project. However, a Walmart at the Alternate Site would result in a different trade area boundary that would consider its location, nearby land use patterns, and proximity to the Galleria at Tyler regional shopping mall and 91 Freeway. It is, however, reasonable to assume an adequate demand for groceries exists at the Alternative Site and within that trade area, and that many of the regular customers of the existing Walmart will travel to the Alternate Site, which is located approximately two miles southwest from the current site, to patronize the new store.

Therefore, although the Closure and Alternate Site Alternative would likely result in a less than significant impact regarding urban decay, because this alternative would result in a large unoccupied structure from the vacation of the existing Walmart store, urban decay impacts under the Closure and Alternate Site Alternative would be worse than under the proposed Project, which was found to have a less than significant impact regarding urban decay.

Energy Conservation
The Closure and Alternate Site Alternative would vacate the existing Walmart store, Tire & Lube Express facility, and exterior Garden Center, leaving the existing structures intact and unoccupied. The vacation of the existing Walmart would result in decreased electricity demand, natural gas demand, and fuel consumption. However, for security reasons, some electricity may be consumed for lighting at the Project site after the store closure, as well as fuel consumption if an on-site security patrol vehicle is necessary. Such demand would likely be negligible. The new 153,399-SF store at the Alternate Site (which is currently vacant), would result in substantial increases in electricity demand, natural gas
demand, and fuel consumption. However, as the new Walmart would likely incorporate the same energy efficient design considerations as are proposed for the Project (which include energy efficient lighting, central energy management system, and integration of sustainable materials and finishes as well as parking for bicycles and designated lower emission vehicles (see Section 3.2.1.6), this alternative is reasonably expected to use the same quantity of energy as the proposed Project for store operations based on comparable size. Short-term energy consumption from construction and site preparation for a new Walmart at the Alternate Site would be greater than the proposed Project, because the ground-up construction process for an entirely new building would be longer and more intensive.

Therefore, although the Closure and Alternate Site Alternative would likely result in a less than significant impact regarding energy conservation, because this alternative would consume more energy during construction, impacts in this area would be greater than would occur under the proposed Project, which was found to have a less than significant impact regarding energy conservation.

**Relationship to Project Objectives**

The Closure and Alternate Site Location Alternative includes the closure and vacation of the existing Walmart store at 5200 Van Buren Boulevard, and the new construction of an approximately 153,399 SF Walmart store with a 28,036-SF grocery sales area generally built to the Project’s specifications at the vacant site of the former GEMCO store near the northwest corner of the intersection of Tyler Street and Magnolia Avenue. Under this alternative, the existing Walmart store would not be expanded; there would be no interior or exterior remodel; the parking lot would not be improved; and the beautification of the Van Buren Boulevard median between the N. Project Driveway and the S. Project Driveway would not be realized. **Table 7-C – Summary of Alternative 2 (Closure and Alternate Site Location Alternative)**

**Success at meeting Project Objectives** lists the project objectives and whether or not Alternative 2 meets each objective.

### Table 7-C – Summary of Alternative 2 (Closure and Alternate Site Location Alternative) Success at Meeting Project Objectives

<table>
<thead>
<tr>
<th>Project Objective</th>
<th>Alternative Meets Objective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively contribute to the local economy.</td>
<td>Yes; Alternative 2 would contribute positively to the local economy by creating jobs and providing additional sales tax revenues from a new, larger Walmart.</td>
</tr>
<tr>
<td>Create new job opportunities for local residents.</td>
<td>Yes; Alternative 2 would result in approximately 80 new jobs.</td>
</tr>
<tr>
<td>Maximize affordable grocery shopping options for residents of the City and the immediate surrounding area.</td>
<td>No; although Alternative 2 would introduce a new affordable shopping option in another location in the City, because the existing Walmart would be closed Alternative 2 would not meet the objective of maximizing affordable grocery shopping options for the immediate surrounding area.</td>
</tr>
</tbody>
</table>
### Project Objective

<table>
<thead>
<tr>
<th>Project Objective</th>
<th>Alternative Meets Objective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a retail establishment that serves local residents and visitors with essential goods and services, in a safe and secure, 24-hour shopping environment.</td>
<td>Yes; Alternative 2 would provide 24-hour shopping.</td>
</tr>
<tr>
<td>Provide regional commercial retail activities that would complement existing local retail activities and enhance commercial retail opportunities available in the City of Riverside.</td>
<td>Yes; the Alternate Site is located in an existing commercial area and as such, Alternative 2 constitutes a use that would be compatible.</td>
</tr>
<tr>
<td>Promote economic growth and development that is consistent with the policies of the City of Riverside General Plan 2025.</td>
<td>Yes; Alternate 2 is consistent with the GP 2025.</td>
</tr>
<tr>
<td>Develop a project consistent with the City of Riverside Municipal Code.</td>
<td>Yes; Alternative 2 would be developed consistent with the Riverside Municipal Code.</td>
</tr>
<tr>
<td>Generate tax revenues to accrue to the various agencies within the Project area.</td>
<td>Yes; because the store proposed in Alternate 2 would generate sales taxes approximate to that of the Project.</td>
</tr>
<tr>
<td>Provide payments or physical improvements to mitigate for Project-related impacts on public services and infrastructure.</td>
<td>Yes; Alternative 2 would pay development impact fees and be subject to conditions of project approval as determined by the City.</td>
</tr>
<tr>
<td>Expand and develop retail uses near regional roadway and freeway facilities, and near other commercial uses to minimize travel lengths and utilize existing infrastructure to the extent possible.</td>
<td>No; Alternative 2 would not expand the existing Walmart store, but would eliminate a retail area, thereby increasing the likelihood that local residents would need to travel further for goods.</td>
</tr>
<tr>
<td>Ensure that commercial development has sufficient on-site parking to minimize impacts to the surrounding area and ensure that adequate parking is provided for customers and employees.</td>
<td>Yes; Alternative 2 would be required to provide adequate parking.</td>
</tr>
<tr>
<td>Implement parking lot layout modifications to reduce nuisance and safety impacts related to vehicular traffic.</td>
<td>Yes; Alternative 2 would likely modify the parking lot at the alternative site.</td>
</tr>
<tr>
<td>Implement a high-quality architectural design that complements the existing design characteristics of the surrounding commercial uses and improves the aesthetics of the existing store.</td>
<td>No; although the new store constructed under Alternative 2 would implement a high quality architectural design, this alternative will not implement the proposed Project's façade improvements at the existing Walmart on Van Buren Boulevard.</td>
</tr>
</tbody>
</table>

#### 7.6.3 Alternative 3 – Smaller Expansion and On-Site Relocation of the Tire & Lube Express

The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would consist of expanding the Walmart store sales area into the existing 5,170-SF Tire & Lube Express area, reducing the amount of space allocable to general merchandise sales to add the same grocery area square footage (also known as food sales and food sales support areas) as the proposed Project, maintaining the Garden Center in its current location, and constructing a new 5,170 SF Tire & Lube Express on the Project site.
Table 7-D – Existing Walmart and Alternative 3 Expansion Detail presents a comparison of the existing Walmart store with the smaller expansion under the Store Expansion and On-Site Relocation of the Tire & Lube Express Alternative.

<table>
<thead>
<tr>
<th>Store Areas</th>
<th>Existing Store (SF)</th>
<th>Proposed Project (SF)</th>
<th>Alternative 3 (SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Sales</td>
<td>359</td>
<td>28,036</td>
<td>28,036</td>
</tr>
<tr>
<td>Food Sales Support</td>
<td>371</td>
<td>8,330</td>
<td>8,330</td>
</tr>
<tr>
<td>Stockroom/Receiving</td>
<td>9,265</td>
<td>15,168</td>
<td>15,168</td>
</tr>
<tr>
<td>Ancillary</td>
<td>9,675</td>
<td>13,043</td>
<td>13,043</td>
</tr>
<tr>
<td><strong>Expanded Grocery Area</strong></td>
<td></td>
<td><strong>44,907</strong></td>
<td><strong>44,907</strong></td>
</tr>
<tr>
<td>General Merchandise Sales</td>
<td>99,301</td>
<td>84,564</td>
<td>59,085</td>
</tr>
<tr>
<td>Restaurant Tenant</td>
<td>1,686</td>
<td>2,165</td>
<td>2,165</td>
</tr>
<tr>
<td>Tire &amp; Lube Express</td>
<td>5,170</td>
<td>0</td>
<td>5,170</td>
</tr>
<tr>
<td>Other&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0</td>
<td>2,093</td>
<td>N/A, the exterior Garden Center will remain at its current location</td>
</tr>
<tr>
<td><strong>Total Interior Building</strong></td>
<td><strong>125,827</strong></td>
<td><strong>153,399</strong></td>
<td><strong>130,997</strong></td>
</tr>
<tr>
<td>Exterior Garden Center</td>
<td>5,300</td>
<td>N/A, Garden Center is included in above SF</td>
<td>5,300</td>
</tr>
<tr>
<td><strong>Total Area</strong></td>
<td><strong>131,127</strong></td>
<td><strong>153,399</strong></td>
<td><strong>136,297</strong></td>
</tr>
</tbody>
</table>

Notes:


<sup>b</sup> Approximately 2,093 SF of the existing exterior Garden Center will be allocated among the store interior space; the specific uses of which are unknown.

Based on the City’s required parking ratio of 4 parking spaces per 1,000 SF of building, this alternative would require 546 parking spaces. Since this alternative is not increasing the footprint of the existing Walmart structure, no new loading dock or loading bays would be constructed. The two most likely locations for relocation of the Tire & Lube Express are behind the existing building west of the existing loading docks, or in the existing parking lot area fronting Van Buren Boulevard between the Audrey Avenue ingress/egress and the S. Project Driveway. Relocation of the Tire & Lube Express to the existing parking lot would eliminate parking spaces; however, the Project site is large enough to accommodate the required parking under this alternative.

The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not require new curb cuts along Van Buren Boulevard, i.e., ingress/egress, as the stand-alone Tire & Lube Express would be accessed internally from the parking lot. In addition, similar to the Project, this alternative would result in the removal of existing USTs, as discussed in Section 5.5 of this DEIR, and the installation of new USTs at the stand-alone Tire & Lube Express. The landscaping plan and parking lot improvements...
would be modified to accommodate the stand-alone Tire & Lube Express; however, this alternative would still comply with the shade tree parking lot requirements.

7.6.3.1 Evaluation of Alternative 3 (Smaller Expansion and On-Site Relocation of the Tire & Lube Express)

Aesthetics
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new stand-alone Tire & Lube Express on the Project site. The relocated Tire & Lube Express would adhere to all applicable Design Review Guidelines and Sign Guidelines, and would require design review approval from the City’s Planning Commission or Zoning Administrator. If the stand-alone Tire & Lube Express was located in the existing parking lot and would be visible from Van Buren Boulevard, it would incorporate design considerations to contribute to Van Buren Boulevard’s Scenic and Special Boulevard and Parkway designations. As such, a new stand-alone Tire & Lube Express would contribute to an increased visual quality and character of the Project site. The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would also include the same façade redesign as the proposed Project, including the enhancement of the east building elevation adjacent to Van Buren Boulevard. As such, this alternative would achieve one of the basic goals of the proposed Project, which is to implement a high-quality architectural design that complements the existing design characteristics of the surrounding commercial uses and improves the aesthetics of the existing store. Therefore, the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in less than significant aesthetic impacts similar to the proposed Project, which was also found to have a less than significant impact regarding aesthetics.

Air Quality
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new stand-alone Tire & Lube Express on the Project site. As this alternative would result in less construction, a smaller store, and fewer vehicular trips than with the proposed Project, construction- and operation-related air quality impacts would be less than the proposed Project, and are not anticipated to exceed any thresholds. Therefore, the Smaller Expansion and on-Site Relocation of the Tire & Lube Express Alternative will likely result in less air quality impacts than the proposed Project, which was found to have less than significant impacts to air quality.

Biological Resources
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new stand-alone Tire & Lube Express on the Project site. While this alternative would involve construction of a new structure, depending on the location of the new Tire & Lube Express, some existing on-site parking lot trees may be removed, and impacts to biological resources would be the same as the proposed Project, and would require mitigation.

Therefore, the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in a less than significant impact to biological resources with mitigation incorporated, and
would result in similar impacts as would occur under the proposed Project, which was also found to have a less than significant impact to biological resources with mitigation.

**Greenhouse Gas Emissions**
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new stand-alone Tire & Lube Express on the Project site. As this alternative would result in less construction and a smaller store than the proposed Project, GHG emissions from construction would be less than the proposed Project. The alternative would include the same proposed energy efficient design considerations, which include energy efficient lighting, central energy management system, and integration of sustainable materials and finishes (see Section 3.2.1.6). Parking for bicycles and designated lower emission vehicles would not be required under this alternative as the existing footprint would remain. However, the overall building energy demand would be less under this alternative when compared to the proposed Project, due to the smaller building size.

Therefore, the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in a less than significant impact regarding greenhouse gas emissions and fewer GHG emissions than the proposed Project, which was also found to have a less than significant impact regarding GHG emissions.

**Hazards and Hazardous Materials**
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new stand-alone Tire & Lube Express on the Project site. The construction of the stand-alone Tire & Lube Express would involve handling and disposal of other hazardous materials, which would be conducted in accordance with all applicable federal, State, and local regulations. This alternative would result in the placement of new USTs; however, because the design, construction, and operation of the USTs would be in accordance with applicable regulations, impacts would be less than significant. Operation of the stand-alone Tire & Lube Express would entail the use and storage of a number of hazardous materials that would have been removed from the Project site under the proposed Project. The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would require review for consistency with the Riverside County Airport Land Use Compatibility Plan, and may require the incorporation of risk reduction measures.

Therefore, although the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in less than significant impacts regarding hazards and hazardous materials, this alternative would have greater impacts than the proposed Project in this area, which was found to have a less than significant impact regarding hazards and hazardous materials, because the Tire & Lube Express operations would continue on the Project site.

**Hydrology and Water Quality**
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new 5,170-SF stand-alone Tire & Lube Express
on the Project site. Because this alternative entails the reconstruction of over 5,000 SF of impervious surface, a project specific WQMP would be required. However, since the reconstructed area is less than 50 percent of the total Project site, the WQMP would only be required to identify BMPs to treat runoff from the stand-alone Tire & Lube Express, not the entire Project site. As with the proposed Project, this alternative would comply with all regulatory requirements relative to drainage and water quality.

Therefore, the Smaller Expansion and on-Site Relocation of the Tire & Lube Express Alternative would likely result in less than significant impacts to hydrology and water quality; however, because this alternative will not treat all of the runoff from the Project site, it will result in greater impacts than would occur under the proposed Project, which was found to have a less than significant impact regarding hydrology and water quality.

Noise
Although the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store the construction and operation of the stand-alone Tire & Lube Express would contribute to an increase in short- and long-term noise impacts. This increased intensiveness of construction, including excavation required for the installation of new USTs and mechanic’s pits, may require mitigation measures if the Tire & Lube Express is located north of the existing store adjacent to the Plymouth Manor Apartments, in order to ensure that noise impacts to residents are less than significant, although the operation mitigation measure under the Project would not be necessary. If the Tire & Lube Express is relocated to the parking lot area adjacent to Van Buren Boulevard between the Audrey Avenue ingress/egress and S. Project Driveway, construction noise impacts would likely be absorbed by the existing noise generated by the vehicular activity along Van Buren Boulevard. However, if the use of heavier construction equipment is required, mitigation may be necessary to reduce construction noise impacts to a less than significant level, similar to or greater than the level of construction mitigation under the Project. Operational impacts from the Tire & Lube Express would likely be marginal and imperceptible, as the majority of the ambient noise is generated by vehicles on the surrounding roadways. Therefore, as the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in a less than significant impact regarding operational noise that may or may not require mitigation, and construction would likely require mitigation similar or greater than the Project’s, this alternative would result in similar noise impacts than the proposed Project, which was found to have a less than significant impact with mitigation regarding noise.

Transportation/Traffic
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new 5,170-SF stand-alone Tire & Lube Express on the Project site. Using the Project-specific trip generation rates identified in Table 5.8 – Existing Walmart Store Trip Generation, this alternative is projected to generate an additional 385 ADTs with 10 and 35 additional ADTs during the AM and PM peak, respectively as shown in Table 7-E –Trip Generation for Alternate 3 (Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative) below.
## Table 7-E – Trip Generation for Alternative 3  
(Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative)

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Unit</th>
<th>AM</th>
<th></th>
<th></th>
<th>PM</th>
<th></th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculated Walmart Specific Trip Rates(^a)</td>
<td></td>
<td></td>
<td>1.19</td>
<td>0.77</td>
<td>1.96</td>
<td>3.43</td>
<td>3.29</td>
<td>6.72</td>
</tr>
<tr>
<td>Proposed Tire &amp; Lube Express</td>
<td>5.170</td>
<td>TSF(^b)</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>18</td>
<td>17</td>
<td>35</td>
</tr>
</tbody>
</table>

Notes:  
\(^a\) Rates per Table 5.8-C – Existing Walmart Store Trip Generation  
\(^b\) TSF = thousand square feet

This alternative would generate substantially fewer ADTs than the proposed Project, due to the substantially reduced size of the general merchandise sales area under this alternative. As a result, it is expected that some mitigation would still be required under this alternative such as the construction management plan.

If the Tire & Lube Express is constructed in the existing parking lot area fronting Van Buren Boulevard between the Audrey Avenue ingress/egress and the S. Project Driveway, approximately 30 existing parking spaces of the existing Walmart’s 721 standard parking spaces would be eliminated, leaving approximately 691 remaining standard parking spaces. Based on the City’s required parking ratio of four spaces per 1,000 SF, the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would require approximately 545 parking spaces (136.297 TSF time 4 spaces/TSF). The City’s parking ratio for the Tire & Lube Express would be 6 spaces plus an additional 2 spaces per service bay, which for the 3 service bays provided by the relocated Tire & Lube Express, equals 12 spaces. Thus, this alternative would be required to provide 557 parking spaces, which the existing parking lot would still be able to accommodate. Although there would be an adequate number of parking spaces under this alternative, the parking lot modifications and reconfiguration to address circulation and congestion experienced in existing conditions on- and off-site would not be realized. The stand-alone Tire & Lube Express would not require new curb cuts along Van Buren Boulevard, and would be accessible only from the Walmart parking lot in a manner similar to the off-site fast-food McDonald’s restaurant.

Therefore, the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in a less than significant impact regarding transportation/traffic with mitigation incorporated, which is similar to the proposed Project, which was found to have a less than significant impact regarding transportation/traffic with mitigation.
Urban Decay
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new 5,170-SF stand-alone Tire & Lube Express on the Project site. This alternative would not contribute to an increased potential for physical degradation and urban decay, as it is unlikely the use would have the ability to result in a diversion of sales from existing retailers within the Project’s market area severe enough to result in business closures that are significant enough in scale to result in long-term vacancies that affect the viability of existing shopping centers or districts. In fact, because of the substantially reduced size of the general merchandise area under this alternative, and the potential that shoppers may need to patronize other retailers, the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in a less than significant impact, and result in fewer urban decay impacts than would occur under the proposed Project, which was also found to have a less than significant impact regarding urban decay.

Energy Conservation
The Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would not expand the footprint of the existing store, but would construct a new 5,170-SF stand-alone Tire & Lube Express on the Project site. As this alternative would result in less construction and a smaller store than the proposed Project, energy consumption during construction would be less than the proposed Project. This alternative would include the same proposed energy efficient design considerations as the proposed Project, which include energy efficient lighting, central energy management system, and integration of sustainable materials and finishes (see Section 3.2.1.6). Parking for bicycles and designated lower emission vehicles would not be required under this alternative as the existing footprint would remain. The overall building energy demand under this alternative would be less than the proposed Project, due to the smaller building size.

Therefore, the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative would likely result in less than significant energy impacts as similar to the proposed Project, which was also found to have a less than significant impact regarding energy conservation.

Relationship to Project Objectives
Under the Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative, the Walmart store would be expanded into the 5,170-SF Tire & Lube Express area, the amount of space allocable to general merchandise sales would be reduced, the Garden Center would remain at its current location, and a new stand-alone 5,170 SF Tire & Lube Express would be constructed on the Project site. Under this alternative, the existing Walmart store would not be expanded, and the parking lot would not be improved. Table 7-F –Summary of Alternative 3 (Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative) Success at meeting Project Objectives lists the project objectives and whether or not Alternative 3 meets each objective.
### Table 7-F – Summary of Alternative 3 (Store Expansion and On-Site Relocation of the Tire & Lube Express Alternative) Success at Meeting Project Objectives

<table>
<thead>
<tr>
<th>Project Objective</th>
<th>Alternative Meets Objective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively contribute to the local economy.</td>
<td>Yes; Alternative 3 would contribute positively to the local economy by providing jobs and sales tax revenues.</td>
</tr>
<tr>
<td>Create new job opportunities for local residents.</td>
<td>Yes; Alternative 3 would create job opportunities during construction and continue providing approximately the same amount of job opportunities as the existing Walmart store during operation.</td>
</tr>
<tr>
<td>Maximize affordable grocery shopping options for residents of the City and the immediate surrounding area.</td>
<td>Yes; although the general merchandise area would be substantially smaller than both the existing Walmart and the proposed Project under Alternative 3; this alternative does create an affordable grocery shopping option.</td>
</tr>
<tr>
<td>Provide a retail establishment that serves local residents and visitors with essential goods and services, in a safe and secure, 24-hour shopping environment.</td>
<td>No; although Alternative 3 would expand the existing Walmart store; the general merchandise area would be substantially smaller than both the existing Walmart and the proposed Project. As such, the variety of merchandise stocked may be less than the existing condition, the store may not be open 24 hours a day, and shoppers may need to patronize other retailers.</td>
</tr>
<tr>
<td>Provide regional commercial retail activities that would complement existing local retail activities and enhance commercial retail opportunities available in the City of Riverside.</td>
<td>No; although Alternative 3 would expand the existing Walmart store; the general merchandise area would be substantially smaller than both the existing Walmart and the proposed Project. As such, the variety of merchandise stocked may be less than the existing condition and shoppers may need to patronize other retailers. This does not constitute enhanced commercial retail opportunities.</td>
</tr>
<tr>
<td>Promote economic growth and development that is consistent with the policies of the City of Riverside General Plan 2025.</td>
<td>No; although Alternative 3 would expand the existing Walmart store; the general merchandise area would be substantially smaller than both the existing Walmart and the proposed Project. Because there would be less floor area devoted to taxable items; there would be less sales tax revenues than the existing condition. This does not constitute economic growth and is therefore not consistent with the policies of the GP 2025.</td>
</tr>
<tr>
<td>Develop a project consistent with the City of Riverside Municipal Code.</td>
<td>Yes; Alternative 3 would be developed consistent with the City of Riverside Municipal Code.</td>
</tr>
</tbody>
</table>
## Alternatives to the Proposed Project

### Walmart Expansion DEIR

<table>
<thead>
<tr>
<th>Project Objective</th>
<th>Alternative Meets Objective?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate tax revenues to accrue to the various agencies within the Project area.</td>
<td>No; although Alternative 3 would expand the existing Walmart store; the general merchandise area would be substantially smaller than both the existing Walmart and the proposed Project. Because there would be less floor area devoted to taxable items; there would be less sales tax revenues generated under this alternative.</td>
</tr>
<tr>
<td>Provide payments or physical improvements to mitigate for Project-related impacts on public services and infrastructure.</td>
<td>Yes; Alternative 3 would pay development impact fees and be subject to conditions of project approval as determined by the City.</td>
</tr>
<tr>
<td>Expand and develop retail uses near regional roadway and freeway facilities, and near other commercial uses to minimize travel lengths and utilize existing infrastructure to the extent possible.</td>
<td>No; although Alternative 3 would expand the existing Walmart store, which is located on a regional roadway, due to the substantial reduction in the size of the general merchandise area, shoppers may be required to patronize other area retailers, thus increasing travel lengths.</td>
</tr>
<tr>
<td>Ensure that commercial development has sufficient on-site parking to minimize impacts to the surrounding area and ensure that adequate parking is provided for customers and employees.</td>
<td>Yes; Alternative 3 would meet the parking standards of the Riverside Municipal Code.</td>
</tr>
<tr>
<td>Implement parking lot layout modifications to reduce nuisance and safety impacts related to vehicular traffic.</td>
<td>No; Alternative 3 does not include parking lot modifications; thus the existing congestion at the Project site’s driveways would continue.</td>
</tr>
<tr>
<td>Implement a high-quality architectural design that complements the existing design characteristics of the surrounding commercial uses and improves the aesthetics of the existing store.</td>
<td>No; because Alternative 3 does not entail expansion of the existing building’s footprint or exterior remodel of the store, none of the facade improvements proposed by the Project would be realized. If the stand-alone Tire &amp; Lube Express is located such that it would be visible from Van Buren Boulevard, the new building would incorporate design considerations to contribute to Van Buren Boulevard’s Scenic and Special Boulevard and Parkway designations.</td>
</tr>
</tbody>
</table>
7.7 Comparison of Alternatives

Table 7-G — Comparison of Alternatives Matrix, below, compares the potential environmental impacts of each alternative and ranks each alternative as better, same, or worse in comparison to the significance determinations that the proposed Project would have with respect to each issue area.

Table 7-G — Comparison of Alternatives Matrix

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Proposed Project</th>
<th>Alternative 1 No Project</th>
<th>Alternative 2 Closure and Alternate Site Location</th>
<th>Alternative 3 Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetics</td>
<td>The Project will not substantially degrade the existing visual character or quality of the site or its surroundings. Less than significant impacts without mitigation.</td>
<td>Worse — Beneficial visual qualities and character of the Project would not be realized. Impacts would be less than significant.</td>
<td>Worse — The Alternate Site would be substantially improved from its existing condition with construction of a new Walmart and improved landscaping. However, the existing Project site would be vacated, leaving a structure anticipated to be difficult to occupy or redevelop. Additionally, none of the beneficial visual qualities and character of the Project would be realized. Impacts would be less than significant.</td>
<td>Same — Beneficial visual qualities and character of the Project would be realized. If the stand-alone Tire &amp; Lube Express is located so as to be visible from Van Buren Boulevard, that structure would also be designed to complement the Scenic and Special Boulevard and Parkway designations of Van Buren Boulevard. Impacts would be less than significant.</td>
</tr>
</tbody>
</table>
### Environmental Issue

<table>
<thead>
<tr>
<th>Proposed Project</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Quality</strong></td>
<td>The Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation; will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); will not expose sensitive receptors to substantial pollutant concentrations; or will not create objectionable odors affecting substantial number of people. Less than significant impacts without mitigation.</td>
<td><strong>Better</strong> – Impacts on air quality from construction and operation of the Project would not be realized. Impacts would be less than significant.</td>
<td><strong>Worse</strong> – Air quality impacts at the existing site would substantially decrease, if not cease entirely. However, the new construction of a new Walmart from the ground up would involve more intensive construction and equipment than the proposed Project, and would likely require mitigation measures to keep potential impacts to air quality at a less than significant level. Impacts would be less than significant impacts with mitigation incorporated.</td>
</tr>
</tbody>
</table>
### Environmental Issue

| Proposed Project | Alternative 1  
| No Project | Alternative 2  
| Closure and Alternate Site Location | Alternative 3  
| Smaller Expansion and On-Site Relocation of the Tire & Lube Express |

#### Biological Resources

The Project may have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Implementation of mitigation measure **MM BIO 1** will reduce the potentially significant impacts to less than significant.

**Better** – Potential impacts from construction on nesting species in existing on-site trees would not be realized. Impacts would be less than significant.

**Same** – While the potential interruption of nesting species in existing on-site trees would not be realized, a potential interruption of nesting species in existing trees at the Alternate Site would result in a potentially significant impact requiring the same mitigation as the Project. Impacts would be less than significant with mitigation incorporated.

**Same** – As a new Tire & Lube Express would be constructed on the Project site, the potential to interrupt nesting species in existing on-site trees remains and requires the same mitigation as the Project. Impacts would be less than significant with mitigation incorporated.

#### Greenhouse Gas (GHG) Emissions

The Project will not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or will not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

**Better** – GHG emissions would remain at existing levels in the short-term. Because the Project’s design considerations and energy efficient measures (including the encouragement of and accommodation for alternative transportation) would not be realized, energy would be used less efficiently; however less energy would be

**Worse** – While GHG emissions at the existing Project site would substantially decrease, if not cease entirely, GHG emissions from the more intensive construction required for this alternative would ultimately produce a greater quantity of GHG emissions than the Project. GHG impacts would be less than

**Better** – The store would use less energy than the proposed Project, and there would be fewer vehicular trips due to the smaller expansion. Thus, there would be a smaller quantity of GHG emissions under this alternative as compared to the proposed Project. Impacts would be less than
## Alternatives to the Proposed Project

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Proposed Project</th>
<th>Alternative 1 No Project</th>
<th>Alternative 2 Closure and Alternate Site Location</th>
<th>Alternative 3 Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazards and Hazardous Materials</td>
<td>The Project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; or will not, 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 use airport, would the project result in a safety hazard for people residing or working in the project area. Impacts will be less than significant.</td>
<td><strong>Worse</strong> – The existing condition regarding hazards and hazardous materials would continue on site. The potential environmental benefits of the Project’s proposal to remove the Tire &amp; Lube Express and its associated components (including the removal of the USTs) and any subsequent remediation, would not be realized, which may contribute the greater long-term impacts than the proposed Project. Impacts would be less than significant.</td>
<td><strong>Worse</strong> – The hazardous materials identified in the Phase I would remain on site due to the store closure and would not be remediated or removed. Construction at the alternate site would not require review for consistency with the Riverside County Airport Land Use Compatibility Plan. Impacts would be less than significant.</td>
<td><strong>Worse</strong> – The existing on-site USTs would be removed and remediated; however, operation and construction of the stand-alone Tire &amp; Lube Express would present potential hazards by retaining hazardous materials associated with its operations and the through the installation and operation of replacement USTs. This alternative would require review for consistency with the Riverside County Airport Land Use Compatibility Plan and mitigation may be required. Impacts would be less than significant with mitigation.</td>
</tr>
</tbody>
</table>
## Alternatives to the Proposed Project

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Proposed Project</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrology and Water Quality</td>
<td>The Project will not cause a violation of any water quality standards or waste discharge requirements; or will not otherwise substantially degrade water quality. Impacts will be less than significant.</td>
<td><strong>Worse</strong> – The existing condition regarding hydrology and water quality would continue on site; however, the Project’s proposal to install water conservation measures, and a series of porous landscape detention sedimentation/filtration facilities to treat for pollutants and slow down storm flows prior to discharging into existing public storm drains would not be realized, which may contribute to greater long-term impacts than the proposed Project. Impacts would be less than significant.</td>
<td><strong>Same</strong> – Existing hydrologic and water quality conditions at the Project site would remain unchanged, however the existing structures would be vacant. Construction of a new Walmart at the Alternate Site would require preparation and implementation of a project specific WQMP, a SWPPP, and compliance with NPDES permit requirements. Adherence to these regulatory requirements would reduce potential impacts to less than significant.</td>
<td><strong>Worse</strong> – Construction of a new 5,170-SF Tire &amp; Lube Express would require compliance with NPDES permit requirements. However, because less than 50 percent of the Project site would be altered under this alternative, the project specific WQMP is only required to identify BMPs to treat runoff from the stand-alone Tire &amp; Lube Express and not the entire Project site. Impacts would be less than significant.</td>
</tr>
<tr>
<td>Noise</td>
<td>The Project may expose 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; will not substantially</td>
<td><strong>Better</strong> – While marginal short-term noise impacts from construction would not be realized, the operational noise would generally be the same as the proposed Project. However, the precautionary mitigation measured under the Project</td>
<td><strong>Worse</strong> – Noise from Project construction at the Project site would not be realized, and the store closure and vacation would decrease operation noise generated by the existing Walmart and Project mitigation measures would not be</td>
<td><strong>Similar</strong> – If the Tire &amp; Lube Express is located north of the existing store adjacent to the Plymouth Manor Apartment, noise impacts may be worse than the Project, in part due to the installation of new USTs, and mitigation may be required for</td>
</tr>
</tbody>
</table>
### Alternatives to the Proposed Project

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Proposed Project</th>
<th>Alternative 1 - No Project</th>
<th>Alternative 2 - Closure and Alternate Site Location</th>
<th>Alternative 3 - Smaller Expansion and On-Site Relocation of the Tire &amp; Lube Express</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Incorporating mitigation measures MM NOI 1 through MM NOI 6 will reduce the potentially significant impacts to less than significant.</td>
<td>Both construction and operation due to the proximity of sensitive receptors. If the Tire &amp; Lube Express is located in a portion of the existing parking lot adjacent to Van Buren Boulevard between the Audrey Avenue ingress/egress and S. Project Driveway, construction-related noise impact would be less than the Project’s to adjacent sensitive receptors, but may also require mitigation due to heavier equipment requires for excavation. Both the alternative and Project would require similar mitigation for both construction and operation. Impacts would be less than significant with mitigation incorporated.</td>
</tr>
<tr>
<td>Transport / Traffic</td>
<td>The Project will cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in worse conditions).</td>
<td>Worst – While there would be no increase to traffic over the existing conditions, parking lot improvements to address circulation and congestion on-</td>
<td>Worst – Existing Project site trip traffic would substantially decrease, if not cease. Construction of a new store would generate approximately 385 ADTs. However, impacts would</td>
<td>Better – The smaller expansion and construction of a stand-alone Tire &amp; Lube Express would generate approximately 385 ADTs. However, impacts would</td>
</tr>
</tbody>
</table>

Permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Implementation of mitigation measures MM NOI 1 through MM NOI 6 will reduce the potentially significant impacts to less than significant.
<table>
<thead>
<tr>
<th>Environmental Issue</th>
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<th>Alternative 2</th>
<th>Alternative 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Decay</td>
<td>The Project will not result in a diversion of sales from existing retail facilities severe enough to result in business closings; and business closures significant enough in scale (i.e., in terms of the total square footage)</td>
<td>Same – The existing Walmart has been in operation for approximately 20 years and is well-established in its Trade Area. Continued operation would not contribute toward</td>
<td>Worse – Impacts regarding the diversion of sales under this alternative would be the same as the proposed Project. However, the vacation of the existing Walmart store would result in a large vacant building.</td>
<td>Better – The small store expansion and construction of a stand-alone Tire &amp; Lube Express is not reasonably expected to result in a diversion of sales from existing area retailers. Due to the substantially smaller</td>
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<td></td>
<td></td>
<td>and off-site, or design considerations to encourage alternative transportation would not be realized. Impacts would be less than significant.</td>
<td>11,414 new ADTs which would use Magnolia Avenue and Tyler street to access the Alternate Site. Given the number of new ADTs that would be generated by this alternative and that these trips would take place on roadways expected to operated a LOS F at GP 2025 Buildout without traffic from this alternative, traffic impacts from the Closure and Alternate Site Alternative are worse than the proposed Project. If feasible mitigation exists, impacts would be less than significant with mitigation incorporated; otherwise, traffic impacts would be significant and unavoidable.</td>
<td>still require mitigation measures, although tempered to the trip generation rate and projected impacts on study area roadways and intersections of this alternative. Impacts would be less than significant with mitigation incorporated.</td>
</tr>
</tbody>
</table>

Implementation of mitigation measures MM TRANS 1 through MM TRANS 8 will reduce the potentially significant impacts to less than significant.
<table>
<thead>
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<tbody>
<tr>
<td>Affected and/or the loss of key “anchor” tenants and duration to affect the viability of existing shopping centers or districts.</td>
<td>Less than significant impacts without mitigation.</td>
<td>Urban decay. Impacts would be less than significant.</td>
<td>Although the Riverside Municipal Code gives the City the authority to abate any public nuisance, even a well maintained vacant property could result in the perception of physical decline in an area if the vacancy remains for an extend period of time. Impacts would be less than significant.</td>
<td>General merchandise area under this alternative, shoppers may need to patronize other retailers; thus impacts relative to urban decay are better than the proposed Project. Impacts would be less than significant.</td>
</tr>
<tr>
<td>Energy Conservation</td>
<td>The Project will not result in the wasteful, inefficient, or unnecessary consumption of energy; substantially increase demand on available energy resources that are not renewable; or fail to comply with existing established energy standards. The Project incorporates sustainability features that will result in more efficient energy usage. Impacts will be less than significant.</td>
<td><strong>Better</strong> – The existing condition regarding energy use would continue on site; however, the Project’s proposal to install energy efficient and conservation measures, including promoting alternative, low-emission transportation would not be realized. Although energy would be used less efficiently under this alternative, less energy would be consumed; thus, impacts would be less than the proposed Project Impacts would be less than significant.</td>
<td><strong>Worse</strong> – The vacation of the existing site and construction of a new Walmart at the alternative site would result in a zero-sum impact compared to the Project because the store constructed under this alternative would incorporate the same sustainability features as the proposed Project. There may be a negligible demand for electricity and fuel consumption at the vacated store for security reasons. Construction of a new Walmart is anticipated to use less energy than the proposed Project. Impacts would be less than significant.</td>
<td><strong>Better</strong> – The smaller expansion and construction of the stand-alone Tire &amp; Lube Express would implement the store-wide sustainability features proposed by the Project; thus, this alternative would use energy more efficiently than the existing Walmart store and less energy than the proposed Project. Impacts would be less than significant.</td>
</tr>
<tr>
<td>Environmental Issue</td>
<td>Proposed Project</td>
<td>Alternative 1 No Project</td>
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</tr>
<tr>
<td>Environmentally Superior to Proposed Project?</td>
<td><em>Not applicable</em></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Meets Project Objectives?</td>
<td>All (Meets 13 out of 13)</td>
<td><strong>No</strong>; as shown in Table 7-B, this alternative only meets 1 of the 13 Project Objectives</td>
<td><strong>Most</strong>; as shown in Table 7-C, this alternative meets 10 of the 13 Project Objectives.</td>
<td><strong>Some</strong>; as shown in Table 7-F, this alternative meets 6 of the 13 Project Objectives.</td>
</tr>
</tbody>
</table>

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7.8 Environmentally Superior Alternative

Section 15126.6(e)(2) of the State CEQA Guidelines, requires the identification of the environmentally superior alternative. Of the alternatives evaluated above, the No Project Alternative is the environmentally superior alternative, because the Walmart would stay in its existing condition with no expansion. However, the beneficial impacts of the proposed Project would not be realized in the areas of aesthetics, GHG, Hazards/Hazardous Materials, Hydrology/Water Quality, Transportation/Traffic, or Energy Conservation.

The State CEQA Guidelines also require the identification of another environmentally superior alternative if the No Project Alternative is the environmentally superior alternative. It should be noted that the proposed Project did not result in any significant and unavoidable impacts. Thus, the two remaining alternatives selected for examination in this EIR also have similar impacts to the proposed Project. Nonetheless, an environmentally superior alternative as required by CEQA has been identified.

Of the remaining project alternatives, Alternative 3 - Smaller Expansion and On-Site Relocation of the Tire & Lube Express Alternative is considered environmentally superior. Alternative 3 would expand the sales area into the 5,170-SF Tire & Lube Express area, reduce the amount of space allocable to general merchandise sales, maintain the Garden Center at its current location, and construct a new 5,170-SF Tire & Lube Express on the Project site. Alternative 3 would result in fewer impacts to air quality, GHG emissions, transportation/traffic, urban decay, and energy conservation and similar impacts to biological resources as compared to the proposed Project. However, this alternative would meet only 6 of the 13 basic Project Objectives.

“CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian” (CEQA Guidelines, Section 15021(d)). The proposed Project would not create any significant impacts upon the environment; therefore, none of the alternatives need be selected under CEQA.

Further, the proposed Project does not result in any significant and unavoidable impacts in any environmental category, after implementation of mitigation. Therefore, none of the alternatives effectively lessen or avoid significant impacts that would otherwise result from the Project.
7.9 References

In addition to other documents, the following references were used in the preparation of this section of this DEIR:


- The Natelson Dale Group, Inc., *Retail Market Impact Analysis for Van Buren (Riverside) Walmart Expansion*, January 5, 2010. (Included as Appendix F to this DEIR.) [Cited as TNDG]

- Urban Crossroads, *Walmart Expansion Traffic Impact Analysis*, October 18, 2010. (Included as Appendix E to this DEIR.) [Cited as Urban Crossroads]
Section 8 – References

8.1 Printed References
The following documents were referred to as general information sources during preparation of this DEIR. They are available for public review at the locations identified after each listing. They are referenced in the DEIR by the acronyms shown at the end of each reference.

Section 4 Environmental Effects Found Not to be Significant

- Krazan & Associates, Inc., Geotechnical Engineering Investigation, Proposed Wal-Mart Expansion, 5200 Van Buren Boulevard, Riverside, California, October 11, 2007. (Included as Appendix G.) [Cited as Geotech]

Section 5.1 Aesthetics

Section 5.2 Air Quality


Section 5.3 Biological Resources

• City of Riverside, *City of Riverside General Plan 2025 Final Program Environmental Impact Report*, July 2007. (Available at the City of Riverside, Planning Division and at http://www.riversideca.gov/planning/gp2025program/, accessed October 11, 2010.) [Cited as GP 2025 FPEIR]


• Riverside County Transportation & Land Management Agency, *Western Riverside County Multiple Species Habitat Conservation Plan*. (Available at Riverside County and at http://www.rctlma.org/mshcp/index.html, accessed May 24, 2011.) [Cited as WRC MSHCP]

Section 5.4 Greenhouse Gas Emissions


• California Executive Department, *Executive Order S-3-05 by the Governor of the State of California*, June 2005. (Available at [http://www.dot.ca.gov/hq/energy/ExecOrdersS-3-05.htm](http://www.dot.ca.gov/hq/energy/ExecOrdersS-3-05.htm), accessed May 23, 2011.) [Cited as Executive Order S-3-05]


Section 5.5  Hazards and Hazardous Materials

- Alaska Petroleum Environmental Engineering, Inc., *Phase I Environmental Site Assessment, Walmart Store #2028, 5200 Van Buren Boulevard, Riverside, California*, March 24, 2009. (Included as Appendix C.1.) [Cited as Phase I]


- Shaw Environmental, *UST Removal Work Plan, Walmart Store #2028, Riverside, CA*, September 14, 2011. (Included as Appendix C.2.) [Cited as SHAW 2011]

- Gresham Savage Nolan & Tilden, APC, ZAP1053RI11 (Van Buren Walmart Expansion): Additional Project Information for May 2, 2011 ALUC Hearing, April 26, 2011. (Included as Appendix C.3.) [Cited as GSNT2011]


Section 5.6  Hydrology and Water Quality


City of Riverside, General Plan 2025 Final Program Environmental Impact Report, November 2007. (Available at the City of Riverside, Planning Division or at http://www.riversideca.gov/planning/gp2025program/, accessed December 28, 2010.) [Cited as GP 2025 FPEIR]


Section 5.7 Noise


Section 5.8 Transportation/Traffic

- City of Riverside, *Ordinance No. 7119*, adopted February 15, 2011. (Available at City of Riverside, Planning Division and at [http://aquarius.riversideca.gov/clerkdb/PDF/bby0ltqak3soze3r0s4lydzb/2/O-7119.pdf](http://aquarius.riversideca.gov/clerkdb/PDF/bby0ltqak3soze3r0s4lydzb/2/O-7119.pdf), accessed May 30, 2011.) [Cited as Ord. 7119]

• Urban Crossroads, *Wal-Mart Expansion, Traffic Impact Analysis*, October 18, 2010 (Revised). (Included as Appendix E.) [Cited as Urban Crossroads]


Section 5.9 Urban Decay


• The Natelson Dale Group, Inc., *Retail Market Impact Analysis for Van Buren (Riverside) Walmart Expansion*, January 5, 2010. (Included as Appendix F.) [Cited as TNDG]


Section 5.10  Energy Conservation


• City of Riverside, General Plan 2025 Final Program Environmental Impact Report, certified November 2007. (Available at the City of Riverside, Planning Division and at http://www.riversideca.gov/planning/gp2025program/, accessed June 2, 2011.) [Cited as GP 2025 FPEIR]

• City of Riverside Department of Public Works, C.U.R.E. Where can I drop off my recyclables? (Available at http://www.riversideca.gov/cure/guide.asp, accessed June 22, 2011.) [Cited as CURE List]


Section 6 Other CEQA Topics


• City of Riverside, City of Riverside General Plan 2025 Final Program Environmental Impact Report, July 2007. (Available at the City of Riverside, Planning Division and at http://www.riversideca.gov/planning/gp2025program/, accessed June 2, 2011.) [Cited as GP 2025 FPEIR]

• City of Riverside, Redevelopment, Redevelopment Project Area Map. (Available at http://www.riversideca.gov/redev/pdf/maps/AllAreas.pdf, accessed May 3, 2011.) [Cited as RDA]
Section 8

References


- The Natelson Dale Group, Inc., Retail Market Impact Analysis for Van Buren (Riverside) Walmart Expansion, January 5, 2010. (Included as Appendix F.) [Cited as TNDG]

- Urban Crossroads, Wal-Mart Expansion, Traffic Impact Analysis, October 18, 2010. (Included as Appendix E.) [Cited as Urban Crossroads]

Section 7

Alternatives to the Proposed Project

- California Department of Toxic Substances Control, EnviroStor Online Database. (Available at http://www.envirostor.dtsc.ca.gov/public/, accessed June 23, 2011.) [Cited as EnviroStor]

- City of Riverside, City of Riverside General Plan 2025 Final Program Environmental Impact Report, July 2007. (Available at the City of Riverside, Planning Division and at http://www.riversideca.gov/planning/gp2025program/, accessed June 2, 2011.) [Cited as GP 2025 FPEIR]

- The Natelson Dale Group, Inc., Retail Market Impact Analysis for Van Buren (Riverside) Walmart Expansion, January 5, 2010. (Included as Appendix F.) [Cited as TNDG]

- Urban Crossroads, Walmart Expansion Traffic Impact Analysis, October 18, 2010 (Revised). (Included as Appendix E.) [Cited as Urban Crossroads]
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