LAND PARK COMMERCIAL CENTER PROJECT (P15-048) DRAFT ENVIRONMENTAL IMPACT REPORT (SCH# 2015112025)



PREPARED FOR CITY OF SACRAMENTO

Community Development Department Environmental Planning Services 300 Richards Boulevard Sacramento, California 95811



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August 2016

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ES.1 PROJECT UNDER REVIEW

This Draft Environmental Impact Report (EIR) evaluates the environmental impacts of the proposed Land Park Commercial Center Project (proposed project) in the City of Sacramento (City). The proposed project includes development of a neighborhood-serving retail center that would include a 55,000 square foot grocery store and 53,165 square feet (sf) of additional retail uses on an approximately 10-acre site located in the Land Park neighborhood. A detailed description of the project and all its components is contained in Chapter 2, Project Description.

ES.2 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION

This summary chapter provides an overview of the technical analysis contained in Sections 4.1 through 4.10 in Chapter 4, Environmental Analysis. This summary also includes a discussion of: (a) effects found to be less than significant, (b) comments received in response to the Notice of Preparation (NOP), (c) potential areas of controversy, (d) significant and unavoidable impacts and mitigation measures to avoid or reduce identified significant impacts, and (e) alternatives to the proposed project.

The California Environmental Quality Act (CEQA) Guidelines Section 15382 defines a significant effect as a substantial, or potentially substantial, adverse change in any physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Implementation of the proposed project would result in significant impacts to the environment. As lead agency, the City determined that this Draft EIR will address the following technical issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions

- Hazards and Hazardous Materials
- Hydrology, Drainage, and Water Quality
- Noise
- Public Services and Utilities
- Transportation and Circulation

A brief summary of the findings of each technical section in Chapter 4 (Technical Analyses) as well as Chapter 3 (Land Use and Planning) is included below followed by a discussion of those impacts determined to be less than significant and therefore not further evaluated in the Draft EIR.

Land Use and Planning

This chapter of the Draft EIR describes existing and planned land uses in and adjacent to the project site, current land uses, 2035 General Plan land use designations, and zoning, and analyzes the consistency of the proposed project with existing land use plans and policies as well as land use compatibility with adjacent lands. CEQA Guidelines Section 15125(d) provides that the environmental setting of an EIR must discuss "any inconsistencies between the proposed project and applicable general plans and regional plans." Potential inconsistencies between the proposed project and the *Sacramento 2035 General Plan*, the *Land Park Community Plan* (a subset of the General Plan), and the City of Sacramento Zoning Ordinance are discussed in this chapter.

The analysis concludes that the proposed project would be consistent with the intent of the City's 2035 General Plan and Land Park Community Plan and would be compatible with the existing adjacent uses.

Aesthetics

This section describes the existing visual setting of the project site and vicinity and evaluates potential impacts related to implementation of the proposed project. The analysis considers whether the project would substantially degrade the existing visual character of the project area, adversely affect sensitive receptors, or create new sources of light and glare that would adversely affect views and visual conditions in the area.

The proposed project would alter the existing visual character of the project site by removing vacant buildings on the former Capital Nursery site as well as two vacant residences and a parking lot and developing a cohesive neighborhood-serving commercial center that will include trees and landscaping. While the project would change the visual character of the site, this change is not considered a significant impact, given the site is currently developed and located in a developed area of the City. The site has been designated by the City for urban development, and the change in character from an existing developed site with vacant buildings to a more contemporary commercial development is not in itself a significant effect. The project site is adjacent to Freeport Boulevard, and is visible to motorists and pedestrians driving or walking along Freeport Boulevard. Views of the site from the backyards of existing residences located to the west, north, and south of the site would be blocked by a proposed 12-foot high masonry wall along the western property line with a10 to 12-foot high masonry wall along the northern property line as well as trees and other landscaping that exists within the backyards. Views of the site from the east would be from existing businesses along Freeport Boulevard and drivers and pedestrians. The change in visual character, while it would be different from the existing views of the site, would not result in a significant impact. The project would contribute to

the existing ambient light in the area by introducing new parking lot and building lights; however, the addition of light would be subject to City design restrictions to avoid spillover light, and would not affect adjacent areas and would not result in a significant impact.

Air Quality and Greenhouse Gases

These sections describe the project's impacts on local and regional air quality and contribution to regional air quality conditions. The analysis evaluates construction and operational air emissions associated with the project. Construction-related activities are considered short-term and include site clearing, grading, and the use of construction equipment that would generate air pollutants. Operational impacts associated with an increase in vehicle trips and use of consumer equipment was also evaluated. The analysis was prepared in compliance with the Sacramento Metropolitan Air Quality Management District (SMAQMD) guidelines. The section also evaluates the project's impacts related to greenhouse gas emissions (GHG) and climate change. A Climate Action Plan checklist was prepared for the project that evaluated the project's consistency with the City's Climate Action Plan (see Appendix B).

The project would not result in any short-term construction impacts or long-term operational impacts. The proposed project would not result in any cumulative impacts to air quality or climate change.

Biological Resources

This section evaluates the potential effects on biological resources associated with construction and operation of the proposed project. The biological resources present within the project site are described and special-status plant and wildlife species that could occur within the project site are identified. A biological survey was prepared for the project to determine the presence or absence of species and the findings are reported and discussed in this section. A copy of the biological report is included in Appendix C.

There are no wetlands, heritage trees, special-status plant species, or wildlife corridors present on the site; therefore, the project would not impact these resources. With implementation of the mitigation measure identified in Section 4.3, Biological Resources, and in Table ES-1, Summary of Impacts and Mitigation Measures, the project would have a less-than-significant impact on nesting birds during construction. The proposed project would not result in any significant impacts to biological resources.

Cultural Resources

The cultural resources section describes the existing historic and archaeological resources within the project site and evaluates the potential for unknown resources to exist. An

architectural assessment of the buildings on the site was conducted to determine if any of the buildings would be eligible for listing (see Appendix D). None of the buildings were determined to be historic so no impacts were identified associated with demolition.

The proposed project would result in potentially significant impacts associated with the potential to unearth unknown historic or archaeological resources or human remains during site construction. Implementation of mitigation measures identified in Section 4.4, Cultural Resources, and in Table ES-1, Summary of Impacts and Mitigation Measures, would reduce project impacts on cultural resources to less than significant.

Hazards and Hazardous Materials

This section describes the potential adverse effects on human health and the environment due to exposure to hazards that could result from construction and operation of the proposed project. Hazards evaluated include those associated with hazardous materials, such as potential exposure to hazardous materials used, generated, stored, or transported in or adjacent to the project site associated with prior use of the site as a nursery, and existing identified or suspected soil and/or groundwater contamination associated with the use of fertilizers, pesticides and other chemicals. The potential for the buildings slated for demolition to include asbestos and lead paint was also evaluated. A Phase I and II Environmental Site Assessment as well as an asbestos and lead paint evaluation were prepared for the project site and included in Appendix E.

The proposed project would not use, transport or store any hazardous materials other than common household products. Implementation of applicable hazardous materials management laws and regulations adopted at the federal, state, and local level would ensure impacts related to such hazardous materials use remain less than significant. Impacts associated with soil or groundwater contamination would be less than significant.

Hydrology, Drainage, and Water Quality

This section describes the existing hydrology, drainage and water quality of the project site and identifies infrastructure improvements associated with the proposed project. The increase in impervious surface area and the potential for an increase in localized flooding is evaluated along with hazards associated with a levee or dam failure.

Based on the Drainage Plan prepared for the project site (see Appendix F) and assuming compliance with existing federal, state, and local regulations, impacts associated with construction-related surface water quality, water quality degradation associated with urban runoff, and increased peak stormwater flows would all be less than significant. The project site is located in an area designated as having 100-year flood protection so impacts associated with flooding were determined to be less than significant.

Noise

The Noise section describes the existing ambient noise environment and evaluates changes to noise associated with construction and operation of the project. In addition, the noise analysis evaluates noise associated with the loading dock and parking lot areas. Noise associated with project operation, including an increase in vehicles on local roadways and noise from on-site uses would not exceed City thresholds; therefore, impacts would be less than significant. Noise associated with project construction is exempt from the City's noise regulations provided all construction activities comply with the City's construction noise requirements. Implementation of mitigation identified in Section 4.8, Noise and in Table ES-1, Summary of Impacts and Mitigation Measures, requires additional steps be taken during construction and project operation to minimize disturbance to adjacent neighbors. This further ensures the impact would be less than significant.

Public Services and Utilities

This section describes existing public services (fire and police protection, and recreation) and utilities (water supply, wastewater treatment and collection, solid waste and energy) that would serve the project site and identifies anticipated demand for these services resulting from development of the proposed project. The project would not result in any impacts to fire and police services that would require the need to construct new facilities or to expand existing facilities to house more staff required to serve the project. The project mitigates any potential impacts to City parks through payment of in-lieu fees, also reducing the impact to less than significant. The increase in demand for public utilities would not exceed capacity or exceed City projections; therefore, impacts are less than significant.

Transportation and Traffic

This section describes potential impacts to the transportation system near the proposed project site. The impact analysis examines the roadway, transit, bicycle, pedestrian, and construction components of the overall transportation system under existing conditions, existing plus project, cumulative, and cumulative plus project conditions.

The proposed project would increase traffic on local roadways and intersections during project construction and operation. During project construction there is a potential for construction traffic to result in impacts to the local roadway system. Mitigation included in Section 4.10 and in Table ES-1, Summary of Impacts and Mitigation Measures, would reduce impacts to less than significant. The traffic analysis determined the increase in vehicle trips associated with project operation would be less than significant. During project operation, under existing plus project conditions, the level of service (LOS) on area roadways would not exceed the City's standard. Intersections would also continue to operate under acceptable levels. Impacts to transit, bicycle and pedestrian facilities under existing plus project and cumulative plus project conditions are all less than significant.

ES.3 EFFECTS FOUND TO BE LESS THAN SIGNIFICANT

Due to certain aspects of the project and project site, project characteristics, and existing regulatory requirements, the project is not anticipated to have significant impacts on the following resources: agricultural resources, forestry resources, geology, soils or mineral resources. The following provides an overview that explains why the project would not adversely affect these resources and therefore these resources are not further analyzed in this Draft EIR.

Agricultural Resources

The project site is currently developed and in an urbanized area of the City. The site does not contain any agricultural land. Development of this site would not impact any agricultural resources and no impact would occur.

Forestry Resources

There are no trees within the project boundaries or in the areas designated for off-site improvements that would be considered timberland or forest land. Forestry resources or forest land is typically defined as land covered with forests or reserved for the growth of forests. Because the project site is currently developed and in an urban area, construction of the project would not result in the loss of protected forestry resources, and no impact would occur.

Geology, Soils, and Mineral Resources

The project site is located in Sacramento County and is classified as a low severity earthquake zone. There are no known active faults within the greater Sacramento region and the project site is considered to have low seismic risk with respect to faulting, ground shaking, seismically related ground failure, and liquefaction. There are no regulated Earthquake Fault Zones or mapped seismic hazard zones in the city. All development in California is subject to the requirements of the California Building Code (CBC). The CBC contains more stringent building standards than the Uniform Building Code, specific to conditions in California.

The project site is flat and does not contain any slopes that would present a landslide hazard during construction or operation of the project. A Geotechnical Report was prepared for the project (see Appendix J) to assess the soils on the site to determine any potential constraints for construction. Soils are on the site are hard cohesive soils that are characterized as stiff to hard lean clay and silt with a low to moderate shrink/swell potential. Groundwater was encountered at depths between 6 to 24.5 feet below existing grade level (Geocon 2015). For more information, please see Appendix J.

The Sacramento 2035 General Plan does not identify the project site as being located in a sensitive geologic area that could expose people to potential geologic impacts. Grading activities associated with project construction would result in the disruption, displacement, compaction, and over covering of soils associated with site preparation (grading and trenching for utilities). There are no notable topographic features on the site. Any grading activities would be limited to the project site and all grading and improvement plans would be reviewed by the City's Department of Utilities in compliance with the Sacramento City Code Chapters 15.20 (Uniform Building Code) and 15.88, (Grading and Erosion Sediment Control), for consistency with the City's development standards. Grading activities would require a grading permit from the Department of Utilities, which requires provision of proper drainage and appropriate dust control and erosion control measures. Grading and erosion control measures would be incorporated into the required grading plans. Project construction is subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) permit requirements. Compliance with the requirements of the City Code and the federal NPDES, and the limited exposure of soils anticipated, ensures the potential for substantial soil erosion or loss of topsoil is less than significant.

Additionally, the City's 2035 General Plan finds geologic impacts to be less than significant since new buildings and structures are required to comply with all applicable state and local building codes.

The project site is not identified by the City as containing mineral resources that would be of local, regional, or statewide importance and development would not have any impacts on mineral resources. The proposed project would not include excavation of mineral resources on the site and would have no impacts related to mineral resources (City of Sacramento 2015.

ES.4 COMMENTS RECEIVED IN RESPONSE TO THE NOP

The Notice of Preparation (NOP) for this Draft EIR was released on November 12, 2015, and the public comment period closed on December 14, 2015. The City received a total of 21 letters. Comment letters were received from two public organizations including Hollywood Park Neighborhood Association and Sacramento Modern. A majority of the stated concerns related to noise and light pollution associated with the project in close proximity to residences, increased traffic on side streets resulting from vehicles avoiding Freeport Boulevard, and air quality associated with idling vehicles, construction and truck exhaust.

A brief overview of the primary concerns raised in the NOP comment letters that relate to the environmental analysis is included below. The purpose of the NOP process is to solicit input from public agencies and the public on the scope of the EIR analysis. Opinions on the merits of the project are noted, but are not considered relevant for the purposes of defining the scope of the analysis. In addition, the Introduction of each technical section in Chapter 4 provides a brief summary of comment relevant to that particular issue area. All of the NOP comment letters received are included in Appendix A.

The project also went before the City's Planning and Design Commission (P&DC) for review and comment on June 2, 2016. There were a total of eight people that spoke before the commission and there was one letter received from the public prior to the meeting. A summary of comments received at this meeting by topic area are provided below, as noted.

The letter received on May 25, 2016, from Jody Ansell and Matthew McKinnon raised a number of the same concerns listed below. However, they also suggested that the project be designed as a mixed-use project with housing and commercial uses, with below grade parking. Housing would be located along the west and north side of the project site along with a greenbelt to connect the new housing with the adjacent existing residential. Another suggestion included providing a shuttle from the project site to the light rail stop along Freeport Boulevard to the north and to the new Curtis Village project to the east.

Land Use and Planning

NOP comments related to land use and planning include concerns about the necessity of rezoning to C-2 and C-2-EA-4 (General Commercial), the possibility of re-zoning instead to C-1 (Limited Commercial Zone) and concerns about re-designation from suburban low- and medium-density to Urban Corridor Low.

Comments raised at the P&DC hearing included allowed uses and development standards in the C-1 versus the C-2 zone, desire to see the project oriented closer to Freeport Boulevard and more pedestrian and bicycle friendly. Concerns that the project reflects a more suburban design and provides too much parking along with a desire to see a residential buffer along the western boundary of the project site were also raised. There was also a comment received asking what was proposed for the existing Raley's building. The Draft EIR addresses these concerns in Chapter 2, Project Description and Chapter 5, Project Alternatives.

Aesthetics

Many NOP comments received regarding Aesthetics expressed concerns associated with light pollution spilling over to adjacent residences. Commenters requested that lighting be designed using strategies that block skyglow and light spillover. Additional concerns were expressed regarding the privacy of the residences behind the proposed 40 foot tall store and adequacy of vegetation shielding the buildings from sight. Commenters requested preservation of the historic feel of the Capital Nursery and Freeport Boulevard by relocating the original 1958 Raley's neon sign, use of urban design concepts in building layout and painting or removing the residences on Wentworth Avenue. Concerns were also raised regarding landscaping and requesting that it be functional, provide shade, contain drought-resistant plants, and effectively reduce light and glare.

Concerns regarding light spillover on adjacent residences and the visual impacts of placing a taller building (proposed Raley's store) adjacent to residences adjacent to the western boundary of the site were also raised at the P&DC hearing. This concern is addressed in Section 4.1, Aesthetics. A request was made by the Commission chairperson to provide a profile (cross) section/line of sight exhibit along this shared boundary. This information was subsequently provided to the commissioners.

Air Quality

A majority of concerns regarding air quality received in response to the NOP were focused on air pollution resulting from truck exhaust and idling at the loading docks. Additional air quality concerns included construction emissions, building materials, dust, and operation of the HVAC system the new buildings would require. Multiple commenters suggested an enclosed loading dock to help mitigate noise and air pollution and plug-ins for refrigeration trucks to reduce idling time.

Cultural Resources

One NOP comment was received regarding the Capital Nursery architecture designed by Leonard F. Starks and a desire to preserve some of the elements of the original building in the new design. As mentioned above in Aesthetics, the commenter requested that the original Raley's neon sign from 1958 be relocated to the new site to preserve the historic feel of Freeport Boulevard.

Hazards and Hazardous Materials

The primary concerns raised regarding hazards in response to the NOP were associated with the possibility for toxins to be present in the soil and toxic mold to be present in the existing buildings on site. Commenters requested that a soil study be conducted to ensure no toxins were present on site that would cause health risks to the surrounding residences.

Hydrology, Drainage, and Water Quality

NOP comments were received regarding the drainage proposed for the site including number and location of storm drains. Additional comments expressed a concern with the increase in runoff resulting from the increase in impervious surfaces and suggested green solutions for parking areas to minimize runoff be considered.

Noise

The primary concerns regarding noise in response to the NOP were focused on placing the project in close proximity to residences and the associated noise disrupting the quiet neighborhood residents currently enjoy. Main concerns for noise include trucks loading on the

docks, the location of the dock and the hours of loading, operation of the roof HVAC system, and noise from associated retail. Commenters requested that a noise study examining the current ambient environment be conducted to show current noise contours and determine if the project would exceed the City's noise ordinance threshold. Concerns were also raised regarding the hours of construction and hours of operation of the store, and the adequacy of the height and design of the sound wall. As noted above in Air Quality, commenters also suggested the possibility for an enclosed loading dock be examined as a way to mitigate air quality and noise associated with trucks and the loading docks.

Noise concerns were also raised at the P&DC hearing. Concerns included noise from the grocery store loading dock, garbage pick-up, trucks backing up and building HVAC units. All of these are addressed in Section 4.8, Noise.

Public Services and Utilities

NOP comments received concerning public services and utilities raised concerns about the height of the fence for the fire access area, material of the fire access road and ways to keep the homeless out of that area. Additional concerns were related to effects on call service time.

Traffic and Transportation

The majority of NOP comments received were concerned with ensuring safe walkability inside the parking lot and safe access to the shopping center for bicycles and pedestrians. Commenters suggested designated bicycle parking at the front of the store and in the parking lot, and at least on vehicle charging space in the parking lot. Additional concerns were related to the potential increase of traffic on local roads, namely, Meer Way, Babich Avenue, Argail Way and Claremont Way and the lack of appropriate speed controls along these roads. Commenters requested both a protected left turn signal (northbound) at Wentworth Avenue and left turn access to the shopping center on Freeport Boulevard.

Comments at the P&DC hearing included a desire to see truck access from Freeport Boulevard not only from Wentworth Avenue, difficulty for bicyclists turning left from Freeport Boulevard, bicycle circulation throughout the site, bicycle and pedestrian access across Freeport Boulevard, and a request for a new signal at 23rd Avenue to line up with the project's entrance. A majority of these traffic improvements are included as Conditions of Project Approval (see Chapter 2, Project Description) as well as Section 4.10, Transportation and Circulation.

ES.5 POTENTIAL ISSUES OF CONCERN

The primary issues of concern raised were associated with an increase in traffic on surrounding roads and safety of bicyclists and pedestrians, air emissions and noise associated with placing

retail/commercial buildings in close proximity to existing residences, and increase in nighttime lights. The size of the project was also an issue raised by the community.

ES.6 SUMMARY OF PROJECT ALTERNATIVES

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where significant environmental impacts will not occur.

As is evident from the text of the EIR, all significant effects of the project would be mitigated to less-than-significant levels by the adoption of feasible mitigation measures. There are no impacts that remain as significant and unavoidable and which cannot be substantially lessened. The EIR includes project alternatives that address concerns raised by the community including the desire to see residential uses be included along the west side of the project site, a single-story building, re-orientation of the Raley's grocery store closer to Freeport Boulevard. Impacts associated with the alternatives evaluated would not result in any significant impacts and would reduce the severity of some of the impacts identified for the project. The EIR evaluates the following alternatives to the proposed project:

No Project/No Development Alternative. This alternative assumes that the proposed project would not be built and there would be no new development of the site. This alternative assumes the site would remain in its current condition.

No Project/Existing Zoning Alternative. This alternative assumes that the project site would be developed consistent with the underlying zoning of R-1/R-1A and R-2A and C-2. Under this alternative, the site would be developed with residential and commercial uses.

Alternate Site Plan Alternative. Under this alternative the proposed grocery store would be relocated to the eastern portion of the site, closer to Freeport Boulevard. Parking would be located behind the store with the loading dock remaining on the south side of the building. The grocery store would remain 55,000 sf with a total of 43,200 sf of additional retail uses.

Reduced Intensity Alternative. Under this alternative the Shops 1 building would not be constructed and the parking area between Shops 1 and Shops 2 would be removed to allow for a plaza area between the grocery store and the 12,000 sf Tenant building. A total of 98,883 sf of retail space could be developed, which includes 55,000 sf for the grocery store and an additional 43,883 sf for retail.

ES.7 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Information in Table ES-1, Summary of Impacts and Mitigation Measures, has been organized to correspond with environmental issues discussed in Chapter 4. The summary table is arranged in four columns and organized as follows:

- 1. Environmental impacts;
- 2. Level of significance prior to mitigation;
- 3. Applicable mitigation; and
- 4. The level of significance after implementation of mitigation.

This Draft EIR assumes that all applicable plans, policies, and regulations would be implemented, including state laws and regulations, the *Sacramento 2035 General Plan* policies, and requirements or recommendations of the City of Sacramento and applicable building codes. Applicable plans, policies, and regulations are identified and described in the Regulatory Setting of each issue area in Chapter 4 and within the relevant impact analysis. A description of the organization of the environmental analysis, as well as key foundational assumptions regarding the approach to the analysis, is provided in Chapter 4, Introduction to the Analysis.

Table ES-1
Summary of Impacts and Mitigation Measures

	Level of Significance		Level of Significance
Environmental Impact	Mitigation	Mitigation Measure(s)	Mitigation
		4.1 Aesthetics	
4.1-1: The proposed project could change the existing visual character or quality of the site and its surroundings.	Less than Significant	None required	Less than Significant
4.1-2: The proposed project could create a new source of light or glare which could cause an annoyance to adjacent residential uses.	Less than Significant	None required	Less than Significant
4.1-3: The proposed project could contribute to cumulative changes in the existing visual character of the area.	Less than Significant	None required	Less than Significant
4.1-4: The proposed project could contribute to a cumulative increase in nighttime light in the area.	Less than Significant	None required	Less than Significant
		4.2 Air Quality	
4.2.1: The proposed project would not result in short-term (construction) emissions of NO _x above 85 pounds per day, or PM ₁₀ above 80 pounds per day or PM _{2.5} above 82 pounds per day (with all feasible best available control technology (BACT) or best management practices (BMPs) for particulates implemented).	Less than Significant	None required	Less than Significant

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.2-2: The proposed project would not result in long-term (operational) emissions of NOx or ROG above 65 pounds per day, or PM ₁₀ above 80 pounds per day or PM _{2.5} above 82 pounds per day (with all feasible best available control technology (BACT) or best management practices (BMPs) for particulates implemented).	Less than Significant	None required	Less than Significant
4.2-3: The proposed project would not result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm).	Less than Significant	None required	Less than Significant
4.2-4: The proposed project would not result in objectionable odors affecting a substantial number of people.	Less than Significant	None required	Less than Significant
4.2-5: The proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations.	Less than Significant	None required	Less than Significant

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Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.2-6: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non- attainment under an applicable federal or state ambient air quality standard (including the release of emissions that exceed quantitative thresholds for ozone precursors).	Less than Significant	None required	Less than Significant
	L	1.3 Biological Resources	
4.3-1: The proposed project could result in substantial degradation of the quality of the environment and substantially reduce the habitat of a fish or wildlife species.	Potentially Significant	4.3-1: Should construction activities begin during the breeding season (March 1 through September 15), a qualified biologist shall conduct appropriate preconstruction surveys for any raptor and native bird nests within or immediately adjacent to the project site no more than 30 days before any construction activity commences. The pre-construction surveys shall be conducted between March and September and shall follow accepted survey protocols. The purpose of the surveys shall be to determine if active nests are present in the disturbance zone or within 350 feet of the disturbance zone boundary (1/4 mile for Swainson's hawk). If active nests are found, ground-disturbing activities shall be postponed or halted, and a suitable buffer from the nest shall be determined and flagged by a qualified biologist based on the species, planned construction activity, and the	Less than Significant

Table ES-1
Summary of Impacts and Mitigation Measures

	Level of Significance Prior to		Level of Significance After
Environmental Impact	Mitigation	Mitigation Measure(s)	Mitigation
		location of the nest. Construction activity may resume within the buffer when the nest is considered inactive by the qualified biologist, either after the eggs have hatched and the chicks have fledged, or upon failure of the nest. All active nests shall be monitored during construction activity by the qualified biologist. If adult birds are exhibiting agitated behavior, construction shall be halted and the buffer may be increased to prevent abandonment of the nest. Consultation with the California Department of Fish and Wildlife shall be sought, as necessary. Limits of construction activities shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas.	
4.3-2: The proposed project could interfere with the movement of native resident or migratory wildlife species or with established native resident or migratory wildlife corridors.	Less than Significant	None required	Less than Significant
4.3-3: The proposed project could contribute to a cumulative loss of habitat for common and special-status wildlife species.	Less than Significant	None required	Less than Significant

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Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation	
		4.4 Cultural Resources		
4.4-1: Project construction, including off-site utility connections could disturb, damage or destroy unidentified subsurface archaeological or historical resources as defined in CEQA Guidelines Section 15064.5.	Potentially Significant Significant A.4-1(a) If any cultural cultural resourd unusual amout architectural r any constructi implement me feasible to avoit to the cultural	4.4-1(a) If any cultural resources (including tribal cultural resources), such as structural features, unusual amounts of bone or shell, artifacts, or architectural remains are encountered during any construction activities, the Contractor shall implement measures deemed necessary and feasible to avoid or minimize significant effects to the cultural resources including the following:	Less than Significant	
		 Suspend work within 100 feet of the find; and, Immediately notify the City's Community Development Director and coordinate any necessary investigation of the site with a qualified archaeologist or Native American representative, as needed, to assess the resource (i.e., whether it is a "historical resource" or a "unique archaeological resource" or a "tribal cultural resource"); and, Provide management recommendations should potential impacts to the resources be found to be significant; Possible management recommendations for identified resources could include resource avoidance or data recovery excavations, where avoidance is infeasible 		

in light of project design or layout, or is

Table ES-1Summary of Impacts and Mitigation Measures

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	Mitigation	 unnecessary to avoid significant effects. In addition, the Contractor in consultation with the City's Preservation Director, State Historic Preservation Officer, and if applicable, Tribal representatives, may include preparation of reports for resources identified as potentially eligible for listing in the California Register of Historical Resources. 	Mitigation
		(b) If a Native American site or a tribal cultural resource is discovered, the evaluation process required by Mitigation Measure 4.3-1(a) shall include consultation with the appropriate Native American representative. If Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment shall be conducted by a qualified archaeologist, who is certified by the Society of Professional Archaeologists (SOPA) and/or meets the federal standards as stated in the Code of Federal Regulations (36 CFR 61), and by Native American representatives, who are approved by the local Native American community as scholars of the cultural traditions.	
		In the event that no such Native American representative is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be	

Environmental Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation
			consulted. If historic archaeological sites are involved, all identified treatment (e.g., conduct additional archaeological surveys and provide measures to preserve the integrity or minimize damage or destruction of significant resources) is to be carried out by qualified historical archaeologists, who shall meet either the Register of Professional Archaeologists (RPA) or 36 CFR 61 requirements.	
		(c)	If a human bone or bone of unknown origin is found during earth-moving activities, all work shall stop within 100 feet of the find, and the County Coroner shall be contacted immediately, pursuant to Section 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission, who shall notify the person most likely believed to be a descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have taken place.	

Table ES-1Summary of Impacts and Mitigation Measures

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation	
4.4-2: Project construction could disturb, damage, or destroy an unidentified historical resource as defined in CEQA Guidelines Section 15064.5.	Less than Significant	None required	Less than Significant	
4.4-3: Project construction could adversely affect tribal cultural resources or disturb unknown human remains.	Potentially Significant	4.4-3 Compliance with Mitigation Measure 4.4-1(a) and (b)	Less than Significant	
4.4-4: The proposed project could contribute to cumulative losses of prehistoric resources, historic-period resources, and human remains in the greater Sacramento region.	Potentially Significant	4.4-4 Implement Mitigation Measures 4.1-1(a) and (b).	Less than Significant	
4.5 Greenhouse Gas Emissions				
4.5-1: The proposed project could impede the City or state efforts to meet AB 32 standards for the reduction of greenhouse gas emissions or conflict with the City's Climate Action Plan.	Less than Significant	None required	Less than significant	

Table ES-1
Summary of Impacts and Mitigation Measures

	Level of Significance		Level of Significance
Environmental Impact	Mitigation	Mitigation Measure(s)	After
	4.6 Haz	ards and Hazardous Materials	
4.6-1: The proposed project could expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities.	Less than Significant	None required	Less than significant
4.6-2: The proposed project could expose people (e.g., residents, construction workers) to asbestos- containing materials or other hazardous materials or situations.	Potentially Significant	4.6-2 In the event that grading or construction of the proposed project reveals evidence of soil contamination (e.g., suspicious odors, non-soil material, or stained soils) a Hazardous Materials Contingency Plan shall be prepared. The plan shall be prepared by a qualified environmental professional registered in California. The plan shall identify specific measures to take to protect worker and public health and safety and specify measures to identify, manage, and remediate wastes. The plan shall include the following:	Less than Significant
		 Contamination evaluation and management procedures: Information on how to identify suspected contaminated soil. Identification of air monitoring procedures and parameters and/or physical observations (soil staining, odors, or buried material) to be used to identify potential contamination. Procedures for temporary cessation of 	

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		 construction activity and evaluation of the level of environmental concern if potential contamination is encountered. Procedures for limiting access to the contaminated area to properly trained personnel. Procedures for notification and reporting, including internal management and local agencies (fire department, SCEMD, etc.), as needed. A worker health and safety plan for excavation of contaminated soil. Procedures for characterizing and managing excavated soils in accordance with CCR Title 14 and Title 22. Procedures for certification of completion of remediation. 	
4.6-3: The proposed project would not substantially increase the risk of exposure of site occupants to inadvertent or accidental release of hazardous substances transported on adjacent roadways or rail lines near the site.	Less than Significant	None required	Less than Significant

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Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.6-4: The proposed project could contribute to cumulative increase in the potential exposure of people to sites where soil and/or groundwater contamination could be present from past or current uses.	Less than significant	None required	Less than Significant
	4.7 Hydrol	logy, Drainage, and Water Quality	
4.7-1: Construction activities associated with the proposed project could generate increases in sediment and/or other contaminants which could violate water quality objectives and/or waste discharge requirements set by the State Water Resources Control Board.	Less than Significant	None required	Less than Significant
4.7-2: The proposed project would increase impervious surface area and commercial activities that could result in substantial long-term effects on water quality.	Less than Significant	None required	Less than Significant
4.7-3: The proposed project could affect the rate and amount of surface runoff in a manner that could exceed the capacity of the stormwater drainage system and/or exacerbate off-site drainage or flooding issues.	Less than Significant	None required	Less than Significant

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.7-4: Development of the proposed project could increase the exposure of people and/or property to the risk of loss, injury, damage, or death in the event of a levee breach or dam failure.	Less than Significant	None required	Less than Significant
4.7-5: The proposed project could substantially deplete groundwater supplies or interfere with groundwater recharge.	Less than Significant	None required	Less than Significant
4.7-6: The proposed project, in addition to other projects in the watershed, could result in the generation of polluted runoff that could violate water quality standards or waste discharge requirements for receiving waters.	Less than Significant	None required	Less than Significant
4.8 Noise			
4.8-1: Short-term construction noise levels could violate the City of Sacramento Noise Ordinance or cause a substantial temporary	Potentially Significant	4.8-1 (a) All construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order.	Less than Significant
increase in ambient noise levels.		 (b) Stationary construction equipment such as generators or compressors shall be located on site as far away from adjacent residential property boundaries as is practicable. 	

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		(c) To reduce construction noise levels on adjacent properties, the 12-foot tall proposed masonry wall along the western property boundary and 10-12-foot tall masonry wall along the northern property boundary shall be installed as early in the construction process as is practicable.	
4.8-2: Existing residential and commercial areas could be exposed to vibration peak-particle velocities greater than 0.5-inch per second or vibration levels greater than 80 VdB due to project construction.	Less than Significant	None required	Less than Significant
4.8-3: Noise from parking lot activities could result in noise levels at adjacent residential properties which exceeds exterior noise exposure limits.	Less than Significant	None required	Less than Significant
4.8-4: Noise from roof-mounted mechanical equipment could result in noise levels at adjacent residential properties which exceeds exterior noise exposure limits.	Less than Significant	None required	Less than Significant
4.8-5: Noise from loading dock activities during project operation could result in excessive noise exposure levels for nearby residences.	Less than Significant	None required	Less than Significant

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.8.6: Long-term project operations could result in vibration impacts upon nearby residences.	Less than Significant	None required	Less than Significant
4.8-7: Proposed project vehicle trips could result in off-site roadway noise level increases that impact noise sensitive land uses located along such roadways.	Less than Significant	None required	Less than Significant
4.8-8: Existing residential and commercial areas could be exposed to vibration peak-particle velocities greater than 0.5-inch per second or vibration levels greater than 80 VdB due to project construction.	Less than Significant	None required	Less than Significant
4.8-9: The proposed project, in addition to cumulative development in the in South Land Park neighborhood, could increase traffic noise that exceeds the City's noise standards.	Less than Significant	None required	Less than Significant
4.9 Public Services and Utilities			
4.9-1: The proposed project could increase demand for police services and fire protection services requiring the need to construct new facilities, or expand existing facilities.	Less than Significant	None required	Less than Significant

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Table ES-1	
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Summary of Impacts and Mitigation Measures	

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.9-2: The proposed project could cause or accelerate the physical deterioration of existing parks or recreational facilities or create a need for construction or expansion of recreational facilities beyond what was anticipated in the City's General Plan or Land Park Community Plan.	Less than Significant	None required	Less than Significant
4.9-3: The proposed project could result in an increase in demand for potable water in excess of existing supplies and result in inadequate capacity in the City's water supply facilities to meet demand requiring the construction of new water supply facilities.	Less than Significant	None required	Less than Significant
4.9-4: The proposed project could exceed existing wastewater capacity to serve the project's demand in addition to existing commitments and result in either the construction of new or expansion of existing wastewater treatment facilities.	Less than Significant	None required	Less than Significant

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Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Massura(a)	Level of Significance After
4.9-5: The proposed project could require the expansion or construction of new solid waste facilities which could cause significant environmental effects.	Less than Significant	None required	Less than Significant
4.9-6: Operation of the proposed project could require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities.	Less than Significant	None required	Less than Significant
4.9-7: The proposed project could contribute to a cumulative increase in demand for police services and fire protection services that could result in the need for new or physically altered facilities.	Less than Significant	None required	Less than Significant
4.9-8: The proposed project could contribute to a cumulative increase in demand for parks and recreation facilities.	Less than Significant	None required	Less than Significant
4.9-9: The proposed project could contribute to a cumulative increase in demand for water supply in excess of existing supplies.	Less than Significant	None required	Less than Significant

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Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.9-10: The proposed project could contribute to a cumulative increase in the demand for water and wastewater treatment, which could result in inadequate capacity and require the construction of new or expansion of existing wastewater treatment facilities.	Less than Significant	None required	Less than Significant
4.9-11: The proposed project could contribute to a cumulative increase in solid waste, which could result in either the construction of new solid waste facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.	Less than Significant	None required	Less than Significant
4.9-12: The proposed project could contribute to a cumulative increase in energy demand, which could result in the need for construction of new energy production and/or transmission facilities or expansion of existing facilities.	Less than Significant	None required	Less than Significant

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Table ES-1
Summary of Impacts and Mitigation Measures

	Level of Significance Prior to		Level of Significance After
Environmental Impact	Mitigation	Mitigation Measure(s)	Mitigation
	4.107	ransportation and Circulation	
4.10-1: The proposed project could cause potentially significant impacts to study area intersections.	Less than Significant	None required	Less than Significant
4.10-2: The proposed project could cause potentially significant impacts to transit.	Less than Significant	None required	Less than Significant
4.10-3: The proposed project could cause potentially significant impacts to pedestrian facilities.	Less than Significant	None required	Less than Significant
4.10-4: The proposed project could cause potentially significant impacts to bicycle facilities.	Less than Significant	None required	Less than Significant
4.10-5: The proposed project could cause potentially significant impacts due to construction-related activities.	Potentially significant	 4.10-5 Prior to the beginning of construction, the applicant shall prepare a construction traffic and parking management plan to the satisfaction of the City's Traffic Engineer and subject to review by all affected agencies. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained. At a minimum, the plan shall include: Description of trucks including: number and size of trucks per day, expected arrival/departure times, truck circulation patterns. Description of staging area including: location, maximum number of trucks simultaneously 	Less than Significant

Table ES-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		 permitted in staging area, use of traffic control personnel, specific signage. Description of street closures and/or bicycle and pedestrian facility closures including: duration, advance warning and posted signage, safe and efficient access routes for emergency vehicles, and use of manual traffic control. Description of driveway access plan including: provisions for safe vehicular, pedestrian, and bicycle travel, minimum distance from any open trench, special signage, and private vehicle accesses. Provisions for parking for construction workers. 	
4.10-6: The proposed project could cause potentially significant impacts to study area freeway system.	Less than Significant	None required	Less than Significant
4.10-7: The proposed project could cause potentially significant impacts to study area intersections under cumulative plus project conditions.	Less than Significant	None required	Less than Significant
4.10-8: The proposed project could cause potentially significant impacts to study area freeway system under cumulative plus project conditions.	Less than Significant	None required	Less than Significant

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ES.8 REFERENCES CITED

- City of Sacramento. 2015. *Master Environmental Impact Report for the City of Sacramento 2035 General Plan.* Final. SCH no. 2012122006. Prepared by Ascent Environmental Inc. Sacramento, California: Ascent. January 2015.
- Geocon. 2015. Geotechnical Investigation Land Park Commercial Center, Sacramento, California. November 2015.

CHAPTER 1 INTRODUCTION AND SCOPE OF THE EIR

The City has prepared this Draft Environmental Impact Report (Draft EIR) to inform the general public, the local community, responsible agencies, trustee agencies, and other interested public agencies, and the City's decision-making bodies (Planning and Design Commission and City Council) regarding the potential significant environmental effects resulting from implementation of the Land Park Commercial Center Project (proposed project). This Draft EIR includes possible measures to mitigate any identified significant effects and also includes alternatives to the proposed project. This "Project EIR," was prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.), the CEQA Guidelines (14 CCR 15000 et seq.), and the City's procedures for implementing CEQA. This Project EIR focuses on the changes in the environment that would result from implementation of the project, including construction and operation.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to a proposed project that could reduce or avoid adverse environmental impacts. As the CEQA lead agency for this project, the City of Sacramento (City) is required to consider the information in the EIR along with any other available information in deciding whether to approve the project entitlements requested. The basic requirements for an EIR include providing information that establishes the existing conditions/environmental setting (or project baseline), and identifying environmental impacts, mitigation measures, project alternatives, growth inducing impacts, and cumulative impacts. An EIR, as an informational document, provides the applicant, the public, other public agencies, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure. This EIR also provides the primary source of environmental information for the lead agency to consider when reviewing the project and requested project entitlements. It is not the intent of an EIR to recommend either approval or denial of a project.

1.1 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

In accordance with CEQA Guidelines Sections 15050 and 15367, the City of Sacramento has been designated the "lead agency," which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." The lead agency is also responsible for determining the scope of the environmental analysis, preparing the EIR, and responding to comments received on the Draft EIR. Prior to making a decision to approve a project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City.

Responsible Agencies

Responsible agencies are state and local public agencies, other than the lead agency, that have some authority to carry out or approve a project or that are required to approve a portion of the project or approve a permit for which a lead agency is preparing or has prepared an EIR or Initial Study/Negative Declaration (CEQA Guidelines Section 15813). The following agencies would potentially act as responsible agencies for the purposes of this project:

- **Central Valley Regional Water Quality Board (CVRWQCB)**. Ensures compliance with the City's National Pollutant Discharge Elimination System (NPDES) Permit for any stormwater discharge associated with construction activity.
- Sacramento Metropolitan Air Quality Management District (SMAQMD). Oversees air quality and has the authority to require mitigation fees.
- Sacramento County Environmental Compliance Division. Oversees the removal or abandonment of septic systems and issues a Septic Tank Destruction Permit.
- **Airport Land Use Commission.** The Airport Land Use Commission is required to review the project to determine consistency with the Comprehensive Land Use Plan.

Trustee Agencies

Trustee agencies are designated public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether or not the agencies have authority to approve or implement the project (CEQA Guidelines Section 15386). The California Department of Fish and Wildlife (CDFW) would be a trustee agency with jurisdiction over the proposed project.

1.2 EIR PROCESS

In accordance with CEQA Guidelines Section 15082, a Notice of Preparation (NOP) was circulated for public and agency review from November 12 through December 14, 2015 (included as Appendix A). The purpose of the NOP was to provide notification that an EIR for the proposed project was being prepared and to solicit guidance on the scope and content of the document. A summary of the comments received on the NOP is included in the Executive Summary, as well as in the introduction of each technical section.

Pursuant to CEQA Guidelines Section 15082, the lead agency held a public scoping meeting on December 2, 2015. Responsible agencies and members of the public were invited to attend and provide input on the scope of the EIR. Comments from agencies and the public in response to the NOP are provided in Appendix A. General concerns and issues raised in response to the NOP are summarized in the Executive Summary and addressed in this Draft EIR. In addition,

the project went before the City's Design and Planning Commission for review and comment on June 2, 2016, where the public was also invited to provide input on the project.

Draft EIR Public Review/Comment Period

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and public agencies can submit comments to the lead agency on the Draft EIR's accuracy and completeness. Release of this Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The 45-day public review period for the Draft EIR will be from Monday, August 1, 2016, through Thursday, September 15, 2016. The public can review the Draft EIR at the following address during normal business hours (Monday through Friday, 8 a.m. to 4 p.m.) or on the City's website at http://www.cityofsacramento.org/dsd/planning/environmental.cfm.

City of Sacramento Community Development Department 300 Richards Boulevard, 3rd Floor Sacramento, California 95811

The City encourages all comments on the Draft EIR be submitted in writing. All comments or questions regarding the Draft EIR should be addressed to:

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Final EIR and EIR Certification

Upon completion of the Draft EIR public review period, a Final EIR will be prepared that will include written comments on the Draft EIR received during the public review period and the City's responses to those comments. The Final EIR will also include the Mitigation Monitoring Program (MMP) prepared in accordance with Section 21081.6 of the Public Resource Code. The Final EIR will address any revisions to the Draft EIR made in response to agency or public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed project. Before the City can approve the project, it must first certify that the EIR has been completed in compliance with CEQA, that the City Council has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City. The City Council also would be required to adopt Findings of Fact. Because the proposed project would not result in

significant and unavoidable impacts, the City Council would not be required to adopt a Statement of Overriding Considerations if it approves the proposed project (See also Public Resources Code Section 21081).

EIR Adequacy

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines, which states the following:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.3 USE OF PREVIOUSLY PREPARED ENVIRONMENTAL DOCUMENTATION

CEQA allows for incorporation by reference of "all or portions of another document which is a matter of public record or is generally available to the public" (Guidelines Section 15150). Incorporation by reference is used principally as a means of reducing the size of EIRs. This Draft EIR relies in part on data, environmental evaluations, mitigation measures, and other components of EIRs and plans prepared by the City for areas within the project vicinity. These documents are listed here and used as source documents for this EIR. All documents are available for public review during normal business hours (Monday through Friday, 8 a.m. to 4 p.m.) at the City of Sacramento (address listed above) and on the City's website at http://www.cityofsacramento.org/dsd/planning/environmental.cfm.

- City of Sacramento 2035 General Plan, adopted March 2015
- Draft and Final 2035 General Plan Master EIR, City of Sacramento General Plan (SCH No. 2012122006), certified March 2015
- City of Sacramento Zoning Code, City of Sacramento, updated through 2016
- 2036 Metropolitan Transportation Plan (MTP) and Sustainable Communities Strategy (SCS), Sacramento Area Council of Governments, adopted February 2016
- Sacramento City Code, updated through August 2015.

1.4 SCOPE OF THE DRAFT EIR

Based on a review of the project and comments received during the NOP public review period, the City determined that an EIR should be prepared that addresses the following technical issue areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology, Water Quality, and Drainage
- Noise and Vibration
- Public Services and Utilities
- Transportation and Circulation

The specific topics evaluated are described in each of the technical sections presented in Chapter 4. Land Use and Planning are not considered technical issues and are addressed in Chapter 3.

This EIR evaluates the direct impacts, reasonably foreseeable indirect impacts, and cumulative impacts resulting from planning, construction, and operation of the proposed project using the most current information available and in accordance with the provisions set forth in CEQA and the CEQA Guidelines. In addition, the EIR recommends potentially feasible mitigation measures, where possible, and project alternatives that would reduce or eliminate significant adverse environmental effects.

The alternatives chapter of the EIR (Chapter 5, Project Alternatives) was prepared in accordance with Section 15126.6 of the CEQA Guidelines. CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where significant environmental impacts will not occur.

As is evident from the text of the EIR, all significant effects of the project would be mitigated to less-than-significant levels by the adoption of feasible mitigation measures. There are no impacts that remain as significant and unavoidable and which cannot be substantially lessened.

The EIR evaluates the following alternatives to the proposed project:

Alternative 1: No Project/No Build Alternative. This alternative assumes no development would occur, and the site would remain in its current developed condition.

Alternative 2: No Project/Existing Zoning Alternative. This alternative assumes that the project site would be developed consistent with the underlying zoning of residential and commercial uses. Under this alternative, the site would be developed with up to 40 residential units and 250,000 square feet of retail and commercial uses.

Alternative 3: Alternate Site Plan Alternative. This alternative assumes the proposed grocery store would be re-located to the eastern portion of the site, closer to Freeport Boulevard. Parking would be located behind the store with the loading dock remaining on the south side of the building. The grocery store would remain 55,000 sf with a total of 43,200 sf of additional retail uses along with 590 parking spaces could be developed under this alternative,

Alternative 4: Reduced Intensity Alternative. Under this alternative there would be a total of 98,883 sf of retail space, which includes 55,000 sf for the grocery store and additional 43,883 sf of retail uses and 427 parking spaces. The overall height of the grocery store would be lowered to 25-feet.

1.5 ORGANIZATION OF THE DRAFT EIR

Chapter ES, Executive Summary—Summarizes the elements of the project including the environmental impacts that could result from implementation of the proposed project. A summary table is provided that lists impacts, describes proposed mitigation measures, and indicates the level of significance of impacts before and after mitigation.

Chapter 1, Introduction and Scope of the Draft EIR—Provides an introduction and overview of the EIR process and describes the intended use of the EIR and the review process.

Chapter 2, Project Description—Provides a detailed description of the proposed project, including its location, background information, project history, project objectives, and technical characteristics.

Chapter 3, Land Use and Planning —Addresses the land use and planning implications of the project and discusses consistency and compatibility with adopted land use policies. Appendix K includes a policy by policy review of consistency with the City's 2035 General Plan.

Chapter 4, Environmental Impacts and Mitigation Measures—Describes the baseline environmental setting and provides an assessment of potential project impacts for each technical

issue area presented. Each section is divided into four sub-sections: Introduction, Environmental Setting, Regulatory Setting, and Impacts and Mitigation Measures (project-specific and cumulative).

Chapter 5, Project Alternatives—Describes and compares the proposed project alternatives to the proposed project.

Chapter 6, CEQA Considerations—Provides information required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, secondary impacts including potential impacts resulting from growth inducement, and significant irreversible changes to the environment.

Chapter 7, References—Provides a list of references used in preparation of the environmental analysis.

Chapter 8, EIR Preparation—Lists report authors who provided technical assistance in the preparation and review of the EIR.

Appendices—Includes various documents and data that support the analysis presented in the EIR.

CHAPTER 2 PROJECT DESCRIPTION

The Land Park Commercial Center project (proposed project) consists of the construction and operation of an approximately 108,165-square-foot (sf) retail center anchored by a full service grocery store with associated infrastructure on an approximately 10 acre site within the Land Park Community Plan Area in the City of Sacramento, California (City). The anchor tenant, Raley's grocery store, is closing its store at 4850 Freeport Boulevard and relocating to the new site. The existing store would be occupied by a new tenant still to be identified. Changes to the existing store are not a part of this project and would be subject to its own review and entitlement process once a new tenant is identified.

The project applicant, MO Capital, is requesting land use entitlements from the City as the CEQA lead agency. This Draft Environmental Impact Report (Draft EIR) examines the potential significant environmental effects (or impacts) of the proposed project. The Draft EIR will analyze removal of existing structures, site clearing, and construction and operation of the proposed project on a project-specific level (CEQA Guidelines Section 15161). The project-level analysis in the EIR will also provide the basis for CEQA compliance for other discretionary permits that may be issued by the City.

The project location, project setting and surrounding land uses, project objectives, and specific project elements are described in detail in this chapter.

2.1 PROJECT LOCATION

The project site is located south of downtown Sacramento in the Land Park neighborhood (see Figure 2-1, Regional Location). The project site is situated near the intersection of Wentworth Avenue and Freeport Boulevard (see Figure 2-2, Project Location). Existing access to the site is from Freeport Boulevard.

The project site includes the following Assessor Parcel numbers (APNs) 017-0121-001, -006, -007, -008, -009, and -010, which includes 4700 Freeport Boulevard, 2009 Wentworth Avenue, 1929 Wentworth Avenue, 1927 Wentworth Avenue, 1919 Wentworth Avenue, and 1913 Wentworth Avenue.

2.2 PROJECT SETTING AND SURROUNDING LAND USES

The project site is located in an existing developed area of the City along a neighborhood retail corridor on the site of a former nursery (Capital Nursery). The project site is bounded by an existing residential neighborhood to the west, Freeport Boulevard and commercial uses to the

east, a small retail area and residences to the north, two banks (Bank of America and East West Bank) a grocery store (Raley's) and residences to the south, as shown on Figure 2-3.

The project site is located within the Land Park Community Plan Area and is designated Suburban Neighborhood Low Density, Suburban Neighborhood Medium Density and Urban Corridor Low Density in the City's 2035 General Plan. Executive Airport is located approximately three miles to the south; therefore, a portion of the project site is within the Executive Airport (EA) overlay zone.

The project site contains vacant buildings, sheds, and greenhouses that were part of the former nursery, Capital Nursery, which occupied the site from roughly 1936 through 2012. Prior to 1936, the project site included stables and the land in the area, including the project site, was used to grow crops. There are two single-family homes located along Wentworth Avenue (1919 Wentworth Avenue, and 1913 Wentworth Avenue) and a parking lot that are also included within the project site. The homes are currently vacant and were constructed in 1938 and 1950, respectively. All of the buildings on the site including both homes would be demolished as part of the project.

The project site is flat and does not contain any streams, waterways or wetland areas. A variety of non-native grasses and weedy or ornamental plant species are present throughout the site. The site contains a few ornamental trees located in the center of the site, but no Heritage trees.

The project site is currently 36% developed with impervious uses with the remaining 64% of the site undeveloped.

The site is zoned Residential Single Family (R-1), Residential Single Unit or Duplex (R-1A-EA-4), General Commercial (C-2, C-2EA-4), and Residential Multi-Unit Dwelling(R-2A-R-EA-4/R-2A-EA-4).

Land surrounding the project site is designated in the City's 2035 General Plan Suburban Neighborhood Low Density to the west, north and south; Suburban Neighborhood Medium Density to the south, and Urban Corridor Low to the east, north and south.

2.3 PROJECT BACKGROUND

The majority of the project site was previously developed as a nursery and operated as a nursery for over 70 years from approximately 1936 through 2012. The former nursery site along with one residence (the other residence was previously owned by Raley's) was purchased in 2012 by Raley's Fine Foods for construction of a new grocery store. The approximately 60,000-square-foot Raley's store has been at its current location on Freeport Boulevard for over 57 years and has outgrown the space. This project site was selected as the new Raley's location due to its proximity to the existing store, to remain in the community, and for the ability to provide more retail opportunities.



Land Park Commercial Center





2.4 PROJECT OBJECTIVES

The overarching goal of the proposed project is the development of an integrated neighborhood commercial center that meets the goals and policies of the City of Sacramento 2035 General Plan, including the Land Park Community Plan, and is compatible with the aesthetic character of the Land Park neighborhood. Accordingly, the project applicant has developed the following objectives for the proposed project:

- Develop a Flagship grocery store and pharmacy along with a commercial center that • includes a mix of small retail and restaurant uses that will support the Land Park, South Land Park, Hollywood Park, Curtis Park and other surrounding neighborhoods.
- Provide a mix of retail services and uses along the block of Freeport Boulevard south of Sutterville Road and north of Wentworth Boulevard that complement the existing businesses, is proximate to residential neighborhoods, and minimizes disruption in service to existing customers of the Raley's grocery store.
- Provide for a welcoming neighborhood outdoor dining and gathering place for local residents that complements the existing urban fabric in the area.
- Design aesthetically pleasing buildings that maximize natural light to the extent possible and provide a mix of landscaping that adds interest and color to this portion of Freeport Boulevard.
- Develop uses that are appropriate to the neighborhood and promote infill development consistent with the City's 2035 General Plan and the Metropolitan Transportation Plan and Sustainable Communities Strategy.
- Create a pedestrian-friendly development that promotes pedestrian and bicycle use from the surrounding neighborhoods and provides bicycle and pedestrian access to other surrounding uses to reduce regional vehicle miles traveled and greenhouse gas emissions.
- Locate buildings and parking areas to minimize potential noise disturbance to the • majority of adjacent residences.

2.5 **PROJECT COMPONENTS**

The proposed project includes development of a mix of retail uses on an approximately 10-acre site in the Land Park neighborhood. The project includes a 55,000-square-foot (sf) full service Raley's grocery store (including a pharmacy) to be occupied by the existing Raley's grocery store currently located just south of the project site at 4850 Freeport Boulevard. The new Raley's store would be approximately 5,000 sf smaller than the existing store and would be designed as a "flagship" store that showcases the best of everything Raley's has to offer. It would include décor and merchandise that is state-of-the-art with the most modern and innovative displays and equipment of any store in the chain. The exterior would include highquality building materials unique to this location. In addition to a Raley's grocery store the project proposes to construct an additional six buildings to include 53,165 sf of retail space for a total of 108,165 sf, as shown in Figure 2-4, Site Plan and in Table 2-1.

Proposed Buildings	Square Footage			
Grocery Store	55,000			
Shops 1	9,282			
Tenant Building	12,000			
Shops 2	11,903			
Shops 3	6,000			
Shops 4	6,000			
Shops 5	7,980			
Total	108,165			
Proposed Parking	Spaces			
Vehicles	457			
Bicycles				
Short term	57			
Long term (lockers)	11			

Table 2-1 Proposed Project Land Use

Source: Site Plan, MCG Architects 2016; see Figure 2-4.

Immediately adjacent to the project site on the southeast corner of Wentworth Avenue and Freeport Boulevard are two existing banks - East West Bank and Bank of America. The project applicant has purchased the parcel leased by East West Bank, but no changes to this property are proposed as part of this project. The project applicant currently owns one residence at 1919 Wentworth Avenue and has purchased a second residence, located at 1913 Wentworth Avenue. Both residences would be removed to accommodate the project.

The existing Raley's grocery store would close and relocate to the new site. The project developers are working with Raley's to secure a new tenant for the existing space to ensure the existing retail center remains an active part of the community. The targeted replacement tenant would have a use that is complementary to Raley's, such as a health club or a large format soft goods retail or hardware store. However, changes to the existing store are not a part of this project and would be subject to its own review and entitlement process once a new tenant is identified.

As shown in Figure 2-4, a small retail building is proposed adjacent to Wentworth Avenue (Shops 5); two other retail buildings are proposed adjacent to Freeport Boulevard (Shops 3 and 4); and the other four buildings, including the Raley's grocery store, are proposed internal to the site. The retail shops adjacent to Freeport Boulevard and Wentworth Avenue would be designed to provide access from internal to the site as well as from the adjacent roadways.



The project applicant is also proposing a slight variation to the site plan to accommodate the inclusion of Bank of America if, in the future, the bank opts to be included within the project boundary (Scheme B). The only changes to the site plan under Scheme B would be Shops 2 would be divided into two buildings separated by a paseo, and there would be vehicle access to connect the bank parking lot with the proposed project's parking lot. Under Scheme B the building square footages all remain the same with the exception of Shops 2, which is slightly smaller than under the proposed project. There would be no changes to the existing bank building or parking as shown in Figure 2-5, Scheme B Site Plan, and Table 2-2. All of the other project elements described below would be the same for Scheme B.

Proposed Buildings	Square Footage			
Grocery Store	55,000			
Shops 1	9,282			
Tenant Building	12,000			
Shops 2	11,185			
Shops 3	6,000			
Shops 4	6,000			
Shops 5	7,980			
Total	107,447			
Proposed Parking	Spaces			
Vehicles	5341			
Bicycles				
Short term	57			
Long term (lockers)	15			

Table 2-2Scheme B – Land Uses

Source: Site Plan, MCG Architects 2016; see Figure 2-5.

Note:

Includes 77 parking spaces in the Bank of America parking lot.

To minimize noise and to provide privacy for the adjacent residences, the project includes a 40foot-wide setback for the proposed Raley's store along the western boundary of the site. Within this area a paved driveway would be provided behind the Raley's store for emergency vehicle access along with a 12-foot-high masonry block wall adjacent to the western boundary. For security reasons, a locked gate and an 8-foot-high fence would be located on the north and south sides of the Raley's store to eliminate access to the setback area (the west and north sides of the building). Access would only be provided for fire trucks in the event of an emergency or fire, using a "knox box." The fence would be constructed of tubular steel or another similar material that is vandal resistant.

Along the northern boundary there would be an 82-foot setback and a 10 to 12-foot-high masonry wall along with trees planted adjacent to the wall. A 95-foot setback would be provided

between the project driveway along Wentworth Avenue and the closest residence to the south. Creeping ivy is proposed on the back side of the Raley's grocery store that would soften the appearance of the wall. In addition, trees are proposed adjacent to the wall along the western boundary of the site to provide additional privacy for adjacent residences.

The loading area for Raley's grocery store would include a depressed loading dock that includes two truck bays for larger trucks and a compactor. The loading dock would be recessed 4-feet on the southern side of the building. To minimize noise, the loading dock would be screened with a 12-foot-high masonry wall separating the residences to the west. The closest residence is approximately 50 feet from the loading dock area. Currently Raley's receives 30-40 deliveries per week with a majority of the deliveries occurring between 6 a.m. and noon. It is anticipated a similar number of deliveries would occur for the new store. Trucks in the loading area would be instructed by Raley's not to leave their engines idling and to turn off their vehicles. Electrical hookups would be provided in the loading docks for use by trucks needing electricity.

The remaining Shops tenants would be serviced by small delivery trucks either at the front or side of the building. No loading docks would be required for these other retail uses.

Trash and recycling containers would be contained within a 10-foot by 18-foot space enclosed within a 6-foot-high concrete block wall. A total of four trash and recycling enclosures would be located throughout the project site. The trash enclosures would be located on the north side of Shops 4 and 5, the west side of Shops 3, the south side of Shops 2, and near the loading dock on the south side of the Raley's store.

Raley's currently employs 115 people and at this time does not anticipate increasing the number of employees. Store hours would remain 6 a.m. to 11 p.m. seven days a week. An additional 120 employees is assumed for the associated retail space for a total of 235 employees.

Access, Circulation, and Parking

Vehicle access would be provided by the main project entrance, a driveway off of Freeport Boulevard that would provide both ingress and egress to the site. A left turn lane is proposed from Freeport Boulevard to allow access for vehicles traveling north. A secondary access point would be provided along Wentworth Avenue. This would be the primary access for delivery trucks entering the site for deliveries to Raley's and the other retail uses located in the southern portion of the site.



Vehicle circulation throughout the site would be provided via striped on-site drive lanes that would permit vehicle access and parking.

Surface parking is proposed as shown in Figure 2-4. A total of 457 surface parking spaces would be provided. The City requires 1 space per 2,000 sf restaurant or retail uses. Additional on-street public parking is also available along Wentworth Avenue. The project also includes bicycle parking consistent with the City's Zoning Ordinance. Long-term Class I and short-term Class III parking would be provided throughout the site. Class I parking would be provided by 11 secure bike lockers with an additional 57 bike spaces provided in bike racks throughout the project site.

Pedestrian and Bicycle Access

Pedestrian access would be provided from a 6-foot-wide sidewalk connecting the project site to Wentworth Avenue and Freeport Boulevard. Sidewalks and pedestrian plazas would provide pedestrian access throughout the site. The project also includes new sidewalks along the project frontage along Freeport Boulevard and Wentworth Avenue consistent with City standards. Figure 2-6 illustrates the project's plan for pedestrian and bicycle access.

Bicycle access would be provided along all internal driveways within the project site. Signs would be included encouraging bicyclists to walk their bikes on the pedestrian sidewalks.

Public Spaces, Lighting and Landscaping

The project includes approximately 17.600 sf in outdoor public spaces, including a public gathering space in front of Shops 2 with seating and landscape features, as shown on Figure 2-4. This gathering space would provide a small outdoor plaza and places for people to sit and gather. The project may also include public art or other architectural features (i.e., decorative paving materials) that would create visual interest. The most likely location for any public art would be in the plaza area in front of Shops 2 (see Figure 2-4). There would be no amplified speakers or programmed events within the public spaces.

Project lighting would include building lights and parking lot lights. All lighting would conform to the City's General Plan policy 6.1.12, which requires lighting be "shielded and directed downward to minimize impacts on adjacent residential uses." Parking lot and driveway lighting would use pole-mounted, multi-head fully shielded fixtures approximately 25-feet tall (similar in height to the existing Raley's parking lot light fixtures). The pole placement would provide security lighting throughout the site and fixture heads would be shielded to avoid light spillage into adjacent properties. Pedestrian and plaza lighting would incorporate ambient and decorative fully shielded fixtures for nighttime dining. Security lighting along the rear of the Raley's store and the loading dock area would consist of wall-mounted fixtures mounted at

between eight to ten feet above grade with cut-off shields and motion sensors to avoid light spillage into adjacent properties. Building lights on the Raley's grocery store and the adjacent shops would be mounted at a height of between 10 feet to 14 feet. No separate lighting would be necessary for the enclosed trash and recycling containers.

The project includes an extensive landscaping plan that relies on drought tolerant species. A total of approximately 259 trees would be planted throughout the site, as shown on Figure 2-7, Landscaping Plan. Species of trees includes Western Redbud, Italian Cypress, Crape Myrtle, Olive, Sycamore, Yew Pine and Southern Live Oak. Creeping ivy would be planted along the back side of the Raley's grocery store. This would help soften the appearance of this wall for the surrounding neighbors.

The project's landscaping plan is designed to help blend the relationship between the project site and the mature landscaping that is prominent throughout Land Park and surrounding neighborhoods. The landscaping plan is consistent with the City's Parking Lot Tree Shading Design and Maintenance Guidelines (City of Sacramento 2003) that require all new parking lots to include tree plantings designed to result in 50% shading of parking lot surface areas within 15 years. Landscaping would be irrigated using drip irrigation with "smart" irrigation controls to minimize water usage.

Other landscape elements include decorative pots with seasonal plantings; raised planters with decorative walls; shade structures; decorative paving patterns using multiple materials and built-in seating areas. Hardscape areas may also introduce a mix of different paving applications, ranging from pavers, stamped concrete and possibly more pervious options such as decomposed granite. The goal is to create an environment that provides a mix of materials and textures.

Building Design

The buildings have been designed to ensure compatibility with the surrounding Land Park neighborhood. The style of the buildings is contemporary with exterior materials that include composite siding, stucco, stone veneer, and brick veneer. The color palette includes tan, gold, brown, gray, red brick and neutral stone. Buildings would vary in height from 20 to 23 feet for Shops 2 through 5 and 25-feet for Shops 1 and the tenant building. The roof height of the grocery store would be 25 feet around the sides and rear of the building increasing to up to 40 feet at the highest point on the east side (front) of the building facing the parking lot. The increase in building height is due to architectural features on the front of the building. There is a small stone accent wall that increases the total height of the proposed buildings and the architectural features described. Additional architectural features include metal and wood lattice; metal canopies; green walls with vines; and architectural arbors. Freestanding buildings with multiple exposures include architectural detailing on all visible sides. There are no windows proposed along the west or north facing sides of the Raley's store.





STEPS WITH POTS EVE. HEASE PUNCHED METAL PANEL FENCE 110'OUFB 12NV/210 8 NUL 3 11 2 NUL 3 CAPPED SEATUALL PRE-CAST CAP COLUR FIN. STAU MATCH LOW FLOWERING SAND FINISH STUCED

TYPICAL SPECIMEN OAK PLANTING DETAIL

Proposed Landscaping Plan

FIGURE 2-7


1 METAL CANOPY 6 STUCCO ACCENT AH Ŧ 훖 H 3 -H 2 STUCCO 7 WOOD LOUVER 3 8 STOREFRONT COPING 4 NOT USED 9 METAL DOOR TO PARAPET 5 MASONRY VENEER 10 GREEN SCREEN 11 WOOD SIDING +25-0 ATT tenant T.O. PILASTE LEGEND: MATERIAL/TYPE MANUFACTURER COLOR/NUMBER Transa Part 10 EXTERIOR CEMENT PLASTER, WALLS AND TRIM: 152 52 1 52 1 -C-O'ATT A PAINT BENJAMIN MOORE ASHLAND SLATE #1608 e C 6 C 6 C B PAINT BENJAMIN MOORE COBBLESTONE PATH. #1806 с PAINT BENJAMIN MOORE SILVERY MOON, #1604 PAINT BENJAMIN MOORE DEEP OCHRE, #1048 LATTE #2163.60 E PAINT RENJAMIN MOORE . c. PAINT DEN JAMIN MOODE WHITALL BROWN #HC-69 MM EAST Le.a. `@-----@-----@ ALUMINUM STOREFRONT: AA ALUM STOREFRON KAWNEER ANODIZED ALUMINUM, CLEAR 6 1 7 5 3 2 6 3 C A DD C C A A 2 EXTERIOR WALL FINISHES CC STONE VENEER STACKED SLATE, CHINA NATURAL CT.O. PARAPET DD BRICK VENEER MONEAF COMMERCIAL SERIES, RED - DIESKIN C.D. PARAPET EE COMPOSITE SIDING RESYSTA FVG-C24 +37-0" AT +35-0 ANT T.O. PARAPET C D E A в F CAP AFF 臣 10 CC DD EE NORTH AA LAND PARK COMMERCIAL CENTER SACRAMENTO, CALIFORNIA

SOURCE: MCG Architects, 2016

Grocery Store/Shops 1 Building Elevation

FIGURE 2-9

Land Park Commercial Center

DUDEK

FINISH MATERIAL KEYNOTES:







WEST



DUDEK



1 METAL CANOPY 6 STUCCO ACCENT 11 WOOD SIDING 2 7 STUCCO WOOD LOUVER 12 SPANDREL GLASS 3 COPING 8 STOREFRONT 4 NOT USED 9 METAL DOOR 5 10 MASONRY VENEER GREEN SCREEN LEGEND: MATERIAL/TYPE MANUFACTURER COLOR/NUMBER EXTERIOR CEMENT PLASTER, WALLS AND TRIM: A PAINT BENJAMIN MOORI ASHLAND SLATE, #1606 PAINT BENJAMIN MOORE COBBLESTONE PATH, #1606 в PAINT BENJAMIN MOORE SILVERY MOON, #1604 PAINT BENJAMIN MOORE DEEP OCHRE, #1048 D BENJAMIN MOORE LATTE. #2163-60 PAINT PAINT BENJAMIN MOORE WHITALL BROWN, #HC-69 ALUMINUM STOREFRONT: AA ALUM STOREFRONT KAWNEER ANODIZED ALUMINUM, CLEAR EXTERIOR WALL FINISHES: CC STONE VENEER STACKED SLATE, CHINA NATURAL DD BRICK VENEER MCNEAR COMMERCIAL SERIES, RED - DIESKIN EE COMPOSITE SIDING RESYSTA FVG-C24 в С D E F Α

FINISH MATERIAL KEYNOTES:

AA

CC

DD

EE

LAND PARK COMMERCIAL CENTER SACRAMENTO, CALIFORNIA

SOURCE: MCG Architects, 2016

FIGURE 2-11

Land Park Commercial Center

Shops 3 Building Elevation



1 A 5 3 6 2 DD B B C 2 F 3 B 5 DD 1 A +25-0" NFF 1.0. PARAPET +22"-0" AFF

FINISH MATERIAL KEYNOTES:



The primary HVAC unit for the Raley's building would be located on the roof generally in the center. There would be an additional 3 or 4 smaller units required, but their location would depend on the final store layout. However, it is anticipated these units would be located closer to the northwest corner of the roof. The HVAC units for the remaining buildings (Shops 1 through 5) are centered over each tenant space along the central spine of the building's roof.

All building mounted signage would comply with the City's zoning requirements and would include individually mounted and internally illuminated letters/signs. In accordance with City standards, "two attached (wall-mounted) signs are permitted for each occupancy. Such signs shall not exceed a total aggregate area of three square feet of sign area for each front foot of building occupancy" (City of Sacramento 2016a). The project applicant would like to incorporate the existing Raley's sign into the new store signage and is currently working with the current landlord to get approval to relocate the sign to the new location.

Infrastructure and Energy Features

Water

The City of Sacramento has an existing public water system consisting of multiple public water mains adjacent to the project site in Wentworth Avenue, Sherwood Avenue, and Freeport Boulevard. The existing water mains vary in size from 6-inches to 10-inches in diameter. Existing public fire hydrants are distributed along the public roadways adjacent to the project site.

The proposed project's water infrastructure system would attempt to use existing water connections where feasible, and abandon any connections determined inadequate for the project. Water and irrigation would be metered with City approved backflow devices and in accordance with City standards. In accordance with City standards, individual domestic water service would be provided to each lot. It is anticipated pipe sizes would range from 2-inch to 4-inch in diameter, with connections to the existing water mainlines in Wentworth Avenue and Freeport Boulevard. A common irrigation system would be used to irrigate the entire site with service provided from the existing water main located in Wentworth Avenue.

Water for fire services would also include approved backflow devices, but would not be metered in accordance with existing City polices. The project's fire service water system would be a separate, private looped system, with multiple points of connection to the City's system to increase on-site fire supply and pressure. The minimum lines would be 8-inches in diameter, with connections to the existing mainline in Wentworth Avenue, Freeport Boulevard, and Sherwood Avenue. On-site private fire hydrants and individual building fire sprinkler services would be served by the on-site system.

Wastewater

There are existing City sewer main lines ranging in size from 9-inches to 12-inches in diameter adjacent the project site in Wentworth Avenue, Sherwood Avenue and Freeport Boulevard. It is anticipated the proposed on-site improvements would be served by 8-inch sewer lines, with a single 8-inch connection to the city's existing sewer mainline in Wentworth Avenue.

Stormwater and Drainage

Existing public storm drain main lines ranging in size from 12-inches to 42-inches in diameter are located adjacent to the project site. It is anticipated the proposed on-site stormwater and drainage system would be served by a network of on-site private storm drain pipes ranging in size from 10-inches to 24-inches, with a single 24-inch service connection to the existing city public storm drain mainline located in Freeport Boulevard.

The percent of the project area covered by impervious surfaces would increase from about 36% under existing conditions to 88% under the proposed project.

The City of Sacramento requires all infill development comply with the City's "Do No Harm" policy, which requires "drainage systems function as well, or better, as a result of the proposed construction, and that there is no increase in flooding or in water surface elevation with negative impacts to individuals, streets, structures, infrastructure, or property" (City of Sacramento 2009, p. 11-3). In order to comply with this standard, underground storage facilities through the use of oversized pipes, storm vaults, or similar methods, would be incorporated into the project design to ensure adequate storm drainage is provided and there is no increase in stormwater.

The project is also required to provide post construction stormwater quality treatment in accordance with current City requirements. Post construction treatment methods may include stormwater planters, vegetated swales, subsurface infiltration methods, and underground mechanical systems, as noted previously.

A drainage analysis has been prepared and is included in Appendix F.

Energy Efficiency Features

The project has been designed to meet and exceed by 5% the current California Building Energy Efficiency Standards (Title 24 2013 standards). In addition, the project includes energy efficient features such as low flow plumbing fixtures; energy efficient HVAC systems; LED lighting; low VOC paints and adhesives; interior daylighting; and energy efficient building envelopes including windows and insulation, consistent with the California Green Building Code. The project would also comply with the CALGreen Tier 1 water efficiency and conservation standards.

Site Clearing, Grading, and Construction

The first phase of project construction would include removing all the buildings and clearing the site. This is anticipated to take approximately 4 months. Subsequent phases would include site grading and utility trenching, followed by building construction. It is anticipated that approximately 11,000 cubic yards of soil would be required to be exported off the project site.

Construction staging, including equipment and construction worker vehicles would generally occur on site. Per City requirements, the project applicant is required to prepare a traffic management plan for construction vehicles and equipment that would be reviewed and approved by the City's Department of Public Works prior to beginning any construction activities. Daily construction trips would range from 30 to 60 vehicle trips including construction deliveries and workers. The majority of traffic would be along Freeport Boulevard to Sutterville Road to access Interstate 5. Most of this traffic would be from construction workers arriving between 7:00 a.m. and 8 a.m., and leaving between 4 p.m. and 5 p.m. The roads used for access would be in the construction traffic management plan to be reviewed and approved by the city.

Project Schedule

If the project is approved in late 2016 project construction would commence in late Spring early Summer 2017. All of the buildings would be constructed in the same phase and there would not be any phasing of project components. Construction is anticipated to take 14 months, with completion scheduled by August 2018.

Off-Site Improvements

Off-site improvements include new curb, gutter and sidewalk along Freeport Boulevard and Wentworth Avenue adjacent to the project frontage. In addition, the project applicant would install new street lighting along Freeport Boulevard and a new left turn lane on Freeport Boulevard to access the project site for vehicles traveling north (if feasible, per roadway safety standards). New water, sewer and storm drain connections would be required to tie into public mainlines located in Wentworth Avenue and Freeport Boulevard.

2.6 REQUIRED DISCRETIONARY ACTIONS AND APPROVALS

The City of Sacramento requires the following discretionary actions for project approval:

• Certification of the EIR and adoption of the Mitigation Monitoring Plan. Before the City can approve the proposed project, it must certify that the EIR was completed in compliance with the requirements of CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of

the City of Sacramento. Approval of the EIR also requires adoption of a Mitigation Monitoring Program (MMP), which specifies the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment. The City would also be required to adopt Findings of Facts part of project approval.

- **Rezone.** The project requires a rezone from Multi-Unit Dwelling Executive Airport Overlay (R-2A-R-EA-4 & R-2A-EA-4) zone and Single-Unit or Duplex Dwelling Executive Airport Overlay (R-1A-EA-4) to General Commercial Executive Airport Overlay zone (C-2-EA-4).
- **General Plan Amendment.** The project requires redesignating the site from Suburban Neighborhood Low Density and Suburban Neighborhood Medium Density to Urban Corridor Low Density.
- **Conditional Use Permit** for a retail store exceeding 40,000 gross square feet.
- Site Plan and Design Review for the construction of a commercial center on a 9.87-acre site.
- **Tentative Map** to subdivide six (6) parcels, total of 9.87 acres into five (5) commercial parcels that each contains a commercial building.

Other Required Ministerial Permits

Grading Permit and Stockpile Permit. The City regulates land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from construction activities. Prior to any earth-disturbing activities directed by the project applicant, the project applicant will be required to obtain a permit from the City per the City's grading ordinance (Sacramento City Code, Chapter 15.88, City of Sacramento 2016b). All grading must be done in compliance with the conditions of grading approval.

Conditions of Project Approval

The City's Conditions of Project Approval require the project applicant to install a new traffic light at Freeport Boulevard and Meer Way and add a striped pedestrian crossing of Wentworth Avenue near the project's driveway off of Wentworth Avenue. This crossing would provide access to the future uses at the existing Raley's store site, as well as to the sidewalk on the south side of Wentworth Avenue. A short median on Wentworth Avenue would also be constructed near the driveway to Bank of America. Traffic signal phasing at the intersection of Freeport Boulevard with Wentworth Avenue/Stacia Way would also be modified to improve pedestrian crossing of Freeport Boulevard. These are not mitigation measures and are not required to reduce any effects of traffic associated with the project. The project does not result in any traffic impacts that require mitigation, as detailed in Section 4.10, Transportation and Circulation. The project applicant has voluntarily agreed to these conditions of approval as requested by the City.

Responsible and Permitting Agencies

Responsible and permitting agencies are state and local public agencies, other than the lead agency, that have some authority to carry out or approve a project or that are required to approve a portion of the project for which a lead agency is preparing or has prepared an EIR or Initial Study/Negative Declaration. A list of trustee, responsible and/or permitting agencies is included below. However, this list is not exhaustive and could include other agencies. This Draft EIR has been designed to provide information to these agencies to assist them in the permitting processes for the proposed project. While CEQA is not binding on federal agencies, and no federal agencies have been identified that would be required to take action on the project, any such agency may use the analysis in this document in order to assist with the preparation of their own analyses required by federal law.

Central Valley Regional Water Quality Control Board (CVRWQCB). Ensures compliance with the City's National Pollutant Discharge Elimination System (NPDES) Permit for any stormwater discharge associated with construction activity.

Sacramento Metropolitan Air Quality Management District (SMAQMD). Oversees air quality and has the authority to require mitigation fees.

Airport Land Use Commission. The Airport Land Use Commission is required to review the project to determine consistency with the Comprehensive Land Use Plan.

Sacramento County Environmental Compliance Division. Oversees the removal or abandonment of septic systems and issues a Septic Tank Destruction Permit.

California Department of Fish and Wildlife. Responsible for protecting natural resources including protected plant and animal species.

2.7 REFERENCES CITED

City of Sacramento. 2003. Parking Lot Tree Shading Design and Maintenance Guidelines.

City of Sacramento. 2009. "Do No Harm" Policy.

City of Sacramento. 2016a. City of Sacramento Code, Title 17, Zoning. As amended February 2016.

City of Sacramento. 2016b. City of Sacramento Code, Title 15, Buildings and Construction; Chapter 15.88. Grading, Erosion and Sediment Control. As amended February 2016.

CHAPTER 3 LAND USE AND PLANNING

3.0 INTRODUCTION

This chapter of the Draft EIR describes existing and planned land uses within and adjacent to the project site, current land uses, land use designations, and zoning, and analyzes the consistency of the proposed Land Park Commercial Center Project (proposed project) with existing land use plans and policies as well as land use compatibility with adjacent lands and with uses proposed internal to the project.

CEQA Guidelines Section 15125(d) provides that the environmental setting of an EIR must discuss "any inconsistencies between the proposed project and applicable general plans and regional plans." Potential inconsistencies between the proposed project and the *Sacramento 2035 General Plan*, the *Land Park Community Plan* (a subset of the General Plan), *Executive Airport Comprehensive Land Use Plan*, and the City of Sacramento (City) Zoning Ordinance are discussed in this chapter. In addition, various technical sections in Chapter 4 of this Draft EIR evaluate and analyze any potential physical/environmental effects and potential incompatibilities that may be considered in the determination of physical environmental impacts.

Changes in population (and housing) in and of themselves are generally characterized as social and economic effects and are not considered physical effects on the environment. CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic changes are connected to physical environmental effects. A social or economic change related to a physical change may be considered in determining whether the physical change is significant (CEQA Guidelines Section 15382). The guidance for assessing economic and social effects is set forth in Section 15131(a) of the CEQA Guidelines:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on physical changes.

While an increase or change in population resulting from new development does not necessarily cause direct adverse physical environmental effects, indirect physical environmental effects such as increased vehicle trips and associated increases in air pollutant emissions and noise could occur. The proposed project does not include the addition of any new residential units and

proposes to include 235 new employees at buildout. Raley's currently employs 115 people and at this time does not anticipate increasing the number of employees. The additional 120 employees is attributed to the shops. It is anticipated the new employees would be local. Therefore, information on an increase in population and housing attributed to the proposed project is not included. However, the City requested preparation of an Urban Decay Analysis (see Appendix I) to determine if the proposed project could have the potential to contribute to the loss of revenue and eventual closing of local merchants, thereby potentially contributing to a condition of urban decay. The decision by the Fifth District Court of Appeal in Bakersfield Citizens for Local Control v. The City of Bakersfield (124 Cal.App.4th 1184, 1204) notes that CEQA requires a lead agency to consider and analyze the potential for the introduction of planned retailers to result in adverse physical impacts on the environment by causing a chain reaction of store closures and long-term vacancies, otherwise referred to as a condition of "urban decay." This analysis is not required for all projects subject to CEQA, but only projects where there is the perceived potential for urban decay or deterioration to result. The key indicator from a CEQA perspective is impacts on the existing physical environment, which in the context of an urban decay analysis includes existing stores and commercial real estate conditions, as measured by current baseline conditions. Concerns associated with urban decay were raised in comments on the Notice of Preparation (NOP) and are addressed in this chapter.

Comments received in response to the NOP (see Appendix A) related to land use included concerns about the necessity of rezoning the project site to commercial, the possibility of rezoning instead to C-1 (Limited Commercial Zone), concerns about re-designation from Suburban Low- and Medium-Density to Urban Corridor Low, and concerns regarding vacating the current Raley's site and contributing a large empty storefront to the neighborhood and associated urban decay. All of these issues are addressed in this chapter.

Information for this chapter was primarily obtained from the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b), the *Land Park Community Plan*, and the Land Park Commercial Center Urban Decay Analysis, ALH Urban and Regional Economics, January 2016 (ALH 2016).

3.1 EXISTING SETTING

The following provides an overview of the existing land uses on the project site as well as the surrounding land use designations and zoning.

Existing Land Uses

The project site is located in a developed area of the City along a neighborhood retail corridor, Freeport Boulevard, on the site of a former nursery (Capital Nursery).

The project site contains vacant buildings, sheds, and greenhouses that were part of the former nursery which occupied the site from roughly 1936 through 2012. There are two single-family homes located along Wentworth Avenue (1919 Wentworth Avenue and 1913 Wentworth Avenue) that are also included within the project site. The homes are currently vacant and were constructed in 1938 and 1950, respectively. Adjacent to the project site at the corner of Freeport Boulevard and Wentworth Avenue are two banks: Bank of America and East West Bank and associated parking lots. Both of these buildings are not included within the project site. Under Scheme B access to Bank of America would be included within the project site.

The project site is flat and does not contain any streams, waterways or wetland areas. A variety of non-native grasses and weedy or ornamental plant species are present throughout the former Capital Nursery portion of the site. The site also contains a few ornamental trees located in the center of the site and in the parking lot located along Wentworth Boulevard. There are no Heritage trees present on the site.

The project site is identified by the following Assessor Parcel numbers (APNs) 017-0121-001 (4700 Freeport Boulevard – Capital Nursery site), -006 (2009 Wentworth Avenue – parking lot), -007 (1929 Wentworth Avenue – parking lot), -008 (1927 Wentworth Avenue – parking lot), -009 (1919 Wentworth Avenue - residence), and -010 (1913 Wentworth Avenue - residence).

Surrounding Land Uses

Surrounding land uses include a residential neighborhood to the west, Freeport Boulevard and commercial uses to the east, a small retail area and residences to the north, and a grocery store (Raley's) and residences to the south.

Land surrounding the project site is designated in the City's 2035 General Plan Suburban Neighborhood Low Density to the west, north and south; Suburban Neighborhood Medium Density to the south, and Urban Corridor Low to the east, north and south (see Figure 3-1, Existing General Plan Land Use Designations).

2035 General Plan and Community Plan Land Use Designations

The City's 2035 General Plan designates the site Suburban Neighborhood Low Density, Suburban Neighborhood Medium Density, and Urban Corridor Low Density. Executive Airport is located approximately three miles to the south; therefore, a portion of the project site is within the Executive Airport (EA) overlay zone, as shown in Figure 3-1.

Allowable land uses within the Suburban Neighborhood Low and Medium density include single family and multifamily housing, accessory units, and limited neighborhood-serving commercial uses on lots two-acres or less. Allowable uses in the Urban Corridor Low density include retail,

service, office, and residential uses; gathering places such as plazas, courtyards, or parks; compatible public, quasi-public, and special uses; and large-scale development with a mix of nonresidential and residential uses.

The project site is within the overflight (EA-4) zone of Executive Airport. This zone is the area where there are no restrictions to development.

The project site is also located within the Land Park Community Plan Area (Plan Area). The Land Park Community Plan Area encompasses 6.7 square miles or 4,327 acres just south of Downtown Sacramento. It is bounded on the north by Broadway, on the south by 35th Avenue, on the east by Highway 99, and on the west by the Sacramento River. The Plan Area is characterized by traditional neighborhoods, tree lined streets, parks, and local shops. Nine neighborhoods make up the Land Park Community Plan Area including: Upper Land Park, Land Park, Curtis Park, Sacramento City College, North City Farms, Carleton Tract, Little Pocket, Hollywood Park, and Mangan Park. The Land Park Community Plan does not include any goals, policies or land use designations (City of Sacramento 2015a).

Existing Zoning

The City of Sacramento's Zoning Code (Title 17) specifies building setback, building height, building density, and site coverage to ensure that the public's health, welfare, and safety would be protected and that development occurs in a planned, logical fashion. The project site is currently zoned Residential Single Family (R-1), Residential Single Unit or Duplex Executive Airport Overlay (R-1A-EA-4), Residential Multi-Unit Dwelling Executive Airport Overlay (R-2A-R-EA-4 & R-2A-EA-4), and General Commercial (C-2, C-2-EA-4). Figure 3-2 shows the existing and proposed zoning.

Under the residential zoning, R-1 and R-1A the maximum allowable building height is 35 feet and the maximum number of units ranges from one single-unit unit per lot to two units per lot. Under R-2A, the maximum density of 17 units per acre with a maximum building height of 35 feet is allowed.

The commercial zoning of C-2 allows buildings up to 45 feet tall within 39 feet of a residential use increasing to 65 feet tall at a distance of 80 feet from the nearest residence. The Floor Area Ratio (FAR) of between 0.3 to 3.0 is allowed within a C-2 zone.

3.2 REGULATORY SETTING

There are no federal or state requirements applicable to the project.



DUDEK

Land Park Commercial Center

Existing General Plan Land Use Designations



Local Regulations

Sacramento 2035 General Plan

The Sacramento 2035 General Plan includes goals and policies that encourage a more compact growth pattern, including the "infill" and reuse of underutilized properties to increase walking and reduced automobile use. In addition, sustainable and livable residential neighborhoods with distinctive and vibrant centers and corridors that incorporate energy- and resource-efficient buildings and landscapes and attractive pedestrian-friendly streets is the focus of the Citywide land use and urban design goals and policies.

The following goals and policies from the Land Use and Urban Design Element of the 2035 General Plan applicable to the project are listed below. A consistency analysis for all the policies listed below is included in Appendix K.

Goal LU 1.1 Growth and Change. Support sustainable growth and change through orderly and well-planned development that provides for the needs of existing and future residents and businesses, ensures the effective and equitable provision of public services, and makes efficient use of land and infrastructure.

LU 1.1.1 Development Intensity at Less than the Minimum Floor Area Ratio. The City shall permit development at less than the required minimum FAR if only a ministerial permit is required. Where a discretionary permit is required, a development with a FAR at less than the required minimum may be deemed consistent with the General Plan if the City finds that (1) the use involves no building or by its nature normally conducts a substantial amount of its operations outdoors, or (2) the initial site development is being phased and an overall development plan demonstrates compliance with the FAR standard, or (3) the use is temporary and would not interfere with long-term development of the site consistent with the FAR standard, or (4) the building size or lot coverage is constrained beyond what is otherwise allowed by the zoning designation of the site, due to the existence of an overlay zone or because of environmental features, such as wetlands.

LU 1.1.5 Infill Development. The City shall promote and provide incentives (e.g., focused infill planning, zoning/rezoning, revised regulations, provision of infrastructure) for infill development, reuse, and growth in existing urbanized areas to enhance community character, optimize City investments in infrastructure and community facilities, support increased transit use, promote pedestrian- and bicycle-friendly neighborhoods, increase housing diversity, ensure integrity of historic districts, and enhance retail viability.

GOAL LU 2.1 City of Neighborhoods. Maintain a city of diverse, distinct, and well-structured neighborhoods that meet the community's needs for complete, sustainable, and high-quality living environments, from the historic downtown core to well-integrated new growth areas.

LU 2.1.1 Neighborhoods as a Basic Unit. Recognizing that Sacramento's neighborhoods are the basic living environments that make-up the city's urban fabric, the City shall strive through its planning and urban design to preserve and enhance their distinctiveness, identity, and livability from the downtown core to well integrated new growth areas.

LU 2.1.3 Complete and Well-Structured Neighborhoods. The City shall promote the design of complete and well-structured neighborhoods whose physical layout and land use mix promote walking to services, biking, and transit use; foster community pride; enhance neighborhood identity; ensure public safety; are family-friendly and address the needs of all ages and abilities.

LU 2.1.7 Good Neighbors. The City shall encourage businesses located within and adjacent to residential developments to conduct their business in a courteous manner by limiting disturbances and nuisances from operations and patrons, and to act as members of the community by making themselves available to respond to complaints and by participating in neighborhood/community meetings.

LU 2.1.8 Neighborhood Enhancement. The City shall promote infill development, reuse, rehabilitation, and reuse efforts that contribute positively (e.g., architectural design) to existing neighborhoods and surrounding areas.

Goal LU 2.4 City of Distinctive and Memorable Places. Promote community design that produces a distinctive, high-quality built environment whose forms and character reflect Sacramento's unique historic, environmental, and architectural context, and create memorable places that enrich community life.

LU 2.4.2 Responsiveness to Context. The City shall require building design that respects and responds to the local context, including use of local materials where feasible, responsiveness to Sacramento's climate, and consideration of cultural and historic context of Sacramento's neighborhoods and centers.

Goal LU 2.5 City Connected and Accessible. Promote the development of an urban pattern of well-connected, integrated, and accessible neighborhoods corridors, and centers.

LU 2.5.1 Connected Neighborhoods, Corridors, and Centers. The City shall require that new development, both infill and greenfield, maximizes connections and minimizes barriers between neighborhoods corridors, and centers within the city.

Goal LU 2.6 City Sustained and Renewed. Promote sustainable development and land use practices in both new development, reuse, and reinvestment that provide for the transformation of Sacramento into a sustainable urban city while preserving choices (e.g., where to live, work, and recreate) for future generations.

LU 2.6.1 Sustainable Development Patterns. The City shall promote compact development patterns, mixed use, and higher-development intensities that use land efficiently; reduce pollution and automobile dependence and the expenditure of energy and other resources; and facilitate walking, bicycling, and transit use.

LU 2.6.4 Sustainable Building Practices. The City shall promote and, where appropriate, require sustainable building practices that incorporate a "whole system" approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.

LU 2.6.8 Heat Island Effect. The City shall reduce the "heat island effect" by promoting and requiring, where appropriate, such features as reflective roofing, green roofs, light-colored pavement, and urban shade trees and by reducing the unshaded extent of parking lots.

Goal LU 2.7 City Form and Structure. Require excellence in the design of the city's form and structure through development standards and clear design direction.

LU 2.7.3 Transitions in Scale. The City shall require that the scale and massing of new development in higher-density centers and corridors provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights.

LU 2.7.4 Public Safety and Community Design. The City shall promote design of neighborhoods, centers, streets, and public spaces that enhances public safety and discourages crime by providing street-fronting uses ("eyes on the street"), adequate lighting and sight lines, and features that cultivate a sense of community ownership.

LU 2.7.7 Buildings that Engage the Street. The City shall require buildings to be oriented to and actively engage and complete the public realm through such features as building orientation, build-to and setback lines, façade articulation, ground-floor transparency, and location of parking.

LU 2.7.8 Screening of Off-street Parking. The City shall reduce the visual prominence of parking within the public realm by requiring most off-street parking to be located behind or within structures or otherwise fully or partially screened from public view.

Goal LU 6.1 Corridors. Support the development of major circulation corridors that balance their vehicular function with a vibrant mix of uses that contribute to meeting local and citywide needs for retail, services, and housing and provide pedestrian-friendly environments that serve as gathering places for adjacent neighborhoods.

LU 6.1.10 Visual and Physical Character. The City shall promote development patterns and streetscape improvements that transform the visual and physical character of typical automobile-oriented corridors by:

- Enhancing the definition of the corridor by locating buildings at the back of the sidewalk, and establishing a consistent street wall
- Introducing taller buildings that are in scale with the wide, multi-lane street corridors
- Locating off-street parking behind or between buildings (rather than between building and street)
- Reducing visual clutter by regulating the number, size and design quality of signs
- Removing utility poles and under-grounding overhead wires
- Adding street trees

LU 6.1.11 Differentiating the Corridor. The City shall promote development patterns that break up long, undifferentiated corridors of commercial strip development by establishing distinct activity nodes or centers that are distinguished by features such as their primary tenants, mix of uses, scale and intensity of development, and architectural character.

City of Sacramento Infill Strategy

In 2002, the City adopted the City of Sacramento Infill Strategy (Resolution 2002-277). The City's Infill Strategy is designed to promote quality infill development in the City and to establish priorities and programs to promote targeted infill development. This strategy was updated as part of the City's 2030 General Plan and is noted on the City's website (City of Sacramento 2016a) as:

Development and redevelopment of underused buildings and vacant lots in areas served by existing infrastructure. Development that channels economic growth into existing urban and suburban areas and conserves open space and agriculture at the periphery of the city (City of Sacramento 2009).

The project site meets the City's definition of land targeted for infill development.

Sacramento Executive Airport Comprehensive Land Use Plan

Every county with a public airport or with an airport served by a scheduled airline is required to prepare a Comprehensive Land Use Plan (CLUP). The Sacramento Area Council of Governments (SACOG) has been designated as the Airport Land Use Commission with the responsibility to prepare the CLUP. The CLUP provides the land use compatibility guidelines on which compatibility of land uses are determined. It also establishes the planning boundaries around the airport. Planning boundaries are established for height, noise, and safety. The project site is within the overflight zone of Executive Airport. This zone is the area where there are no restrictions to development (ALUC 1998). In addition, the Airport Land Use Commission is required to review the project to determine consistency with the CLUP.

3.3 LAND USE EVALUATION

This section evaluates whether or not the proposed project physically divides an established community; evaluates the project's compatibility with adjacent land uses; and evaluates the proposed project for consistency with applicable goals and policies contained in the City's 2035 General Plan, Land Park Community Plan, as well as consistency with the Executive Airport CLUP and the City's Zoning Ordinance. Physical environmental impacts resulting from development of the project site are discussed in the applicable technical sections in Chapter 4 of this Draft EIR. The discussion in this chapter differs from the impact discussions in that only general land use compatibility and land use plan or policy consistency issues are discussed, as opposed to a discussion of the physical impacts on the environment that could occur with implementation of the proposed project. This discussion complies with Section 15125(d) of the CEQA Guidelines, which requires EIRs to discuss potential conflicts with local or regional plans as part of the environmental setting. Therefore, the following discusses the compatibility of proposed land uses with adjacent land uses and uses proposed internal to the project; analyzes consistency with the City's 2035 General Plan, Land Park Community Plan, Executive Airport CLUP, and Zoning Ordinance (Title 17).

This consistency analysis provides the reader with a general overview of whether the project is in harmony with the overall intent of the City's 2035 General Plan goals and policies. It is within the City's decision makers' purview to decide if the proposed project is consistent or inconsistent with any applicable City goals or policies. The 2035 General Plan clarifies the role of the City in determining consistency as: "[t]he City, in its sole discretion, shall determine a proposed project's consistency with the City's General Plan. Consistency is achieved if a project will further the overall objectives and policies of the General Plan and not obstruct their attainment, recognizing that a proposed project may be consistent with the overall objectives of the General Plan, but not

with each and every policy thereof." (City of Sacramento 2015, p. 1-2). The discussions in this Draft EIR on the subject of General Plan consistency represent the best attempt of City staff to advise the City Council of its opinions as to whether the proposed project is consistent with identified goals and policies of the City's General Plan. Under state law, a development project cannot be approved if it is inconsistent with the General Plan; therefore, the proposed project could not proceed if determined by the City Council to be inconsistent with the General Plan (see *Clover Valley v. City of Rocklin* (2011) 197 Cal.App.4th 200, 238).

Based on the evaluation contained in Chapter 4 of this Draft EIR and in Appendix K along with the analysis in this chapter, the proposed project is generally consistent with the City's 2035 General Plan.

Implementation of the proposed project would result in a change in land use as compared to existing conditions, as well as a change in the type of use, but would be consistent with the City's intent to develop the site. Changes in land use are regulated by the planning policies adopted by each local governmental jurisdiction in California. Therefore, this change in land use is evaluated in comparison to the planning goals and policies contained in the City's 2035 General Plan. General plans provide the long-term objectives, principles, and standards for development, and all development proposals must be generally consistent with the overall land use guidance provided in a general plan. More detailed regulation and land use controls are applied through the City's zoning, subdivision, and grading requirements, as well as through other City regulations and ordinances. The project's consistency with applicable ordinances, as well as specific land use implications associated with development of the project, are discussed in this chapter and in other technical sections in Chapter 4 of this Draft EIR. The analyses of consistency with other planning documents (e.g., regional air quality plans) are provided in the applicable technical sections in Chapter 4 of this Draft EIR.

As noted in Chapter 2, Project Description, the project applicant is negotiating with Bank of America to include the bank within the project boundary (Scheme B). The only changes to the site plan (and the proposed project) would be Shops 2 would be divided into two buildings separated by a paseo, and there would be vehicle access to connect the bank parking lot with the proposed project's parking lot. Under Scheme B the building square footages all remain the same with the exception of Shops 2, which is slightly smaller than under the proposed project. There would be no change to the existing bank building or parking as shown in Figure 2-5, Scheme B Site Plan. For the purposes of this analysis, Scheme B would not change the findings presented below.

Urban Decay

As mentioned above, concerns regarding the potential for the proposed project to contribute to urban decay were raised during the scoping process. To evaluate the potential for the project to contribute or hasten urban decay, the Land Park Commercial Center Urban Decay Analysis (Urban Decay Analysis) was prepared by ALH Urban and Regional Economics (ALH Economics; see Appendix I). When looking at the phenomenon of urban decay, it is also helpful to note economic impacts that do not constitute urban decay. For example, a vacant building is not urban decay, even if the building were to be vacant over a relatively long time. Similarly, even a number of empty storefronts would not constitute urban decay. ALH Economics examined whether there was sufficient market demand to support the proposed project without affecting existing retailers so severely such as to lead toward urban decay.

The Urban Decay Analysis defines urban decay as "visible symptoms of physical deterioration that invite vandalism, loitering, and graffiti that is caused by a downward spiral of business closures and long term vacancies. This physical deterioration¹ to properties or structures is so prevalent, substantial, and lasting for a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community" (ALH 2016, p. 4). Based on the analysis, the project is not anticipated to contribute to the closure of existing retailers in the area and if there were to be a prolonged vacancy of a retail business conditions suggest any vacant buildings would be well-maintained and not result in urban decay conditions (ALH 2016, pp. 5, 6).

The analysis notes that while some existing stores may experience negative impacts following project completion in combination with other cumulative retail development within the City, there is limited evidence to suggest that closed or vacant retail space would exhibit traditional signs of deterioration and decay, such as graffiti, refuse dumping, and dilapidated fencing. In addition, existing vacant spaces throughout the area appear reasonably well-maintained, including those longer-term vacancies. This, plus the recent area leasing activity, indicates that the City as a whole, including the market area, is an appealing retail market. Therefore, the conclusion is implementation of the proposed project would not cause or contribute to urban decay (ALH 2016, p.55).

¹ The manifestations of urban decay include such visible conditions as plywood-boarded doors and windows, parked trucks and long term unauthorized use of the properties and parking lots, extensive gang and other graffiti and offensive words painted on buildings, dumping of refuse on site, overturned dumpsters, broken parking barriers, broken glass littering the site, dead trees and shrubbery together with weeds, lack of building maintenance, homeless encampments, and unsightly and dilapidated fencing.

Physical Division of an Established Community

The project site is located in a developed area of the City on the site of a former retail nursery (Capital Nursery) along a commercial corridor, as shown in Figure 2-2 in Chapter 2, Project Description. The project site is developed with buildings, sheds, and greenhouses formerly used for the nursery along with two vacant residences.

Uses that surround the project site include existing residential neighborhoods to the west, north and south, Freeport Boulevard and commercial uses to the east, a small retail area to the north, and a grocery store (Raley's) to the south.

The proposed project is located on a site that has been developed since 1936 (including one of the residences). Much of the surrounding area was developed in the 1940s and 1950s, around the project site. Due to its location and the fact that the project site has been developed for over 60 years development of the proposed project would not create a physical division of the existing established community.

Land Use Compatibility with Surrounding Uses

The proposed project includes development of a retail center anchored by a grocery store surrounded by six smaller commercial buildings. As noted previously, the majority of the project site (with the exception of the two residences) has been developed with a retail use (nursery) adjacent to the existing residential neighborhoods to the west, north and south. As shown in Figure 2-3, in Chapter 2, Project Description, residential uses currently exist immediately adjacent to the western half of the southern boundary and western portion of the northern boundary of the project site. A small commercial use exists adjacent to the eastern half of the northern portion of the site and along the eastern portion of the southern boundary of the project site, across Wentworth Avenue. Commercial uses are present across Freeport Boulevard to the east.

The project site is designated in the City's 2035 General Plan Urban Corridor Low Density (4.7 acres), Suburban Neighborhood Low Density (4.6 acres), and Suburban Neighborhood Medium Density (0.6 acre), as illustrated in Figure 3-1.

The project is proposing to redesignate the entire site to Urban Corridor Low and rezone the portions designated and zoned residential to commercial (C-2), consistent with the proposed land use changes. Uses permitted in the C-2 zone include single and multifamily residential units indicating that residential uses are compatible with the C-2 zone.

The proposed project is not expected to generate excessive noise, light, dust, odors, or air emissions that would be considered incompatible with adjacent uses, as evaluated in the technical sections included in Chapter 4 (see Section 4.1, Aesthetics, 4.2, Air Quality, and 4.6,

Noise). The project has been designed to shield the adjacent residences from activities that could create a nuisance or a disturbance to residents. The retail uses proposed by the project would be compatible with the existing residential and commercial/retail/office land uses to the south, north, east, and west of the site. Therefore, there would be no land use incompatibilities with surrounding uses.

Land Use Compatibility with Internal Uses

The proposed project has been designed as a retail center with complementary uses to serve the residential neighborhoods in the surrounding area including Land Park, South Land Park, Curtis Park, Hollywood Park, and Carleton Tract, as well as the City as a whole. To maintain a separation between cars, bicyclists and pedestrians the project has been designed to include 6foot wide sidewalks and areas designated for bicyclists and pedestrians, as illustrated in Figure 2-5, in Chapter 2, Project Description. Compatibility of the internal circulation plan is addressed in Section 4.9, Transportation and Circulation. It is not anticipated that the proposed project would result in any internal land use inconsistencies or incompatibilities.

Consistency with the Sacramento 2035 General Plan

The proposed project includes the reuse and redevelopment of a site that operated previously as a retail nursery (Capital Nursery) and also provided housing on two residential lots. The proposed project would include neighborhood-serving retail uses anchored by a grocery store, Raley's. The site is presently designated as Urban Corridor Low density, Suburban Neighborhood Low density, and Suburban Neighborhood Medium density in the City's 2035 General Plan. The project applicant is requesting a General Plan Amendment to redesignate the site from Suburban Neighborhood Low density and Medium density to Urban Corridor Low density. The General Plan defines Urban Corridor Low density as:

...street corridors that have multistory structures and more-intense uses at major intersections, lower-intensity uses adjacent to neighborhoods, and access to transit service throughout. At major intersections, nodes of intense mixed-use development are bordered by lower-intensity single-use residential, retail, service, and office uses. Street-level frontage of mixed-use projects is developed with pedestrian-oriented uses. The streetscape is appointed with landscaping, lighting, public art, and other pedestrian amenities (City of Sacramento 2015, p. 2-90).

Allowable uses include retail, service, office, and residential uses; gathering places such as plazas, courtyards, or parks; compatible public, and quasi-public, and special uses. The minimum FAR is .3 with a maximum FAR of 3.0 (City of Sacramento 2015, p. 2-90).

Key urban design characteristics include:

- Building heights generally ranging from two to six stories;
- Lot coverage generally not exceeding 70%;
- Building façades and entrances directly addressing the street;
- Buildings with pedestrian oriented uses such as outdoor cafes located at the street level;
- Attractive pedestrian streetscape, with sidewalks designed to accommodate pedestrian traffic, that includes appropriate landscaping, lighting, and pedestrian amenities/facilities;
- Public and semi-public outdoor spaces such as plazas, courtyards, and sidewalk cafes.

The proposed project incorporates the majority of the design features outlined above including building entrances oriented towards either Freeport Boulevard or Wentworth Avenue; an outdoor plaza and a courtyard area designed to provide places for people to gather; sidewalks, landscaping and lighting throughout the site to provide a safe and attractive environment for patrons; all of the project buildings would be less than six stories. Therefore, the proposed project generally meets the urban design characteristics established in the Urban Corridor Low designation.

2035 General Plan Goals and Policies

The proposed project's consistency with applicable goals and policies from the 2035 General Plan is described below and also in Appendix K.

Goal LU 1.1 and Policies LU 1.1.1 and LU 1.1.5, support infill development and growth in existing urbanized areas where City services are in place to support new uses and make efficient use of land and existing infrastructure. The project calls for a FAR of .24, which is slightly less than the minimum .30 FAR identified under the Urban Corridor Low Density designation. Policy LU 1.1.1 allows exceptions to this policy and allows any outdoor dining or gathering space to be omitted from the developed area (per exemption (1) in Policy LU 1.1.1) as well as any overlay zones or existing constraints that would not allow development (per exemption (4) in Policy LU 1.1.1). The project includes 17,600 sf in outdoor dining and gathering space as well as approximately 51,450 sf along the northern boundary of the project site where overland drainage currently flows from Freeport Boulevard to Babich Avenue and would need to be maintained. Therefore, the developable site area is reduced to 360,756 sf which results in a FAR of .30, consistent with the policy. In addition, Policy LU 1.1.5 promotes pedestrian and bicycle friendly neighborhoods, and enhances community character and retail viability. To address this goal and policies, the proposed project is located in a developed area of the City where services are available, and would provide a range of neighborhood-serving retail uses and places for people to gather close to the existing
neighborhoods in Land Park, South Land Park, Curtis Park and Hollywood Park, encouraging residents to walk and bike to the project site.

Goal LU 2.1 and Policies 2.1.1 and 2.1.3 are focused on maintaining diverse neighborhoods, promoting land uses that encourage biking and walking, enhancing neighborhood identity and addressing the needs of all ages and abilities. To address these policies, the project includes a mix of retail uses on a site that was previously developed and is located in close proximity to residential areas to encourage walking and biking and to serve the needs of the community. The anchor store, Raley's grocery store, has been in the neighborhood since the 1950s, and has created an identity for this stretch of Freeport Boulevard. The new store, located across the street from the existing Raley's location would allow for a continuation of the identity created by the existing Raley's store.

Policies 2.1.7 and 2.1.8 encourage businesses located within and adjacent to residential areas to conduct their business in a courteous manner by limiting disturbances and nuisances from operations and patrons, and to act as members of the community, and to have infill uses contribute positively to the neighborhood. The main anchor, Raley's, has been a member of the Land Park neighborhood since the 1950s and has an established track record as a good neighbor. It is anticipated this relationship with the neighborhood would not change with the project. The other retail uses have not been identified yet, but the goal is to attract restaurant and retail uses that contribute positively to the neighborhood. As noted in Chapter 2, the project has been designed to ensure compatibility with the surrounding Land Park neighborhood. The style of the buildings is contemporary with exterior materials that include composite siding, stucco, stone veneer, and brick veneer with a neutral tan, gold, brown, gray, red brick and natural stone color palette.

Goal LU 2.4 and Policy 2.4.2 promote projects that produce a high-quality built environment that reflects Sacramento's unique historic, environmental, and architectural context and building design that uses local materials and responds to Sacramento's climate and is considerate of the City's neighborhoods. As noted above, the project has been designed to ensure compatibility with the surrounding Land Park neighborhood using materials that include composite siding, stucco, stone veneer, and brick veneer with a neutral tan, gold, brown, gray, red brick and natural stone color palette.

Goal 2.5 and Policy 2.5.1 focus on development that is well-connected and accessible and minimizes barriers between neighborhoods and centers within the city. As noted previously, the project is located along a commercial corridor in an area that was previously developed with a retail use. The project site is located near existing residential neighborhoods and other retail and commercial businesses along Freeport Boulevard. The proposed project has been designed to provide pedestrian access from Wentworth Avenue and Freeport Boulevard, but does not

provide direct access from the neighbors located to the west and north in accordance with their wishes a direct connection not be provided. The project site is located in an area that already provides good access and is well-connected due to its visibility along Freeport Boulevard.

Goal LU 2.6 and Policies 2.6.1, 2.6.4 and 2.6.8 all address development that is sustainable and uses land efficiently, reduces automobile dependence, and supports more walking, bicycling and transit use. In addition, Policy 2.6.4 encourages designing buildings that consume less energy, water and other resources, while Policy 2.6.8 encourages new buildings to reduce heat absorption and to use light colored pavement, shade parking lots, etc. The project site is located in a developed neighborhood where people currently walk and bike to neighborhood retail shops. The project is designed to encourage more walking and biking by creating comfortable and safe places for people to walk and to secure their bikes. Due to the state and local building requirements (e.g., Title 24 and CALGreen Tier 1 water efficiency and conservation standards) the project would include all the latest technology to conserve water and energy. All landscaping would be drought tolerant and irrigated using drip irrigation with "smart" irrigation controls to minimize water usage. The project would include over 200 trees planted throughout the site, including the parking lot (in compliance with the City's Parking Lot Tree Shading Design and Maintenance Guidelines [City of Sacramento 2003], that require all new parking lots include tree plantings designed to result in 50% shading of parking lot surface areas within 15 years).

Goal LU 2.7 and Policies LU 2.7.3, 2.7.4, 2.7.7 and 2.7.8 address the scale and massing of new buildings, transitions that are sensitive to the character of adjoining neighborhoods, development that enhances public safety and reduces crime, and designing buildings that engage the street. The project includes seven freestanding buildings, including the Raley's grocery store, the largest and tallest building proposed. Building heights would range from approximately 20 to 23 feet for Shops 2 through 5 and 25-feet for Shops 1 and the larger 12,000 sf building. The roof height of the Raley's store would be 25 feet around the sides and rear of the building increasing to up to 40 feet at the highest point on the east side (front) of the building facing the parking lot. The increase in building height is due to architectural features on the front of the building. The lower portions of the building would be located adjacent to the south, west and north sides, providing more of a transition to the residential areas. The proposed project includes a 40-feet setback along with a 12-foot high masonry wall and a planting strip adjacent to the western boundary of the project site that provides a separation between the Raley's store and adjacent residences. An 82-foot wide setback along with a 10 to 12-foot high masonry wall is proposed adjacent to the northern boundary of the project site, providing a separation between the Raley's store, Shops 4 and adjacent residences. The landscaping plan includes trees along the northern boundary of the site to help provide a visual transition between the proposed buildings and adjacent uses. All of these project elements address Policy 2.7.3.

The City's police department has been involved in reviewing the project design and has provided input to enhance public safety. Consistent with this concept, the project includes a variety of lighting to enhance safety and to discourage crime. The proposed project includes three freestanding buildings adjacent to Wentworth Avenue and Freeport Boulevard to engage the street, consistent with this policy and Policy 2.7.7. In addition, the buildings include clear windows to engage pedestrians and area oriented facing Freeport Boulevard and Wentworth Avenue to also engage the street. Policy 2.7.8 is designed to minimize views of parking lots from the public view. As shown in Figure 2-4, in Chapter 2, Project Description, the project site includes the freestanding buildings adjacent to Wentworth Avenue and Freeport Boulevard that would help block views of the parking lot and reduce the visual prominence. The project also includes trees throughout the parking lot, as shown in Figure 2-6 (see Chapter 2). The trees would also help screen views and reduce the visual prominence of the parking lot, consistent with Policies 2.7.7 and 2.7.8. In addition, the area behind the Raley's store (west) would be gated to prohibit access, consistent with the intent of Policy 2.7.4.

Goal LU 6.1 and Policies LU 6.1.10 and LU 6.1.11 encourage development along corridors that enhance the corridor, provide pedestrian-friendly environments, reduce visual clutter and establish activity nodes with a mix of tenants, scale of development and architectural character. To address these policies, the project includes an activity node that provides a mix of tenants and will be designed to ensure compatibility with the surrounding Land Park neighborhood. Consistent with the City's sign ordinance signage will be high quality and the project may incorporate the existing Raley's sign. The project's landscape plan includes trees along the project's eastern boundary along Freeport Boulevard. Parking would be oriented internal to the project site and buildings are included adjacent to the sidewalk to help enhance the definition of the corridor.

Consistency with the City of Sacramento Zoning Ordinance

A zoning designation applied to the project site must be consistent with the General Plan and the anticipated uses of the project site. The project applicant has requested a change in land use to redesignate 5.2 acres from Suburban Neighborhood Medium and Low Density Residential to Urban Low Corridor. In concert with the change in land use, the project applicant is requesting a rezone from Multi-Unit Dwelling Executive Airport Overlay (R-2A-R-EA-4 & R-2A-EA-4) zone and Single-Unit or Duplex Dwelling Executive Airport Overlay (R-1A-EA-4) to General Commercial and General Commercial Executive Airport Overlay zone (C-2 and C-2-EA-4).

The definition of the C-2 zone from Title 17 is as follows:

The purpose of the C-2 zone is to provide for the sale of goods; the performance of services, including repair facilities; office uses; dwellings; small wholesale stores or distributors; and limited processing and packaging.

Concerns regarding the height of the proposed Raley's store have been raised regarding compatibility with adjacent residential uses to the west, south and north of the site. The current residential zoning of R-1, R-1A and R-2A in the western half of the site all permit building heights of up to 35 feet tall by right, while the C-2 zone permits building heights of 45 feet tall within 39 feet of a residential use increasing to 65 feet tall at a distance of 80 feet from the nearest residence. The closest residence would be greater than 40 feet from the Raley's store. A small portion of the eastern frontage of the proposed new Raley's store would be approximately 40 feet tall with the remaining portions of the building 25 feet tall around the sides and rear. Under the existing residential zoning buildings up to 35 feet are permitted. The increase of four feet for only a portion of the building is relatively small compared to what is currently permitted and would not generate excessive light, or shadows that would be considered incompatible with adjacent uses, as evaluated in the technical sections included in Chapter 4.

Another commenter requested that the site be re-zoned to C-1 (Limited Commercial) versus C-2 (General Commercial). The C-1 zone provides for certain office, retail stores, and commercial service establishments that are compatible with residential development. This zone is intended to be applied to small lots that are surrounded by a residential neighborhood (City of Sacramento 2016b). Allowable uses by right under C-1 include residential, restaurant, theater, fitness studio, office, retail and a community market. The maximum building height is 35 feet. Under the C-1 zoning a Superstore is allowed with a Conditional Use Permit, the same as under the C-2 zoning.

Uses allowed by right under the C-2 zone include the same as those listed under C-1, but also include hotel/motel, plant nursery (with limitations), laundromat, indoor amusement center, and a veterinary clinic or hospital. The new grocery store and other smaller retail uses would not be very different from what is allowed under the C-1 zone and would not generate excessive noise, light, dust, odors, or air emissions that would be considered incompatible with adjacent uses, as evaluated in the technical sections included in Chapter 4.

The proposed project has been designed consistent with the C-2 zone and the City's Zoning Ordinance.

Consistency with the Executive Airport Overlay Zone

The purpose of the Executive Airport Overlay Zone is to protect the health, safety, and general welfare of people in the vicinity of the Sacramento Executive Airport and to improve air navigation safety. Three categories of land use restrictions are included in the overlay zone: (a) height restrictions to protect the navigable airspace around airports; (b) noise to minimize the number of people exposed to noise from aircraft operations; and (c) safety of people on the ground to minimize the number of people exposed to hazards related to aircraft operations and

accidents. The four safety areas are: the clear zone (EA-1), the approach-departure zone 1 (EA-2), the approach-departure zone 2 (EA-3), and the overflight zone (EA-4). The clear zone is near the end of the runway and is the most restrictive. The approach-departure zones (EA-2 and EA-3) are located under the takeoff and landing slopes and are less restrictive. The overflight (EA-4) zone is the area that is the least restrictive. The project site is located in the overflight zone where there are no restrictions to development and a grocery store and other retail uses are compatible in this zone (ALUC 1998 pp. 36, 39). Therefore, the project is consistent with the Executive Airport Overlay zone.

3.4 REFERENCES CITED

- ALH. 2016. Land Park Commercial Center Urban Decay Analysis.
- ALUC (Airport Land Use Commission for Sacramento, Sutter, Yolo and Yuba Counties). 1998.Sacramento Executive Airport Comprehensive Land Use Plan. Last amended May 1999.
- City of Sacramento. 2015a. Sacramento 2035 General Plan. Sacramento, California: city of Sacramento Planning Department. Adopted March 3, 2015. Accessed May 2016. http://portal.cityofsacramento.org/Community-Development/Resources/ Online-Library/General%20Plan.
- City of Sacramento. 2015b. *Master Environmental Impact Report for the City of Sacramento* 2035 General Plan. Final. SCH no. 2012122006. Prepared by Ascent Environmental Inc. Sacramento, California: Ascent. January 2015.
- City of Sacramento. 2016a. "Infill Development Assistance and Policy." Accessed May 2016. http://portal.cityofsacramento.org/Community-Development/Resources/FAQs/ Infill%20Development%20Assistance%20and%20Policy.

City of Sacramento. 2016b. City of Sacramento Code, Title 17, Zoning. As amended February 2016.

CHAPTER 4.0 INTRODUCTION TO THE ANALYSIS

4.0.1 SCOPE AND FORMAT OF THE EIR

This chapter of the Draft Environmental Impact Report (Draft EIR) discusses the environmental and regulatory setting, impacts, and mitigation measures for each of the following technical issue areas (Sections 4.1 through 4.10):

- 4.1 **Aesthetics**
- 4.2 Air Quality
- 4.3 **Biological Resources**
- 4.4 **Cultural Resources**
- 4.5 Greenhouse Gas Emissions
- 4.6 Hazards and Hazardous Materials
- 4.7 Hydrology, Drainage, and Water Quality
- 4.8 Noise
- 4.9 Public Services and Utilities
- 4.10 Transportation and Circulation.

It is important to note impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required CEQA review. "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project" (Ballona Wetlands Land Trust v. City of Los Angeles (2011) 201 Cal.App.4th 455, 473 and California Building Industry Association v. Bay area Air Quality Management District (2015) Cal.App 4th.).

Technical Studies Overview

A number of technical studies were prepared as part of this Draft EIR and are included in the technical appendices. Studies prepared include a Biological Field Survey (Appendix C), Cultural Resources Report (Appendix D), Phase I and Phase II Environmental Site Assessments (Appendix E), a Drainage Report (Appendix F), and an Urban Decay Analysis (Appendix I). The following is a brief overview of the findings of the technical studies listed above.

Due to the developed nature of the project site, no biological resources or special-status plant or animal species were identified on the site. All of the buildings on the project site were evaluated to determine if any would qualify as eligible for listing on the National Register of Historic Places or the California Register of Historic Resources. Based on the findings none of the buildings meet any of the criteria for listing on a federal or state register. To assess if any existing hazardous substances or petroleum hydrocarbon sources were present on the former Capital Nursery portion of the project site, a Phase I Environmental Site Assessment (ESA) was performed. The report concluded that soil on the site had previously been impacted by petroleum hydrocarbons and that there was the potential for residual pesticide and herbicide to also be present in the soil. Based on these findings a Phase II ESA was performed to specifically address these concerns. The Phase II ESA reported that the soil and groundwater tested did not exceed acceptable levels related to human exposure and no follow up was required. A Drainage Report was prepared to ensure on-site drainage would meet current City standards and to determine if any retention facilities would be needed. Based on the report retention/storage facilities would be sized to meet the site's 100-yr 6-hr pre/post runoff volume or the required design water quality volume (volume TBD) - whichever is larger. The project applicant plans to meet this storage requirement primarily through underground storage cells ("Contech" or equivalent) and/or stormwater treatment filters (i.e., rechargeable, self-cleaning, media-filled cartridges to absorb and retain pollutants from stormwater runoff). An Urban Decay Analysis was also prepared for the project to assess the economic impact and potential for urban decay to occur resulting from development of the project. The report documents there is limited evidence to suggest that the potential for urban decay (closed and vacant stores, graffiti, trash, etc.) would occur in the surrounding neighborhood if the project were implemented.

Lastly, the City contracts directly with the traffic consultant to prepare the traffic analysis. The City's traffic consultant, DKS Associates, did not prepare a stand-alone traffic report for the project because the technical section in Chapter 4, Section 4.10, Transportation and Circulation, provides the same information as a traffic report. Appendix G provides the model output data from the traffic modeling prepared for the project.

Environmental Setting

According to subdivision (a) of Section 15125 of the California Environmental Quality Act (CEQA) Guidelines, an EIR must include a description of the existing physical environmental condition in the vicinity of the project as they exist at the time when the Notice of Preparation (NOP) is published. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. Therefore, the baseline conditions for this EIR, unless noted otherwise, are based on conditions that existed in November 2015, when the NOP was published. The CEQA Guidelines recognize that the data for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate in certain circumstances when doing so results in a more accurate or conservative environmental analysis. Recent case law suggests that this analysis could have also included conditions as they existed when the former nursery (Capital Nursery) was operating on the site as part of the baseline conditions. In *North County Advocates v. City of Carlsbad* (2015) 241 Cal.App.4th 94, the court found that substantial evidence supported use of

a baseline that treated the site as fully occupied, even though it was currently vacant, because it was based on recent historical use and was consistent with the applicant's right to occupy the space without further discretionary approvals. Because the "baseline condition" used for this analysis does not assume any existing operations on the site, the analysis is more conservative.

For analytical purposes, impacts associated with implementation of the proposed Land Park Commercial Center Project (proposed project) are compared against two different baselines: first, project-specific effects are assessed against existing conditions at the time the NOP was first published; and second, cumulative effects are assessed against future, or "cumulative," conditions, generally defined as buildout of the City of Sacramento 2035 General Plan. Existing conditions and the cumulative baseline can differ by issue area. Each technical section defines the existing conditions and cumulative baseline for the impacts being analyzed.

In addition, the proposed project includes Scheme B, a slightly modified site plan in the event Bank of America allows access through their parking lot. For the purposes of the environmental review, only the proposed project (Scheme A) is evaluated because it includes more square footage and would result in a more conservative analysis. However, where there would be a difference, Scheme B is evaluated. For example, for the purposes of traffic and circulation Scheme B is evaluated because it would change on-site circulation.

The analysis assumes a total of 235 employees would be required for the project. This includes 115 people currently employed at the existing Raley's store and an additional 120 employees assumed for the associated retail space for a total of 235 employees.

In determining the level of significance of environmental impacts associated with the proposed project, the analysis in this Draft EIR assumes that the proposed project would comply with relevant federal and state laws and regulations, City General Plan policies, ordinances, and other adopted City documents, unless otherwise noted. Therefore, such mandatory policies, ordinances, and standards are not identified as mitigation measures, but rather are discussed as part of the "Regulatory Setting" governing the proposed project.

Section Format

Each technical section in Chapter 4 begins with an **introduction** that explains the issues to be evaluated, provides a general summary of comments received in response to the NOP, and identifies the primary sources reviewed to prepare the analysis. The introduction is followed by a description of the project's **environmental setting** and **regulatory setting** as it pertains to a particular issue.

The regulatory setting provides a summary of applicable federal, state, and local regulations, plans, policies, and laws that are relevant to each issue area. The regulatory setting description

in each section is followed by a discussion of **project-specific impacts**. The project-specific impacts discussion is followed by an analysis of the **cumulative impacts** of the project. This section addresses what the project's incremental contribution to any cumulatively significant impacts would be and identifies mitigation measures, if required. The impact statement is prefaced by a number for ease of identification. An explanation of each impact and an analysis of its significance follow each impact statement. All **mitigation measures** are identified immediately following the impact analysis. The degree to which the identified mitigation measure(s) would reduce the impact is also described. Compliance with applicable laws, policies, and City regulations is assumed and will be identified in the impact analysis. In many cases, compliance with applicable laws, policies, or regulations would reduce the significance of a potential impact; and thus will not be identified as a separate mitigation measure.

An example of an impact statement is shown below.

4.1-1: Implementation of the proposed project could expose sensitive receptors to substantial pollution concentrations. Based on the analysis below and with implementation of mitigation the impact is less than significant. (The significance finding is included in each impact statement).

A discussion of potential impacts of the proposed project is presented in paragraph form. The project-specific impacts associated with construction and operation of the project are evaluated and compared to the threshold of significance for the particular impact. The analysis discusses the applicable local, state, and federal laws and regulations that would reduce impacts, and assumes that the project would comply with applicable laws, ordinances, and regulations, and that the project applicant would obtain all necessary permits and comply with all required conditions of those permits. In many instances, the actions that are necessary to reduce a project impact are already required by existing laws or requirements. The impact analysis concludes with a determination of the impact's significance in **bold type** (e.g., **significant impact, less-than-significant impact, or no impact**).

Mitigation Measures

A discussion of the applicable mitigation measures identified to reduce the significance of an impact will immediately follow the impact analysis.

This section includes a statement indicating whether the mitigation measure will reduce the impact to a **less-than-significant level** or if the impact remains **significant and unavoidable** due to the absence of any available mitigation that could reduce the impact below the applicable threshold. A discussion of how the mitigation would reduce the impact is included before the mitigation measure.

Mitigation measures, if applicable, are numbered and presented in the following format.

4.1-1 Statement of what, if any, mitigation measures are required.

Note that CEQA Guidelines, Section 15370, defines mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- Compensating for the impact by replacing or providing substitute resources or environments.

In addition, provided there is a "reasonable plan for mitigation" and contributions are "sufficiently tied to the actual mitigation" of the project's impacts, a commitment to contribute a fair share to such a program discharges an agency's mitigation duty under CEQA (*Save Our Peninsula Com. v. Monterey County Bd. of Supervisors* 2001) 87 Cal.App.4th 99, 141); see also CEQA Guidelines, Section 15130, subd. (a)(3) [recognizing that a project's contribution to a cumulative impact may be less than cumulatively considerable where "the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact"] see also *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173).

Cumulative Impacts

An analysis of cumulative impacts follows the evaluation of project impacts under existing conditions in each section in Chapter 4. As defined in CEQA Guidelines, Section 15355, cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project together with other past, present, and reasonably foreseeable projects causing related impacts.

An introductory statement that defines the cumulative analysis methodology and the cumulative context being analyzed for respective sections (e.g., buildout of the City's General Plan, development within the Sacramento Valley Air Basin) is included under the "Cumulative Analysis" discussion. In some instances, a project-specific impact may be considered less than significant, but would be considered potentially cumulatively significant in combination with other development within the surrounding area. Or, in some instances, a potentially significant impact could result on a

project level, but would not result in a cumulatively considerable impact. The cumulative impacts analysis is presented in the same format as the impacts section, shown above.

4.0.2 TERMINOLOGY USE IN THIS EIR

This Draft EIR uses the following terminology to describe environmental effects of the proposed project:

- Thresholds of Significance: A set of criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Standards of significance used in this Draft EIR include those set forth in CEQA Guidelines Section 15065 (Mandatory Findings of Significance) and those derived from questions set forth in Appendix G to the CEQA Guidelines; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the City of Sacramento 2035 General Plan. In fashioning criteria based on these sources, City staff has also relied on its own professional judgment and experience in some instances. In determining the level of significance, the analysis assumes that the proposed project would comply with relevant federal, state, and local regulations and ordinances.
- Less-than-Significant Impact: A project impact is considered less than significant when it does not reach the standard of significance, indicating that there would be no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- **Potentially Significant Impact:** A potentially significant impact is an environmental effect that could cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- **Significant Impact:** A project impact is considered significant if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects in the context of specified significance criteria. When available, potentially feasible mitigation measures and/or project alternatives are identified to reduce these effects to the environment.
- Cumulative Impact: According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). CEQA requires that cumulative impacts be discussed when the "project's incremental effect is cumulatively considerable" (CEQA Guidelines, Section 15130 (a)).

4.1 **AESTHETICS**

4.1.1 Introduction

This section describes the existing visual setting of the project site and vicinity, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Land Park Commercial Center Project (proposed project). The analysis considers whether the project would substantially change the visual character of the project area, adversely affecting sensitive receptors (e.g., adjacent residential land uses), or create new sources of light and glare that would adversely affect visual conditions in the area.

A number of comments regarding visual resources and light were received in response to the Notice of Preparation (NOP). Concerns included potential impacts on the surrounding single-family residential neighborhood from the proposed grocery store (Raley's) due to an increase in light and potential spillover onto adjacent neighbors; shadow effects from the building, height of the proposed Raley's store; and privacy concerns. To the extent comments are related to visual impacts, these issues are addressed in this section. A copy of the NOP and comments received is included in Appendix A.

The information presented in this section is based on site visits and a review of project plans, the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b), aerial photographs, and topographic maps of the project area.

4.1.2 Environmental Setting

This section describes the existing environmental setting in the project area and the built environment. Photographs are used to illustrate visual characteristics included in this discussion. Photographs were taken during site visits in October 2014, September and December 2015. The points from which these photographs were taken are shown on Figure 4.1-1.

Site Location

The project site is located approximately 5 miles south of downtown Sacramento on the northwest corner of the intersection of Freeport Boulevard and Wentworth Avenue in the Land Park neighborhood. The majority of the project site occupies the former Capital Nursery site with two parking lots and two residences along Wentworth Avenue comprising the remainder of the site.

Freeport Boulevard from Sutterville Road south is a four lane divided road characterized by a mix of older commercial centers and smaller retail and office uses. From the northern boundary

of the project site, William Land Regional Park (Land Park) is located approximately .13 mile to the north. The Sacramento River and Interstate 5 (I-5) are located approximately 1 mile west.

Existing Site Conditions

The portion of the project site that once housed Capital Nursery contains vacant sheds, greenhouses, buildings, and a surface parking lot, as shown in Figures 4.1-2 and 4.1-3. This portion of the project site is fenced on all sides with a mix of wood and chain link fencing. There are a few ornamental trees present within the former nursery along with a variety of non-native grasses and weeds. There are no waterways, streams, or wetland areas present on the site. The topography of the site is mostly flat with an elevation of 20 feet above sea level.

Two single-story residences and surface parking lots located adjacent to Wentworth Avenue are also included within the project site. Mature trees are located in the surface parking lots adjacent to Wentworth Avenue. The East West Bank and Bank of America are located in the southeast corner of the site and are not a part of this project under Scheme A. Under Scheme B, Bank of America would be included within the project site to allow access between the existing buildings and the project retail shops.

Surrounding Uses

The project site is located within an older mixed residential and commercial area with developed uses surrounding the site. Residences border the northern and western boundaries with commercial and office uses located to the north and east. Chase Bank, a family clinic and an auto service business are located directly across Freeport Boulevard to the east. The existing Raley's store is located across Wentworth Avenue to the south. Figures 4.1-4 and 4.1-5 show existing commercial uses along Freeport Boulevard directly east of the project site.

Commercial buildings in the area range from older, single-story buildings to the taller, more modern Chase Bank building with surface parking lots visible in front of the buildings along Freeport Boulevard. The majority of the commercial uses are single story with no unifying design elements. Signage is visible on the buildings as well as freestanding signs visible from Freeport Boulevard. Some landscaping is present along Freeport Boulevard and in the center median.

Residential uses include single-story homes along Wentworth Boulevard, Meer Way, and Babich Avenue to the north, with more one- and two-story homes along Marion Court to the west (an example of residences in the area is shown in Figure 4.1-6).





Figure 4.1-2 Viewpoint #1 - On-Site Greenhouse



Figure 4.1-3 Viewpoint #2 - On-Site Storage Shed

DUDEK



Figure 4.1-4

Viewpoint #3 - Commercial uses along Freeport Boulevard looking east from the project site



Figure 4.1-5 Viewpoint #4 - Commercial uses along Freeport Boulevard looking east from the project site

DUDEK



Residence on Meer Way



Residence on Wentworth

FIGURE 4.1-6 Surrounding Residential Uses

Land Park Commercial Center Project

DUDEK

Views of the Project Site from the Surrounding Area

The Capital Nursery portion of the project site is secured by a mix of wood and chain link fencing along the western and northern boundaries of the project site. Views from those residences that back up to site are limited to the fence and what is visible above the fence line. In addition, changes in private views are not evaluated in an environmental impact report (EIR) because private views are not considered public. There are two local streets, Sherwood Avenue to the west and Babich Avenue to the north that come to a dead-end at the site. Due to mature trees and other landscaping views of the site from where the roads end are blocked, as shown in Figures 4.1-7 and 4.1-8.

The site is primarily visible to vehicles, bicyclists and pedestrians traveling along Freeport Boulevard and Wentworth Avenue. Current views from Freeport Boulevard consist of a surface parking lot and a stone and wood clad building that ranges in height from one to two stories, as shown in Figures 4.1-9 and 4.1-10. The single-story Bank of America building and the East West bank building and surface parking lots are visible at the intersection with Wentworth Avenue, as shown in Figures 4.1-11 and 4.1-12. A surface parking lot with mature trees and two small, single-story residences are visible from Wentworth Avenue (see Figure 4.1-13).

Scenic Resources

Scenic resources are physical features that provide scenic value to a project site and its surroundings. These typically include topographic, geologic, hydrologic, or biological resources (for example, hills, rock outcroppings, creeks, woodlands or landmark trees) and can also include historic buildings. Photographs of the project site provided in Figures 4.1-2, 4.1-3, 4.1-9 and 4.1-10 demonstrate that due to the developed, urban nature of the site there are no features that would quality as scenic resources. The buildings on the project site also include two residences, shown in Figures 4.1-14 and 4.1-15. All of the buildings on the project were evaluated and determined to not be historic, as described in Section 4.4, Cultural Resources

A scenic vista is generally defined as an expansive view of a highly valued landscape observable from a publicly accessible vantage point or from a designated scenic highway. The project site is not located along a designated scenic highway, does not contain views of valued landscapes, and does not contain any scenic resources.

Sensitive Receptors

A sensitive receptor is defined as an individual that is especially sensitive to changes in aesthetic qualities, such as changes in lighting, shadows, or surrounding visual character. These typically include residences, schools, daycare centers, and convalescent homes. The adjacent residential uses north and west of the project site could accommodate sensitive receptors.

Existing Light and Glare

Nighttime lighting is necessary to provide and maintain a safe, secure, and attractive environment. Light that falls beyond the intended area of illumination is referred to as "light trespass." The most common cause of light trespass is spillover light, which occurs when a lighting source illuminates surfaces beyond the intended area, such as when building security lighting or parking lot lights shine light onto neighboring property. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Light intensity can affect the amount of light spillover that might occur, as well as the type of light fixture used. Modern, energy-efficient fixtures that face downward, such as cutoff-type fixtures and shielded light fixtures, are less obtrusive than older light fixtures. Light trespass can also result from automobile headlights shining onto property adjacent to roadways.

The second type of light trespass is glare. Glare can result from sunlight or from artificial light reflecting off building exteriors, such as glass windows or other highly reflective surface materials. During daylight hours, the amount of glare depends on the intensity and direction of sunlight. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles. Glare resulting from sunlight reflecting off building exteriors can be reduced with design features that use low-reflective glass and exterior materials and colors that absorb, rather than reflect, light.

The most notable lighting in the vicinity of the project site is from vehicle headlights along Freeport Boulevard, street lights, building lights, and illuminated signs along Freeport Boulevard. There are no occupied buildings on the project site; therefore, there is no nighttime lighting. During the day, the primary sources of glare near the project site are from sunlight reflecting off vehicles and vehicle windows. There are no buildings that contain reflective glass, highly polished surfaces or metallic architectural features in the vicinity of the project site that could create glare.



Figure 4.1-7 Viewpoint #5 - View from Babich Avenue looking South



Figure 4.1-8 Viewpoint #6 - View from Sherwood Avenue looking East

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Figure 4.1-9 Viewpoint #7 - View of the project site looking west from Freeport Boulevard



Figure 4.1-10 Viewpoint #8 - View of the project site looking north toward Meer Way

DUDEK



Figure 4.1-11 Viewpoint #9 - View looking west from Freeport Boulevard of East-West Bank



Figure 4.1-12 Viewpoint #10 - View looking west from Freeport Boulevard of Bank of America

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Figure 4.1-13 Viewpoint #11 - View looking south at the existing parking lots along Wentworth Avenue



Figure 4.1-14 Viewpoint #12 - View of 1919 Wentworth Avenue

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Figure 4.1-15 Viewpoint #13 - View of 1913 Wentworth Avenue

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4.1.3 Regulatory Setting

Federal

There are no specific federal regulations related to aesthetics, light, and glare that are applicable to the proposed project.

State

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. According to the California Department of Transportation (Caltrans) list of designated scenic highways under the California Scenic Highway Program, there are no highway segments within the City of Sacramento that are designated scenic. Moreover, there are no officially designated roadways or highways under the state's Scenic Highway Program in the vicinity of the project site.

Local

The City of Sacramento has adopted Neighborhood Design Guidelines to provide consistent design principles for residential and commercial structures. The Design Guidelines are applied to specific areas within the City of Sacramento, but the design guidelines do not include the Land Park neighborhood.

The Land Park Community Association (LPCA) considers projects under review in the Land Park neighborhood. In September 2012, the LPCA adopted four Neighborhood Design Principles:

- 1. Respects the context of the community as a whole as well as the context of adjacent properties;
- 2. Preserves the historic character of our neighborhood streetscapes;
- 3. Encourages investment in our community including the creative adaptation of existing structures to meet modern codes and functional needs; and
- 4. Maintains the well-established patterns of massing, scale, form, landscape, open space, materials, color and detail.

Sacramento 2035 General Plan

The following goals and policies from the Land Use and Urban Design Element (LU) and the Environmental Resources Element (ER) related to aesthetics, light, and glare from the City's 2035 General Plan (City of Sacramento 2015a) are relevant to the proposed project. Those goals and policies that directly pertain to the project are discussed in the impact analysis below and further evaluated in a consistency analysis included in Appendix K.

GOAL LU 2.1 City of Neighborhoods. Maintain a city of diverse, distinct, and well-structured neighborhoods that meet the community's needs for complete, sustainable, and high-quality living environments, from the historic downtown core to well-integrated new growth areas.

LU 2.1.2 Protect Established Neighborhoods. The City shall preserve, protect, and enhance established neighborhoods by providing sensitive transitions between these neighborhoods and adjoining areas, and by requiring new development, both private and public, to respect and respond to those existing physical characteristics buildings, streetscapes, open spaces, and urban form that contribute to the overall character and livability of the neighborhood.

GOAL LU 2.4 City of Distinctive and Memorable Places. Promote community design that produces a distinctive, high-quality built environment whose forms and character reflect Sacramento's unique historic, environmental, and architectural context, and create memorable places that enrich community life.

LU 2.4.1 Unique Sense of Place. The City shall promote quality site, architectural and landscape design that incorporates those qualities and characteristics that make Sacramento desirable and memorable including: walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles.

LU 2.4.2 Responsiveness to Context. The City shall require building design that respects and responds to the local context, including use of local materials where feasible, responsiveness to Sacramento's climate, and consideration of cultural and historic context of Sacramento's neighborhoods and centers.

GOAL LU 2.6 City Sustained and Renewed. Promote sustainable development and land use practices in both new development, reuse, and reinvestment that provide for the transformation of Sacramento into a sustainable urban city while preserving choices (e.g., where to live, work, and recreate) for future generations.

LU 2.6.8 Heat Island Effect. The City shall reduce the "heat island effect" by promoting and requiring, where appropriate, such features as reflective roofing, green roofs, light-colored pavement, and urban shade trees and by reducing the unshaded extent of parking lots.
GOAL LU 2.7 City Form and Structure. Require excellence in the design of the city's form and structure through development standards and clear design direction.

LU 2.7.3 Transitions in Scale. The City shall require that the scale and massing of new development in higher-density centers and corridors provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights.

LU 2.7.7 Buildings that Engage the Street. The City shall require buildings to be oriented to and actively engage and complete the public realm through such features as building orientation, build-to and setback lines, façade articulation, ground-floor transparency, and location of parking.

LU 2.7.8 Screening of Off-street Parking. The City shall reduce the visual prominence of parking within the public realm by requiring most off-street parking to be located behind or within structures or otherwise fully or partially screened from public view.

GOAL LU 6.1 Corridors. Support the development of major circulation corridors that balance their vehicular function with a vibrant mix of uses that contribute to meeting local and citywide needs for retail, services, and housing and provide pedestrian-friendly environments that serve as gathering places for adjacent neighborhoods.

LU 6.1.10 Visual and Physical Character. The City shall promote development patterns and streetscape improvements that transform the visual and physical character of typical automobile-oriented corridors by:

- Enhancing the definition of the corridor by locating buildings at the back of the sidewalk, and establishing a consistent street wall
- Introducing taller buildings that are in scale with the wide, multi-lane street corridors
- Locating off-street parking behind or between buildings (rather than between building and street)
- Reducing visual clutter by regulating the number, size and design quality of signs
- Removing utility poles and under-grounding overhead wires
- Adding street trees

LU 6.1.11 Differentiating the Corridor. The City shall promote development patterns that break up long, undifferentiated corridors of commercial strip development by establishing distinct activity nodes or centers that are distinguished by features such as their primary tenants, mix of uses, scale and intensity of development, and architectural character.

LU 6.1.12 Compatibility with Adjoining Uses. The City shall ensure that the introduction of higher-density mixed-use development along major arterial corridors is compatible with adjacent land uses, particularly residential uses, by requiring such features as:

- Buildings setback from rear or side yard property lines adjoining single-family residential uses
- Building heights stepped back from sensitive adjoining uses to maintain appropriate transitions in scale and to protect privacy and solar access
- Landscaped off-street parking areas, loading areas, and service areas screened from adjacent residential areas, to the degree feasible
- Lighting shielded and directed downward to minimize impacts on adjacent residential uses

GOAL ER 7.1 Visual Resource Preservation. Maintain and protect significant visual resources and aesthetics that define Sacramento.

ER 7.1.3 Lighting. The City shall minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, and requiring light for development to be directed downward to minimize spill-over onto adjacent properties and reduce vertical glare.

ER 7.1.4 Reflective Glass. The City shall prohibit new development from (1) using reflective glass that exceeds 50% of any building surface and on the bottom three floors, (2) using mirrored glass, (3) using black glass that exceeds 25% of any surface of a building, (4) using metal building materials that exceed 50% of any street facing surface of a primarily residential building, and (5) using exposed concrete that exceeds 50% of any building.

Goal EC 3.1 Noise Reduction. Minimize noise impacts on land uses and human activity to ensure the health and safety of the community.

Policy EC 3.1.11: Alternatives to Sound Walls. The City shall encourage the use of design strategies and other noise reduction methods along transportation corridors in lieu of sound walls to mitigate noise impacts and enhance aesthetics.

Land Park Community Plan

The Land Park Community Plan does not include any specific goals or policies and defers to the City's Land Use and Urban Design Element in Part 2 of the General Plan for specific design guidance.

Sacramento City Code, Title 17 Tree Sharing Requirements for Parking Lots

Chapter 17.612 Section 17.612.040 of the City's Planning and Development Code requires that a minimum of 50% of any parking lot be shaded. The Code states that "[t]rees shall be planted and maintained throughout the surface parking facility to ensure that, within 15 years after establishment of the parking facility, at least 50% of the parking facility will be shaded. All planting, soil volumes, and maintenance shall comply with the parking facility tree shading design and maintenance guidelines" (City of Sacramento 2016).

Parking Lot Tree Shading Design and Maintenance Guidelines

The City's Parking Lot Tree Shading Design and Maintenance Guidelines provides standards and guidance for the planting, maintenance, protection, removal and replacement of trees planted pursuant to the City's parking lot tree shading regulations as defined in the City Code. The purpose of the Parking Lot Tree Shading Design and Maintenance Guidelines is to improve the effectiveness of the City's parking lot shading ordinance. The standards and recommendations in this document encourage achievement of the City's 50% shading requirement (City of Sacramento 2003).

4.1.4 Impacts and Mitigation Measures

Methods of Analysis

A description of the project site and the surrounding area is derived from site visits and photographs taken in October 2014, September and December 2015. The City's 2035 General Plan and MEIR were reviewed to determine what visual elements have been deemed valuable by the community. The impact analysis focuses on the manner in which development could alter the visual elements or features that exist in or near the project area. This analysis assumes that development of the project site would comply with the City's General Plan goals and policies and design standards; therefore, such policies and standards are not specifically identified as mitigation.

The analysis below focuses on Scheme A because the addition of Bank of America under Scheme B would not change the visual character or views of the project site.

The determination of when changes to the visual environment become a substantial adverse effect is based on the following primary factors: (a) the existing scenic quality of an area; (b) the level of viewer exposure and concern regarding visual change; and (c) the level of actual visual change caused by the project as seen by a given viewer group. The overall visual sensitivity of each location is first established based on existing visual quality, viewer exposure, and viewer concern. These factors are then considered together with the level of expected visual change or

contrast and significance. Visual change is an overall measure of the alteration or change in basic visual attributes such as form, line, color, and texture as a result of the proposed project. Thus, a substantial adverse effect can occur when a project results in high levels of visual change or obstruction of scenic views by sensitive receptors.

The value attached to changes in visual character is largely subjective. This Draft EIR does not assign a judgment of "good" or "bad" to a proposed change; rather, it identifies any "substantial adverse effect," as defined below, as a significant environmental impact.

Comments received in response to the Notice of Preparation raised concerns regarding privacy of the adjacent residences (back yards) located on the west side of the new grocery store (Raley's). The California Environmental Quality Act (CEQA) does not require that privacy be addressed in an Environmental Impact Report (EIR) because it is not an environmental issue. In addition, views of a project by a limited number of individuals do not constitute public views and are typically not evaluated under CEQA. (See *Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, holding that if agency policy does not protect private views, then impacts to such private views are not significant impacts under CEQA.) The project has been designed to meet (and exceed) the City's setback requirements, which substantially reduce or eliminate privacy impacts. In addition, there would be no windows along the west side of the building so no one from the project site could potentially look into the backyards of adjacent homes. Thus, concerns regarding privacy are not further addressed.

Thresholds of Significance

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- substantially degrade the existing visual character of the site or its surroundings;
- create a source of glare that would cause a public hazard or annoyance; or
- create a new source of light that would be cast onto oncoming traffic or residential uses.

Criteria Not Applicable to Proposed Project

Due to the location and characteristics of the proposed project, certain significance criteria are not applicable to the proposed project and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document. The project site does not contain any scenic vistas and development of the project would have no effect on any scenic vistas. In addition, the site does not provide or support substantial scenic resources, and there are no scenic highways in the vicinity of the project site. Thus, the project would have no effect related to damage to scenic resources visible from a state scenic highway.

Project-Specific Impacts and Mitigation Measures

4.1-1: The proposed project could change the existing visual character or quality of the site and its surroundings. Based on the analysis below the impact is *less than significant.*

Development of the project site would convert the approximately 10-acre site from primarily single-story, commercial and residential vacant buildings and paved parking lots to a more intense urban use. Residences located to the west, north, and south of the site, as well as vehicles traveling along Freeport Boulevard and Wentworth Avenue, have the most direct views of the project site. The project would introduce more modern development onto a site that is currently developed with older buildings that are vacant and falling into disrepair, surrounded by a mix of residential neighborhoods and neighborhood commercial uses. The analysis below provides an overview of the change in visual character that would occur once the project is completed.

The project is proposing to construct a retail center anchored by a grocery store. The project includes six single-story buildings. The tallest building would be the grocery store at a maximum roof height of approximately 40 feet. The roof height would be 25 feet around the sides and rear of the building increasing to up to approximately 40 feet at the highest point on the east side (front) of the building facing the parking lot. The increase in building height is due to architectural features on the front of the building. The smaller retail buildings range in height from 20 to 25 feet. The project is requesting a General Plan Amendment to re-designate the entire site to Urban Corridor Low, which allows buildings between 2 to 6 stories in height and a rezone to C-2. Under the existing residential zoning, R-1, R-1A, the maximum allowable building height is 35 feet. Under the portion of the site zoned C-2 buildings up to 45 feet tall are allowed within 39 feet of a residential use increasing to 65 feet tall at a distance of 80 feet from the nearest residence. Figures 2-8 through 2-13, Building Elevations, in Chapter 2, Project Description, show building elevations of the proposed new buildings.

Views of the project site from vehicles driving on Freeport Boulevard and Wentworth Avenue would change as a result of the project, but the developed nature of the site would be consistent with a developed urban environment similar to the existing commercial development along these roadways. The project would require removal of the buildings and mass grading of the site to prepare it for development, which would change the existing visual character and quality of

the site. However, because the site contains older buildings that are vacant and not maintained, no mature trees or other visual elements that add visual interest to the site, grading would change the current look of the site but this change would be temporary and not significant. Views of the project site from Freeport Boulevard looking west would change from the blacktop parking lot and a faded green one- and two-story building with a stone façade along the base of the building to views of one-story, modern buildings adjacent to Freeport Boulevard (Shops 3 and 4), landscaping, and a driveway into the project site. Views of the grocery store, trees planted in the parking lot and parking lot lights may also be visible to drivers passing the site. Views of the project site from Wentworth Avenue would change from views of two single-story residences, one residence is quite old and in very poor condition with peeling paint and in desperate need of repairs. Views would also include two small, surface parking lots with trees visible along the edges and in the center of the lots. Views would change to a one-story building, landscaping and a driveway into the project site.

The surrounding area is developed with a mix of one and two-story residential neighborhoods to the north, west and southwest, and one and two story commercial buildings to the north, south and east along Freeport Boulevard, including the existing Raley's grocery store located approximately 400 feet south of the project site. The existing commercial buildings include surface parking lots in front of the buildings with a mix of architectural design elements and styles. Most of the buildings are older, nondescript and constructed of stucco and/or wood and painted beige or brown. The area appears to have been built out over a number of years and was not developed consistent with any design guidelines, other than what zoning would permit.

The style of the proposed new buildings would be contemporary with exterior materials that include composite siding, stucco, stone veneer, and brick veneer. The color palette includes tan, gold, brown, gray, red brick and neutral stone, very similar to the colors that already exist in the surrounding commercial areas. However, in contrast to existing conditions, more trees would be planted in the parking lot area visible from Freeport Boulevard and Wentworth Avenue. The trees in the parking lot would meet the City's shade tree guidelines, which require that at least 50% of the paved parking areas be shaded. Sidewalks would be replaced along Freeport Boulevard and Wentworth Avenue along the project's frontage. It is noted that the trees and landscaping would take time to mature; therefore, on-site development would be more visible from Freeport Boulevard and Wentworth Avenue during the first 5–10 years following construction. However, this would not result in any temporary impacts.

The largest building, Raley's grocery store, would be located in the northwest corner of the project site, set back from Freeport Boulevard by approximately 200 feet. A 40-foot-wide setback for the proposed Raley's store would be provided along the western boundary of the site. Within this area would be a paved driveway for emergency vehicle access along with a 12-foot-high landscaped masonry wall adjacent to the western boundary and the residences to the

west. The wall combined with the setback and existing trees within the backyards of adjacent residences would minimize, if not entirely block views of the building from the residences. Along the northern boundary there would be an 82-foot setback from the proposed buildings and the backyards of residences along Meer Way and Babich Court. In addition, a 10 to 12-foot-high masonry wall would be installed along the northern boundary of the project site with trees planted adjacent to the wall. The combination of the wall, landscaping and the distance to the buildings would minimize, if not entirely block views of the buildings from the backyards of adjacent residences. A 95-foot setback would be provided between the project driveway along Wentworth Avenue and the closest residence to the south.

The City's Policy EC 3.1.11 encourages other options in lieu of sound walls along transportation corridors to mitigate noise and enhance aesthetics. The project includes walls along the western and northern property boundaries to shield the adjacent neighbors from project noise. These walls are located along the rear and side of the project site and are not representative of more typical sound walls common in residential subdivisions adjacent to major transportation corridors. In addition, the western wall would be shielded from public view by the proposed Raley's grocery store and landscaping and the northern wall would be shielded by landscaping in the parking lot, which would further soften and minimize public views of the walls.

Shops 1 and the Tenant Building would be adjacent to the grocery store in the rear of the site. Shops 5 would be located adjacent to Wentworth Avenue and would be visible to people walking or driving in this area. Shops 3 and 4 would be located adjacent to Freeport Boulevard and would be visible to pedestrians and vehicles along Freeport Boulevard. Shops 2 would be located behind Shops 5, immediately adjacent to the existing Bank of America building. Placement of Shops building 3, 4 and 5 adjacent to both Wentworth Avenue and Freeport Boulevard would shield views of the parking lot areas located behind the buildings. The placement of the Shops buildings in these areas would change the existing visual character and quality of the site because it would introduce new uses closer to the street, more representative of an urban environment compared to a suburban shopping center. The increase in the number of buildings and access throughout the whole of the site would also be a change from the existing environment, which prohibits access and views to a majority of the project site. In addition, the introduction of new buildings would change the existing visual character of this stretch of Freeport Boulevard, which is comprised of a mix of new and older buildings. A newer retail center is located at the corner of Sutterville Road and Freeport Boulevard, approximately 0.9 of a mile north.

While the project would change the visual character of the site, this change is not considered a substantial degradation in visual character because the site is currently developed and has been developed for over 50 years. The site is also located in a developed area surrounded by a mix of old and new commercial buildings along a neighborhood serving commercial corridor, including

the existing Raley's store that has been in the Land Park neighborhood for over 50 years. The proposed project has been designed consistent with the intent of the goals and policies contained in the City's 2035 General Plan and is proposing development that overall is consistent with the scale of surrounding commercial uses in the neighborhood. The project site does not contain a high level of existing visual quality because it does not contain any scenic resources. Therefore, the change in visual character is considered a **less-than-significant impact**.

Mitigation Measures

None required

4.1-2: The proposed project could create a new source of light or glare which could cause an annoyance to adjacent residential uses. Based on the analysis below the impact is *less than significant*.

As discussed previously, the project site does not include any occupied buildings and there are no light sources on any of the vacant buildings. The project site is primarily exposed to nighttime light from car headlights on Freeport Boulevard and Wentworth Avenue, and from building lights on commercial uses to the north, south and east. In addition, limited amounts of nighttime light emanate from the adjacent commercial uses along Freeport Boulevard, including the adjacent East West Bank, Bank of America and Raley's store to the south and in the nearby neighborhoods to the west and north. There are no sources of glare within the project site currently.

The proposed project would introduce new sources of light into the area, particularly from parking lot lights and building lights, as well as low level security lighting (e.g., bollards). Views into the project site at night would be altered by these sources of artificial light. During project construction there may also be overhead lights provided for security that may alter current nighttime views of the site during the period of project construction. The project includes 25-foottall parking lot lights, consistent with commercial uses throughout the City including the existing Raley's store. The landscaping and sound wall proposed along the site's western and northern boundaries as well as the location of the buildings would provide some shielding to minimize any light trespass (from building and parking lot lights) onto adjacent residences. Proposed landscaping and project design would be consistent with General Plan policy LU 6.1.22, which states that the City shall minimize obtrusive light and maintain compatibility with adjacent uses by shielding light and directing it downward. In addition, the project is designed consistent with General Plan policy ER 7.1.3 that requires the City to "minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, and requiring light for development to be directed downward to minimize spill-over onto adjacent properties and reduce vertical glare." All building lighting and parking lot lights include shielding to ensure light does not create an annoyance for adjacent residents. Building lights along the west and north

sides of the Raley's store would be mounted approximately 8 to 10 feet high with cut-off shields and motion sensors to prevent spillover light. There are no building windows proposed on the west, north or south aspects of the Raley's grocery store. Building lights located at the front of the store, facing east, would be mounted between 10 to 14feet high. All of these building lights would be shielded and directed downward to minimize any annoyance associated with adding more light to this area. During the nighttime hours interior building lights would contribute some light, but this would be consistent with other commercial uses along Freeport Boulevard and the existing Raley's store. Trees proposed within the parking lot would also help to mute and block any interior building light. Therefore, combined with the project's proposed landscaping plan and the existing trees present in adjacent backyards, light intrusion would be minimal. No separate lighting would be necessary for the enclosed trash and recycling containers.

The 10 to 12-foot-tall masonry walls along the western and northern boundaries of the project site, as well as the Raley's store would block car headlights from cars accessing the parking lot from shining directly into the backyards of any adjacent residence. In addition, off-site improvements are limited to transportation and utilities infrastructure and pedestrian facilities that would not create any new sources of light. Therefore, light generated by the project would be considered a **less-than-significant impact**.

The project does not propose to use highly reflective surfaces, such as mirrored glass, black glass, or metal building materials. The project's design features would be consistent with General Plan policy ER 7.1.4 which states the "City shall prohibit new development from (1) using reflective glass that exceeds 50% of any building surface and on the bottom three floors, (2) using mirrored glass, (3) using black glass that exceeds 25% of any surface of a building, (4) using metal building materials that exceed 50% of any street facing surface of a primarily residential building, and (5) using exposed concrete that exceeds 50% of any building." The front of the grocery store would include large glass windows (see Figure 2-9 in Chapter 2, Project Description), however, the design of the building includes an overhang that would minimize sun directly hitting the window to create glare and the glass would not be tinted or mirrored. Therefore, the project would not introduce glare. Off-site improvements are limited to infrastructure and pedestrian facilities that would not create new sources of glare. Therefore, the project would have **no impact** related to creating a new source of glare.

Mitigation Measures

None required.

Cumulative Impacts

This cumulative impact analysis does not rely on any list of specific pending, reasonably foreseeable development proposals in the general vicinity of the proposed project Rather, the

geographic scope of the cumulative impact analysis for the evaluation of potential cumulative impacts on visual resources is future development within the City of Sacramento associated with buildout of the 2035 General Plan.

The scope of the cumulative impact analysis for aesthetics includes the area that comprises the viewshed in which the project site is visible, and the views visible from the project site, which includes development in the immediately surrounding areas. This development includes renovated businesses and associated signage occupying space in the existing strip retail centers located south along Freeport Boulevard.

The cumulative context for light would be other development in the surrounding area that could affect the same area as that affected by project-generated light.

4.1-3: The proposed project could contribute to cumulative changes in the existing visual character of the area. Based on the analysis below the impact would be *less than significant.*

The project site is located adjacent to developed uses along a neighborhood-serving commercial corridor. The project site is currently developed with the now-closed Capital Nursery and two vacant residences.

This area of the City has been fully developed with a mix of commercial uses along Freeport Boulevard from Sutterville Road south. Because this area of the City has been built out there is limited potential for new development to occur in the surrounding area. Any new development would redevelop existing buildings. Therefore, the change in the existing visual character associated with the proposed project and other cumulative development would not be considered an existing cumulative impact because this area of the City is developed and represents a developed environment.

As discussed under Impact 4.1-1, the proposed project would alter the existing visual character of the project site by re-developing a site that contains the closed Capital Nursery and two vacant residences. The change in visual character in this area of the City is not considered a significant impact. The primary view that would be affected by the proposed project is the view of vacant buildings that comprise the former Capital Nursery and parking lot from Freeport Boulevard. The project site is not a key element in other views within the project region. The project's contribution to cumulative visual changes in the region would not be considerable because the cumulative impact is already less than significant. The impact would be **less than significant**.

Mitigation Measures

None required.

4.1-4: The proposed project could contribute to a cumulative increase in nighttime light in the area. Based on the analysis below the impact would be *less than significant.*

Existing development within the surrounding area has introduced artificial lighting into the area, including building lighting and street lighting from adjacent residential and commercial uses to the north, south, east and west, as well as from car headlights along Freeport Boulevard and Wentworth Avenue. New development along Freeport Boulevard, specifically the small retail center at the corner of Sutterville Road and Freeport Boulevard has been designed to minimize lighting impacts. Future development would also be required to comply with City requirements that require new projects to minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary (Policy ER 7.1.3 and LU 6.1.22). In addition, the City requires that new development avoid the creation of incompatible glare through development design features (Policy ER 7.1.4). The cumulative light and glare impact associated with future buildout of the 2035 General Plan, is less than significant.

As discussed in Impact 4.1-2, development of the proposed project would introduce new sources of light. The proposed project would contribute to the existing ambient light in the area by introducing parking lot lights, exterior building lights, interior-building light emitted through the windows, street lights, and car headlights. However, project light would be somewhat blocked by masonry walls proposed along the western and northern boundaries of the site to minimize light spillover into adjacent residences. Project implementation would not create any glare; therefore, the proposed project would not contribute to an increase in glare. Although the project would change nighttime views of the project site, the project's incremental contribution to the increase in light and glare would not be considerable, because the cumulative impact is less than significant. Therefore, the impact would be **less than significant**.

Mitigation Measures

None required.

4.1.5 References Cited

City of Sacramento. 2003. Parking Lot Tree Shading Design and Maintenance Guidelines. June 17, 2003.

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- City of Sacramento. 2016. City of Sacramento Planning and Development Code, Title 17, Tree Sharing Requirements for Parking Lots. Chapter 17.612, Section 17.612.040.

4.2 AIR QUALITY

4.2.1 Introduction

This section describes the project's impacts on air quality and the project's contribution to regional air quality emissions, identifies associated regulatory requirements, and evaluates potential impacts and identifies mitigation measures required (if any) during implementation of the Land Park Commercial Center project (proposed project).

A number of comments regarding air quality were received in response to the Notice of Preparation (NOP), which included concerns about construction dust, air pollution from automobiles, diesel exhaust from trucks in loading docks, and odors from garbage. Several measures were also suggested to reduce emissions from loading docks, including enclosing the loading dock, establishing stringent idling limits, and designing the dock to have electrical hookups for trucks. All of the air quality concerns raised during the NOP process are addressed in this section. A copy of the NOP and letters received in response to it are included in Appendix A. The air quality model outputs are included in Appendix B.

The background information and impact analysis presented in this section is based on project plans, the California Emissions Estimator Model (CalEEMod) (used to estimate project emissions), the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b), and the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Guide to Air Quality Assessment in Sacramento County (SMAQMD 2016).

4.2.2 Environmental Setting

Ambient air quality is generally affected by climatological conditions, the topography of the air basin, the type and amounts of pollutants emitted, and, for some pollutants, sunlight. The project site is located the within Sacramento Valley Air Basin (SVAB). Topographical and climatic factors in the SVAB create the potential for high concentrations of regional and local air pollutants. This section describes relevant characteristics of the air basin, types of air pollutants, health effects, and existing air quality levels.

The SVAB includes Sacramento, Shasta, Tehama, Butte, Glenn, Colusa, Sutter, Yuba, Yolo, and portions of Solano and Placer counties. The SVAB extends from south of Sacramento to north of Redding and is bounded on the west by the Coast Ranges and on the north and east by the Cascade Range and Sierra Nevada. The San Joaquin Valley Air Basin is located to the south.

Climate and Topography

Hot dry summers and mild rainy winters characterize the Mediterranean climate of the valley. During the year the temperature may range from 20 to 115 degrees Fahrenheit (°F) with summer highs usually in the 90s and winter lows occasionally below freezing. The high average summer temperatures, combined with very low relative humidity, produces hot, dry summers that contribute to ozone buildup. Average annual rainfall is about 20 inches with snowfall being very rare. The prevailing winds are moderate in strength and vary from moist clean breezes from the south to dry land flows from the north.

Weather patterns throughout the SVAB are affected by geography. Mountain ranges tend to buffer the basin from the marine weather systems that originate over the Pacific. However, the Carquinez Strait creates a breach in the Coast Range on the west of this basin, which exposes the midsection of the SVAB to marine weather. This marine influence moderates climatic extremes, such as the cooling that sea breezes provide in summer evenings. These breezes also help to move pollutants out of the valley. During about half of the days from July to September, however, a phenomenon called the "Schultz Eddy" prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. Essentially this phenomenon causes the air pollutants to be blown south toward the Sacramento area. This effect exacerbates the pollution levels in the area and increases the likelihood of violating federal or state standards. The effect normally dissipates around noon when the delta sea breeze arrives.

The mountains surrounding the valley can also contribute to elevated pollutant concentrations during periods of surface of elevated surface inversions. These inversions are most common in late summer and fall. Surface inversions are formed when the air close to the surface cools more rapidly than the warm layer of air above it. Elevated inversions occur when a layer of cool air is suspended between warm air layers above and below it. Both situations result in air stagnation. Air pollutants accumulate under and within inversions, subjecting people in the region to elevated pollution levels and associated health concerns. The surface concentrations of pollutants are highest when these conditions are combined with smoke from agricultural burning or when temperature inversions trap cool air, fog, and pollutants near the ground.

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter equal to or less than 10 microns in aerodynamic diameter (PM_{10}), particulate matter equal to or less than 10 microns in aerodynamic diameter ($PM_{2.5}$), and lead (Pb). These pollutants are discussed below¹. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOCs), sometimes referred to as reactive organic gases (ROGs), and oxides of nitrogen (NO_x) react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of VOCs and NO_x, the precursors of O_3 , are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. While O_3 in the upper atmosphere absorbs harmful ultraviolet light, ground-level O_3 is damaging to the tissues of plants, animals, and humans. O_3 reacts chemically with internal body tissues, such as the lungs, and can cause adverse effects on the human respiratory system. Prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections.

Nitrogen Dioxide. Most NO₂, like O₃, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO₂ are collectively referred to as NO_x and are major contributors to O₃ formation. High concentrations of NO₂ can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO₂ and chronic pulmonary fibrosis and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million by volume (ppm).

Carbon Monoxide. CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban

¹ The following descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the Environmental Protection Agency (EPA) Criteria Air Pollutants (EPA 2016) and the California Air Resources Board (CARB) Glossary of Air Pollutant Terms (CARB 2016) published information.

areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfurcontaining fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOC. Inhalable or coarse particulate matter, or PM_{10} , is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

 $PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as Pb, sulfates, and nitrates, can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, the manufacturing of batteries, paint, ink, ceramics, and ammunition and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC.

Existing Air Quality

Under both the federal and state Clean Air Acts, standards identifying the maximum allowable concentration of the criteria air pollutants have been adopted. The U.S. EPA and the California Air Resources Board (CARB) use air quality monitoring data to determine if each air basin or county is in compliance with the applicable standards. If the concentration of a criteria air pollutant is lower than the standard or not monitored in an area, the area is classified as attainment or unclassified (and unclassified areas are treated as attainment areas). If an area exceeds the standard, the area is classified as nonattainment for that pollutant.

The U.S. EPA has designated Sacramento County as a nonattainment area for the federal 8hour O_3 standard, and CARB has designated the County as a nonattainment area for the state 1-hour and 8-hour O_3 standards. The County has been designated as a nonattainment area for the state 24-hour and annual PM₁₀ standards. The County is designated as a nonattainment area for the 2006 federal 24-hour $PM_{2.5}$ standard. The air basin is designated as unclassified or attainment for all other criteria air pollutants. The status of the air basin with respect to the National Ambient Air Quality Standards (NAAQS) is summarized in Table 4.2-1, NAAQS and Status – Sacramento Valley Air Basin (Sacramento County), and the status of the air basin with respect to the California Ambient Air Quality Standards (CAAQS) is summarized in Table 4.2-2, CAAQS and Status – Sacramento Valley Air Basin (Sacramento County).

Table 4.2-1NAAQS and StatusSacramento Valley Air Basin (Sacramento County)

Pollutant	Averaging Time	Designation/Classification
Ozone (O ₃)	8 hours	Nonattainment/Severe-15
Nitrogen dioxide (NO ₂)	1 hour, annual arithmetic mean	Unclassifiable/Attainment
Carbon monoxide (CO) ¹	1 hour, 8 hours	Attainment/Maintenance (North) Unclassifiable/Attainment (South)
Sulfur dioxide (SO ₂)	24 hours, annual arithmetic mean	Unclassifiable
Respirable particulate matter (PM ₁₀)	24 hours	Attainment/Maintenance
Fine particulate matter (PM _{2.5})	24 hours, annual arithmetic mean 24 hours	Unclassifiable/Attainment (1997 NAAQS) Nonattainment/Moderate (2006 NAAQS)
Lead (Pb)	Rolling 3-month average	Unclassifiable/Attainment

Source: EPA 2015.

Note:

The northern (urbanized) portion of Sacramento County, which includes the project site, is designated as Attainment/Maintenance, while the southern (rural) portion of the County is designated as Unclassifiable/Attainment.

Table 4.2-2

CAAQS and Status

Sacramento Valley Air Basin (Sacramento County)

Pollutant	Averaging Time	Designation/Classification
Ozone (O3)	1 hour, 8 hours	Nonattainment ¹
Nitrogen dioxide (NO ₂)	1 hour, Annual	Attainment
Carbon monoxide (CO)	1 hour, 8 hours	Attainment
Sulfur dioxide (SO ₂)	1 hour, 24 hours	Attainment
Respirable particulate	24 hours, annual arithmetic	Nonattainment
matter (PM ₁₀)	mean	

Table 4.2-2CAAQS and StatusSacramento Valley Air Basin (Sacramento County)

Pollutant	Averaging Time	Designation/Classification
Fine particulate matter (PM _{2.5})	Annual arithmetic mean	Attainment
Lead (Pb)	30-day average	Attainment
Sulfates (SO ₄)	24 hours	Attainment
Hydrogen sulfide (H ₂ S)	1 hour	Unclassified
Visibility-reducing particles	8 hours (10:00 a.m.–6:00 p.m.)	Unclassified

Source: CARB 2015a.

Note:

CARB has not issued area classification based on the state 8-hour standard. The previous classification for the 1-hour O_3 standard was Serious.

The CARB maintains ambient air quality monitoring stations throughout Sacramento County. All air pollutants are not monitored at each station; thus, data from the closest representative station that monitors a specific pollutant are summarized. The ambient air quality monitoring stations nearest the project site are the Sacramento T Street station, which monitors for O_3 , PM_{10} , $PM_{2.5}$, and NO_2 ; and the Sacramento Goldenland Court station, which monitors CO. The most recent background ambient air quality data from 2012 to 2014 are presented in Table 4.2-3.

Table 4.2-3Ambient Air Quality Data

Pollutant	Averaging Time	2012	2013	2014	Most Stringent Ambient Air Quality Standard	Monitoring Station
O ₃	1 hour	0.104	0.091	0.085	0.09 ppm	T Street ^a
		ppm	ppm	ppm		
	State exceedances	1	0	0	—	
	8 hours	0.093 ppm	0.068 ppm	0.072 ppm	0.070 ppm	
	Federal exceedances	4	0	0	—	
	State exceedances	9	0	4	_	

Pollutant	Averaging Time	2012	2013	2014	Most Stringent Ambient Air Quality Standard	Monitoring Station
PM ₁₀	24 hours	36.7 µg/m ³	92.3 µg/m ³	106.4 µg/m³	50 μg/m³	T Street ^a
	Federal exceedances	0	N/A	0	—	
	State exceedances	0	N/A	N/A	—	
	Annual	17.8 µg/m³	N/A	N/A	20 µg/m ³	
PM _{2.5}	24 hours	27.1 µg/m³	39.2 µg/m ³	26.3 µg/m³	35 µg/m³	T Street ^a
	Federal exceedances	0	6.1	0		
	Annual	N/A	10.1 µg/m ³	8.1 µg/m³	12 µg/m³	
NO ₂	1 hour	0.062 ppm	0.059 ppm	0.064 ppm	0.100 ppm	T Street ^a
	Federal exceedances	0	0	0	—	
	State exceedances	0	0	0	—	
	Annual	0.012 ppm	0.012 ppm	0.011 ppm	0.030 ppm	
CO	8 hours	1.55 ppm	N/A	N/A	9.0 ppm	Goldenland Court ^b
	Federal exceedances	0	0	0	_	
	State exceedances	0	0	0	_	

Table 4.2-3Ambient Air Quality Data

Sources: CARB 2015b.

Notes: ppm = parts per million; O3 = ozone; PM10 = coarse particulate matter; µg/m3 = micrograms per cubic meter; PM2.5 = fine particulate matter; NO2 = nitrogen dioxide; N/A = not available; CO = carbon monoxide; SO2 = sulfur dioxide. Data were taken from CARB iADAM (2015; http://www.arb.ca.gov/adam) or EPA AirData (2015; http://www.epa.gov/airdata/) and represent the highest concentrations experienced over a given year. Exceedances of federal and state standards are only shown for ozone and particulate matter. Daily exceedances for particulate matter are estimated days because PM10 and PM2.5 are not monitored daily. All other criteria pollutants did not exceed either federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM10, or 24-hour S02, nor is there a state 24-hour standard for PM2.5.

^a T Street Monitoring Station is located at 1309 T Street, Sacramento CA 95814.

^b Goldenland Court Monitoring Station is located at 68 Goldenland Court, Sacramento California, 95834.

While the data gathered at these monitoring stations may not necessarily reflect the unique meteorological environment of the project site nor the proximity of site-specific stationary and street sources, they do present the nearest available benchmark and provide the reader with a reference point to what the pollutants of greatest concern are in the region and the degree to which the area is out of attainment with specific air quality standards.

Sensitive Receptors

Some receptors are considered more sensitive than others to air pollutants. The reasons for greater than average sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. The SMAQMD identifies a sensitive receptor as "facilities that house or attract children, the elderly, and people with illnesses or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors" (SMAQMD 2016). Recreational uses may also be considered sensitive due to the greater exposure to ambient air quality conditions because people engaging in vigorous exercise have higher breathing rates.

The project site is located in an existing developed area of the City along a neighborhood retail corridor on the site of a former nursery (Capital Nursery). The project site currently contains vacant buildings, sheds, and greenhouses that were part of the Capital Nursery, as well as two single-family homes that are currently vacant. All of the buildings on the site including both homes would be demolished as part of the project. The project site is bounded by an existing residential neighborhood to the west, Freeport Boulevard and commercial uses to the east, a small retail area and residences to the north, and two banks and a grocery store (existing Raley's) and residences to the south. The closest sensitive receptors to the project site include residential neighborhoods located adjacent to the western and northern boundaries of the project site. The closest schools to the project site are Leonardo da Vinci Elementary School located approximately 0.30 of a mile south.

4.2.3 Regulatory Setting

Federal

Criteria Pollutants

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the CAA, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures,

stratospheric O₃ protection measures, and enforcement provisions. NAAQS are established for criteria pollutants under the CAA, which are O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3 , NO_2 , SO_2 , PM_{10} , $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3 , NO_2 , SO_2 , PM_{10} , and $PM_{2.5}$ are based on statistical calculations over 1-to 3-year periods, depending on the pollutant. The CAA requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. Current NAAQS are depicted in Table 2-1.

If an air basin is not in federal attainment (e.g., does not meet federal standards) for a particular pollutant, the basin is classified as a marginal, moderate, serious, severe, or extreme nonattainment area. Nonattainment areas must take steps towards attainment by a specific timeline. These steps include establishing a transportation control program and clean-fuel vehicle program, decreasing the emissions threshold for new stationary sources and for major sources, and increasing the stationary source emission offset ratio to at least 1.3:1. The above programs are published in the State Implementation Plan (SIP), which is approved by the U.S. EPA.

The SIP is a number of documents that set forth the state's strategies for achieving federal air quality standards. The Code of Federal Regulations (CFR Title 40, Chapter I, Part 52, Subpart F, Section 52.220) lists all of the items that are included in the California SIP. The SIP is not a single document, but a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. Many of California's SIPs detail control strategies, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. Local air districts and other agencies, such as the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. State law makes CARB the lead agency for all purposes related to the SIP.

Hazardous Air Pollutants

EPA identifies and regulates Hazardous Air Pollutants (HAPs) under Title III of the CAA, as amended in 1990, which directed EPA to issue national emissions standards for HAPs (NESHAP). The NESHAP may be different for major sources than for area sources of HAPs. Major sources are defined as stationary sources with the potential to emit more than 10 tons per year (TPY) of any HAP or more than 25 TPY of any combination of HAPs; all other sources are considered area sources. There are two types of emissions standards –standards that require application of Maximum Achievable Control Technology (MACT) and health-risk based standards

deemed necessary to address risks remaining after implementation of the MACT. For area sources, the MACT standards may be different, based on generally available control technology.

The CAA also requires EPA to issue vehicle or fuel standards containing reasonable requirements that control toxic emissions, at a minimum for benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, Section 219 requires the use of reformulated gasoline in selected areas with the most severe O_3 nonattainment conditions to further reduce mobile-source emissions.

State

Criteria Pollutants

The federal CAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency (CalEPA) in 1991, is responsible for ensuring implementation of the California Clean Air Act (CCAA) of 1988, responding to the federal CAA, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and PM_{2.5} and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The current CAAQS are presented in Table 4.2-4.

Table 4.2-4
Ambient Air Quality Standards

		California Standards ¹	National Standards ²	
Pollutant	Averaging Time	Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
O ₃	1 hour	0.09 ppm (180 μg/m ³)	—	Same as Primary
	8 hours	0.070 ppm (137 μg/m ³)	0.070 ppm (137	Standard [®]
			μ g/m ³) ⁶	

		California Standards ¹	National Standards ²	
Pollutant	Averaging Time	Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
NO ₂ ⁷	1 hour	0.18 ppm (339 μg/m ³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m ³)	0.053 ppm (100 μg/m ³)	
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
SO ₂ ⁸	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	_
	3 hours		—	0.5 ppm (1,300 μg/m³)
	24 hours	0.04 ppm (105 μg/m ³)	0.14 ppm (for certain areas) ⁷	_
	Annual		0.030 ppm (for certain areas) ⁷	—
PM ₁₀ ⁹	24 hours	50 μg/m³	150 μg/m³	Same as Primary
	Annual Arithmetic Mean	20 μg/m ³	—	Standard
PM _{2.5} ⁹	24 hours	No Separate State Standard	35 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m ³	15.0 μg/m³
Lead ^{10,11}	30-day Average	1.5 μg/m³	—	—
	Calendar Quarter	—	1.5 μg/m ³ (for certain areas) ¹¹	Same as Primary Standard
	Rolling 3-Month Average		0.15 μg/m ³	
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m ³)	—	—
Vinyl chloride ¹⁰	24-hour	0.01 ppm (26 µg/m ³)		
Sulfates	24-hour	25 µg/m ³		

Table 4.2-4Ambient Air Quality Standards

		California Standards ¹	National Standards ²	
Pollutant	Averaging Time	Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
Visibility reducing particles	8-hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%		_

Table 4.2-4Ambient Air Quality Standards

Source: CARB 2015c.

Notes: ppm = parts per million by volume; $\mu g/m^3$ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter.

- ¹ California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter—PM₁₀, PM₂₅, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ² National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter (µg/m³) is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- ³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ⁴ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ⁵ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ⁶ On October 1, 2015, the EPA Administrator signed the notice for the final rule to revise the primary and secondary NAAQS for O_3 . The EPA is revising the levels of both standards from 0.075 ppm to 0.070 ppm, and retaining their indicators (O_3), forms (fourth-highest daily maximum, averaged across three consecutive years) and averaging times (eight hours). The EPA is in the process of submitting the rule for publication in the Federal Register. The final rule will be effective 60 days after the date of publication in the Federal Register. The lowered national 8-hour standards are reflected in the table.
- ⁷ To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ⁸ On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- ⁹ On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 μg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- ¹⁰ CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

¹¹ The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs.

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. Toxic air contaminant emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 as compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program, and In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets Regulation. All of these regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel powered equipment. Several Airborne Toxic Control Measures (ATCMs) that reduce diesel emissions are described in greater detail below.

Despite these reduction efforts, CARB recommends that proximity to sources of diesel particulate matter (DPM) emissions be considered in the siting of new sensitive land uses. In April 2005, CARB published *Air Quality and Land Use Handbook: a Community Health Perspective*. This handbook is intended to give guidance to local governments in the siting of sensitive land uses near sources of air pollution. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities such as ports, rail yards, and distribution centers. Specifically, the document focuses on risks from emissions of DPM, a known carcinogen, and establishes recommended siting distances of sensitive receptors. CARB notes that these recommendations are advisory and should not be interpreted as defined "buffer zones," and that local agencies must balance other

considerations, including transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk where necessary, CARB's position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level (CARB 2005).

Idling of Commercial Heavy Duty Trucks (13 CCR 2485): This ATCM was adopted to control emissions from idling trucks. It prohibits idling for more than 5 minutes for all commercial trucks with a gross vehicle weight rating over 10,000 pounds. The ATCM contains an exception that allows trucks to idle while queuing or involved in operational activities.

In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.): This ATCM requires that specific fleet average requirements are met for criteria air pollutant emissions, particularly NO_x and particulate matter, from in-use off-road diesel-fueled vehicles. Where average requirements cannot be met, Best Available Control Technology requirements apply.

In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025): This ATCM was adopted to reduce NO_x and particulate matter emissions from most in-use on-road diesel trucks and buses with a gross vehicle weight rating greater than 14,000 pounds and requires use of exhaust retrofit equipment and replacement of older vehicles.

In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate (13 CCR 2477): This ATCM uses a phased approach to reduce DPM emissions from in-use TRUs and TRU generator set equipment used to power electrically driven refrigerated shipping containers and trailers that are operated in California.

Clean Car Standards: As required under AB 1493 (Pavley 2002) and as authorized by the granting of a waiver from the federal CAA, CARB established GHG emission standards for passenger vehicles, light-duty trucks, and other personal vehicles. These standards apply to all new passenger vehicles starting with the 2009 model year.

Senate Bill 656

In 2003, the State Legislature passed Senate Bill (SB) 656 to reduce public exposure to PM_{10} and $PM_{2.5}$. The legislation requires the ARB, in consultation with local air pollution control and air quality management districts, to adopt a list of the most readily available, feasible, and cost-effective control measures that could be implemented by air districts to reduce PM_{10} and $PM_{2.5}$. The legislation establishes a process for achieving near-term reductions in PM throughout California ahead of federally required deadlines for $PM_{2.5}$, and provides new direction on PM reductions in those areas not subject to federal requirements for PM. Source categories

addressed by SB 656 include measures to address residential wood combustion and outdoor green-waste burning; fugitive dust sources such as paved and unpaved roads and construction; combustion sources such as boilers, heaters, and charbroiling; solvents and coatings; and product manufacturing. These measures include, but are not limited to, the following:

- Require water or chemical stabilizers/dust suppressants during grading activities
- Limit visible dust emissions beyond the project boundary during construction
- Require paving/curbing of roadway shoulder areas
- Require street sweeping

Local

Sacramento Area Council of Governments Sustainable Communities Strategy

In February 2016, Sacramento Area Council of Governments (SACOG), the designated metropolitan planning organization (MPO) for the Sacramento region adopted the 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (SACOG 2016). The MTP/SCS is a long-range plan for transportation projects within the planning area and focuses on cost-effective operational improvements to preserve the existing and expanded regional transportation system through 2035. The 2016 update to the MTP/SCS focused on refinement of and addressing implementation challenges to the previous (2012) plan. The SACOG Board of Directors has adopted five guiding policy themes including, land use forecast, transportation funding, investment strategy, investment timing, and plan effects which provide direction for the plan update.

Sacramento Region Blueprint

In 2007 SACOG adopted the Preferred Blueprint Scenario for 2050 (Blueprint). The Blueprint depicts a way for the region to grow through 2050 in a manner consistent with the seven smart growth principals: (1) transportation choices; (2) mixed-use developments; (3) compact development; (4) housing choice and diversity; (5) use of existing assets; (6) quality design, and (7) natural resources conservation. The seven smart growth principals provide guidance for land use planners which, when implemented, would ultimately result in an overall reduction in vehicle miles traveled (VMT), emissions of criteria pollutants, and greenhouse gas emissions.

Sacramento Metropolitan Air Quality Management District

The SMAQMD is the primary agency responsible for planning to meet federal and state ambient air quality standards in Sacramento County and the larger Sacramento Ozone Nonattainment Area.

The SMAQMD develops rules and regulations for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. The SMAQMD's air quality management plans include control measures and strategies to be implemented to attain state and federal ambient air quality standards in Sacramento County. The SMAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. Applicable SMAQMD attainment plans include:

- Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions): The 8-Hour Ozone Attainment and Reasonable Further Program Plan (2013 Ozone Plan) describes measures to be implemented by the air districts in the Sacramento Federal Nonattainment Area (SFNA) to achieve the 1997 O₃ NAAQS. The 2013 Ozone Plan shows that the region continues to meet federal progress requirements and demonstrates that the region will meet the 1997 O₃ NAAQS by 2018. The 2013 Ozone Plan updates the emissions inventory, provides photochemical modeling results, updates the reasonable further progress and attainment demonstrations, revises adoption dates for control measures, and sets new motor vehicle emission budgets for transportation conformity purposes. The 2013 Ozone Plan also includes a VMT offset demonstration that showed the emissions reduction from transportation control measures are sufficient to offset the emissions increase due to VMT growth (SMAQMD 2013).
- *PM*₁₀ *Implementation/Maintenance Plan and Redesignation Request* for Sacramento County: On October 28, 2010, the SMAQMD Governing Board approved the PM₁₀ maintenance plan and request for redesignation for the 1997 PM₁₀ NAAQS (SMAQMD 2010). In 2002, the U.S. EPA officially determined that Sacramento County had attained the PM₁₀ NAAQS by the December 31, 2000, attainment deadline. This plan fulfills the requirements for the U.S. EPA to redesignate Sacramento County from nonattainment to attainment of the PM₁₀ NAAQS by preparing the following plan elements and tasks:
 - Document the extent of the PM₁₀ problem in Sacramento County
 - Determine the emission inventory sources contributing to the PM₁₀ problem
 - Identify the appropriate control measures that achieved attainment of the PM₁₀ NAAQS
 - Demonstrate maintenance of the PM₁₀ NAAQS

The U.S. EPA formally re-designated Sacramento County attainment for the federal 24hour PM₁₀ NAAQS, effective October 28, 2013.

 PM_{2.5} Implementation/Maintenance Plan and Redesignation Request for Sacramento PM2.5 Nonattainment Area: On May 9, 2012, CARB submitted a request that U.S. EPA find the Sacramento region in attainment for the 2006 24-hour PM2.5 NAAQS. On August 14, 2013, the U.S. EPA officially determined that the SFNA had attained the 24-hour $PM_{2.5}$ NAAQS by the attainment deadline. On October 24, 2013, the SMAQMD, EI Dorado County Air Quality Management District, Placer County Air Pollution Control District, and the Yolo-Solano Air Quality Management District approved the $PM_{2.5}$ maintenance plan and request for redesignation for the 2006 $PM_{2.5}$ NAAQS (SMAQMD et al. 2013) to meet the U.S. EPA redesignation requirements.

• 2015 Triennial Report and Air Quality Plan Revision: This plan is intended to comply with the requirements of the CCAA as related to bringing the region into compliance with the CAAQS for O₃. The SMAQMD has prepared several triennial progress reports that build upon the 1994 Sacramento Area Regional Ozone Attainment Plan. The 2015 Triennial Report and Air Quality Plan Revision (SMAQMD 2015) is the most recent report. The triennial progress report describes historical trends in air quality, includes updated emissions inventories, and identifies feasible control measures the SMAQMD will study or adopt over the triennial period.

Similar to CARB's land use siting recommendations for sensitive receptors in proximity to sources of substantial TACs, SMAQMD has adopted the *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways* (SMAQMD 2011) as guidance on how to assess and disclose potential cancer risk of sensitive receptors to DPM from major roadways.

In addition, the SMAQMD has several rules that relate to the proposed project, which are summarized below.

Rule 201 – General Permit Requirements: Requires any project that includes the use of certain equipment capable of releasing emissions to the atmosphere as part of project operation to obtain a permit from the SMAQMD prior to operation of the equipment. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the SMAQMD to determine if a permit is required. Portable construction equipment with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a CARB portable equipment registration.

Rule 401 – Ringelmann Chart/Opacity: Prohibits individuals from discharging into the atmosphere from any single source of emissions whatsoever any air contaminant whose opacity exceeds certain specified limits.

Rule 402 – Nuisance: To protect the public health, Rule 402 prohibits any person from discharging such quantities of air contaminants that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.

Rule 403 – Fugitive Dust: Requires a person to take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation.

Rule 442 – Architectural Coatings: Sets VOC limits for coatings that are applied to stationary structures or their appurtenances. The rule also specifies storage and cleanup requirements for these coatings.

Rule 453 – Cutback and Emulsified Asphalt Paving Materials: Asphalt paving operations that may be associated with implementation of the project would be subject to Rule 453. This rule applies to the manufacture and use of cutback asphalt and emulsified asphalt for paving and maintenance operations.

Rule 902 – Asbestos: Establishes survey, notification, and work practice requirements to prevent asbestos emissions during building demolition.

City of Sacramento 2035 General Plan

The City of Sacramento's air quality Goals and Policies are provided in the Environmental Resources (ER) Element of the General Plan and applicable goals and policies are as follows (City of Sacramento 2015a).

Goal ER 6.1 Improved Air Quality. Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that contribute to climate change.

Policy ER 6.1.2 New Development. The City shall review proposed development projects to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases, nitrogen oxides, and particulate matter $(PM_{10} \text{ and } PM_{2.5})$ through project design.

Policy ER 6.1.3 Emissions Reduction. The City shall require development projects that exceed SMAQMD ROG and NO_X operational thresholds to incorporate design or operational features that reduce emissions equal to 15% from the level that would be produced by an unmitigated project.

Policy ER 6.1.4 Sensitive Uses. The City shall coordinate with SMAQMD in evaluating exposure of sensitive receptors to toxic air contaminants, and will impose appropriate conditions on projects to protect public health and safety.

Policy ER 6.1.10 Coordination with SMAQMD. The City shall coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design.

4.2.4 Impacts and Mitigation Measures

Methods of Analysis

Project-related air quality impacts fall into two categories: short-term impacts due to construction and long-term impacts due to project operation. First, during project construction (short-term), the project would result in an increase in emissions primarily due to off-road equipment, on-road vehicles, architectural coating and asphalt off-gassing, and fugitive dust from earth moving. Under operations (long-term), the project would result in an increase in emissions due to motor vehicle trips and on-site stationary sources such as boilers. Other sources include minor area sources such as landscaping and use of consumer products.

The proposed project's short-term construction-related and long-term operational emissions were estimated using the CalEEMod software (version 2013.2.2), a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers Trip Generation Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data were input into the model (e.g., construction phases, timing, equipment, and estimated daily project trips). All project modeling results are included in Appendix B.

The analysis below only addresses Scheme A because there would be no measurable change in the project footprint or project operation under Scheme B.

Thresholds of Significance

The significance criteria used to evaluate the project impacts are based on Appendix G of the CEQA Guidelines, the SMAQMD thresholds, the thresholds adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to air quality would occur if the project would:

- conflict with or obstruct implementation of an applicable air quality plan;
- result in short-term (construction) emissions of NOx above 85 pounds per day, or PM10 above 80 pounds per day or PM2.5 above 82 pounds per day with all feasible best available control technology (BACT) or best management practices (BMPs) implemented;

- result in long-term (operational) emissions of NO_X or ROG above 65 pounds per day, or PM₁₀ above 80 pounds per day or PM_{2.5} above 82 pounds per day with all feasible best available control technology (BACT) or best management practices (BMPs) implemented;
- result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm);
- result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under an applicable federal or state ambient air quality standard (including the release of emissions that exceed quantitative thresholds for ozone precursors);
- create objectionable odors affecting a substantial number of people; or
- create a lifetime cancer risk from TAC exposures exceeding 10 in 1 million for stationary sources, or substantially increase the lifetime cancer risk as a result of increased exposure to TACs from mobile sources.

Project Specific Impacts and Mitigation Measures

4.2-1: The proposed project would not conflict with or obstruct implementation of an applicable air quality plan. Based on the analysis below, the impact is *less than significant.*

The Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions) addresses attainment of the federal 8-hour ozone standard, while the 2015 Triennial Report and Air Quality Plan Revision addresses attainment of the California 1-hour and 8-hour ozone standards. These are the latest plans issued by the SMAQMD, and they incorporate land use assumptions and travel demand modeling provided by SACOG. The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with federal and state air quality standards. In general, projects are considered consistent with, and would not conflict with or obstruct implementation of the air quality plan if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the air quality management plan.

Demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) were developed by SACOG for its MTP/SCS based on general plans for cities and counties in the SVAB. The air quality management plans rely on the land use and population projections provided in the MTP/SCS, which is generally consistent with the local plans; therefore, the air quality management plans are generally consistent with local government plans.

As discussed in Chapter 3 (Land Use and Planning), implementation of the proposed project would result in a change in land use as compared to existing conditions, as well as a change in the type of use, but would be consistent with the City's intent to redevelop this infill site. The site is presently designated as Urban Corridor Low density, Suburban Neighborhood Low density, and Suburban Neighborhood Medium density in the City's 2035 General Plan. The project is requesting a General Plan Amendment to re-designate the site from Suburban Neighborhood Low density. Since the proposed project (108,165 sf commercial) would result in less intense development of the site compared to how the site could be developed consistent with the underlying land use and zoning (assumed 288,585 sf commercial and 40 residential units)², the proposed project would not generate substantial population and employment that was not accounted for in the City's General Plan or SACOG's MTP/SCS and impacts relating to the project's potential to conflict with or obstruct implementation of the applicable air quality management plan would be **less than significant.**

Mitigation Measures

None required.

4.2-2: The proposed project would not result in short-term (construction) emissions of NO_x above 85 pounds per day, or PM₁₀ above 80 pounds per day or PM_{2.5} above 82 pounds per day (with all feasible best available control technology (BACT) or best management practices (BMPs) for particulates implemented). Based on the analysis below, the impact is *less than significant*.

Construction of the project would result in a temporary addition of pollutants to the local air shed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling demolition debris and excavated earth materials and from construction workers travelling to and from the site. Existing buildings that may contain asbestos would also be demolished. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists.

Pollutant emissions associated with construction activity were quantified using CalEEMod. Default values provided by the program were used where detailed project information was not available. A detailed depiction of the construction schedule—including information regarding phasing, equipment utilized during each phase, haul trucks, vendor trucks, and worker vehicles—is contained in the CalEEMod outputs, provided in Appendix B.

² Buildout of site based on existing land use designations conservatively estimated per communication with the City (Johnson 2016).

Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The project would be required to comply with SMAQMD's Basic Construction Emission Control Practices, which are required for all construction activities within the SMAQMD jurisdiction. These measures include watering the construction site twice daily, limiting vehicle speeds on unpaved roadways to 15 miles per hour, minimizing vehicle idling, covering haul trucks transporting soil, and cleaning paved roads. Internal combustion engines used by construction equipment and haul trucks, vendor trucks, and worker vehicles would result in emissions of VOCs, NO_x , CO, PM_{10} , and $PM_{2.5}$.

It is anticipated that construction of the proposed project would occur from approximately June 2017 through August 2018. For purposes of estimating project emissions, and based on information provided by the project applicant, it is assumed that construction activity would occur continuously and would not be phased. The analysis contained herein is based on the following assumptions (duration of phases is approximate):

- Demolition: 40 days
- Site preparation: 10 days
- Grading and Utilities: 30 days
- Building construction: 185 days
- Paving: 20 days
- Architectural coating: 20 days

CalEEMod was used to quantify construction NO_x , PM_{10} , and $PM_{2.5}$ emissions from off-road equipment, haul trucks associated with demolition and soils export, on-road worker vehicle emissions, and vendor delivery trips. Predicted construction emissions for the worst-case day for each of the construction years are presented in Table 4.2-5 and compared to the SMAQMD threshold.

Year	NO _x (Ibs/day)	PM ₁₀ (Ibs/day)	PM _{2.5} (Ibs/day)
	Summer		
2017	79.53	11.02	7.04
2018	31.61	3.38	2.15
	Winter		
2017	80.43	11.02	7.04
2018	32.00	3.38	2.15

Table 4.2-5 Estimated Maximum Daily Construction Emissions

Year	NO _x (Ibs/day)	PM₁₀ (Ibs/day)	PM _{2.5} (Ibs/day)
Maximum Daily	80.43	11.02	7.04
Pollutant Threshold	85	80	82
Threshold Exceeded?	No	No	No

Table 4.2-5Estimated Maximum Daily Construction Emissions

Source: See Appendix B for detailed results.

Notes: These estimates reflect implementation of SMAQMD Basic Construction Emission Control Practices. SMAQMD has adopted construction thresholds for NOx, PM10, and PM2.5.

lb/day = pounds per day; NOx = oxides of nitrogen; PM10 = coarse particulate matter; PM2.5 = fine particulate matter

As noted above, all construction projects in the SMAQMD jurisdiction are required to implement SMAQMD's Basic Construction Emission Control Practices and are required to comply with District Rules and Regulations, including those identified in the Regulatory Setting section above. Compliance with SMAQMD's rules and regulations are included in the modeling and as shown in Table 4.2-5, daily construction emissions would not exceed the SMAQMD significance thresholds for NO_x, PM₁₀, or PM_{2.5} during construction in all construction years. Therefore, construction impacts of the project would be **less than significant** and no mitigation measures are required.

Mitigation Measures

None required.

4.2-3: The proposed project would not result in long-term (operational) emissions of NO_x or ROG above 65 pounds per day, or PM₁₀ above 80 pounds per day or PM_{2.5} above 82 pounds per day (with all feasible best available control technology (BACT) or best management practices (BMPs) for particulates implemented). Based on the analysis below, the impact is *less than significant*.

Following the completion of construction activities, the proposed project would generate criteria pollutant emissions from vehicular traffic, area sources (consumer products, architectural coatings, landscaping equipment), and energy sources (natural gas appliances, space and water heating). The emissions associated with on-road mobile sources include running and starting exhaust emissions, evaporative emissions, brake and tire wear, and fugitive dust from paved and unpaved roads. Default trip generation rates and trip lengths included in CalEEMod for each analyzed land use for the project were adjusted to match the overall daily trips (6,568 trips) and total average daily vehicle miles traveled (VMT) length data (4.51 miles per trip). Emissions from energy sources include natural gas combustion for appliances and space and water heating. For the project, the most recent and available 2013 Title 24 values and default non-Title 24 energy intensities were used. Area sources include gasoline-powered landscape maintenance
equipment, consumer products, and architectural coatings for the maintenance of buildings. CalEEMod was used to estimate daily emissions from the operational sources, with unmitigated emissions depicted in Table 4.2-6. Notably, there are no specific BACT or BMPs applicable to operational particulate matter emissions for land development projects at this time (Huss 2016a).

Source	ROG (lb/day)	NO _x (lb/day)	PM₁₀ (Ib/day)	PM _{2.5} (lb/day)			
	Summer						
Area	8.67	0.00	0.00	0.00			
Energy	0.04	0.39	0.03	0.03			
Mobile	19.40	27.99	23.25	6.48			
Total Summer	28.11	28.38	23.28	6.51			
Winter							
Area	8.67	0.00	0.00	0.00			
Energy	0.04	0.39	0.03	0.03			
Mobile	17.87	31.72	23.25	6.48			
Total Winter	26.58	32.11	23.28	6.51			
Maximum Daily	28.11	32.11	23.28	6.51			
Pollutant Threshold	65	65	80	82			
Threshold Exceeded?	No	No	No	No			

Table 4.2-6Estimated Unmitigated Maximum Daily Operational Emissions

Source: See Appendix B for detailed results.

Note: SMAQMD has adopted operational thresholds for ROG, NOx, PM10, and PM2.5.

lb/day = pounds per day; ROG = reactive organic gases; NOx = oxides of nitrogen; PM10 = coarse particulate matter; PM2.5 = fine particulate matter

As shown in Table 4.2-6, ROG, NO_x , PM_{10} , and $PM_{2.5}$ emissions would be substantially below the SMAQMD threshold of significance. In addition, as part of complying with the City's CAP, the project would include design features that would increase energy efficiency and further reduce emissions. This impact would be **less than significant**.

Mitigation Measures

None required.

4.2-4: The proposed project would not result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm). Based on the analysis below the impact is *less than significant*.

Motor vehicles are the primary source of CO in the SVAB. The SMAQMD CEQA Guide to Air Quality Assessment provides two tiers of screening criteria to determine whether air quality

modeling to evaluate CO concentrations is necessary. The proposed project does not meet the first tier of screening because it would add traffic to an intersection (Freeport Boulevard and Sutterville Road - south) that already operates at level of service (LOS) E or F. The second tier of screening provides that if the project meets all of the following criteria, it would have a less-than-significant impact to air quality related to local CO concentrations:

- The project would not result in an affected intersection experiencing more than 31,600 vehicles per hour;
- The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air will be substantially limited; and
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

Based on the traffic analysis prepared for the project, the proposed project would meet all of the SMAQMD's CO hotspot second tier screening criteria and would not generate traffic volumes that could cause CO hotspots at local intersections and would not adversely affect sensitive receptors. This impact is **less than significant**.

Mitigation Measures

None required.

4.2-5: The proposed project would not result in objectionable odors affecting a substantial number of people. Based on the analysis below the impact is *less than significant.*

The SMAQMD has identified typical odor sources in the SMAQMD *CEQA Guide to Air Quality Assessment*; a few examples of these sources include wastewater treatment plants, sanitary landfills, composting and green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting and coating operations, rendering plants, and food packaging plants. The project would not include uses that have been identified by SMAQMD as potential sources of objectionable odors. Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the Project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. This impact would be **less than significant**.

Mitigation Measures

None required.

4.2-6: The proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Based on the analysis below the impact is less than significant.

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, child-care centers, athletic facilities, long-term health-care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Toxic Air Contaminants

TACs are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. The nearest sensitive receptors to the project area are single-family residences located adjacent to the western and northern project boundary. The closest residence is approximately 50 feet from the project boundary. Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SMAQMD recommends an incremental cancer risk threshold of 10 in 1 million for stationary sources. SMAQMD does not have a recommended threshold for mobile source emissions. "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period would contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology. In addition, some TACs have noncarcinogenic effects. The SMAQMD recommends a Hazard Index of 1 or more for acute (shortterm) and chronic (long-term) effects.³ TACs that would potentially be emitted during demolition and construction activities associated with project development would be asbestos (from building demolition) and diesel particulate matter (DPM) (from diesel equipment and trucks).

³ Noncancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the project to published reference exposure levels that can cause adverse health effects.

Unmitigated demolition activities could result in airborne entrainment of asbestos, particularly where structures built prior to 1980 would be demolished. All of the buildings slated for demolition were evaluated to determine if any building material contains asbestos material (see Section 4.6, Hazards and Hazardous Materials and Appendix E). Asbestos was found in numerous buildings in the floor tiles, composite roofing materials, gypsum wallboard and wall texture, and acoustical ceiling material. Demolition of buildings containing asbestos are required to follow the National Emission Standards for Hazardous Air Pollutants and SMAQMD Rule 902 and Cal/OSHA safety orders of 8 CCR 1529 related to asbestos removal and cleanup. Section 1529 regulates construction-related asbestos exposure involving demolition of structures, removal of asbestos-containing materials, asbestos clean-up, or excavation activities which may involve exposure to asbestos. Therefore, potential asbestos emissions would be minimized during demolition.

DPM emissions would be emitted from heavy-duty construction equipment and heavy-duty trucks. Heavy-duty construction equipment and diesel trucks are subject to CARB ATCMs (described in the Environmental Setting) to reduce DPM emissions. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities would only constitute a small percentage of the total 30-year exposure period. The construction period for the project would total approximately 1.2 years, after which construction-related TAC emissions would cease. The 1.2-year construction duration represents 4% of the total 30-year exposure period. Due to this relatively short period of exposure and minimal particulate emissions on site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

In regards to operations, the proposed project does not include stationary sources that would emit air pollutants or TACs, such as large boilers, emergency generators, or manufacturing facilities. Thus, the project would not result in emissions of TAC from such stationary sources. However, idling diesel trucks and transport refrigeration units (TRUs) associated with the grocery store loading docks would result in the generation of DPM and increased exposure to nearby residences. The closest residence is located approximately 50 feet west of the proposed Raley's grocery store loading dock. The remainder of the retail stores would receive deliveries from step-side trucks that would maneuver and park in the store parking lot. Diesel trucks and TRUs are subject to CARB ATCMs (described in the Environmental Setting) to reduce DPM emissions. The existing Raley's store currently receives 30–40 deliveries per week and it is anticipated a similar number of deliveries to an average of one delivery truck operation at the loading dock per hour, seven days per week between 6:00 a.m. and noon. Trucks in the loading

area would be instructed by Raley's not to leave their engines idling and to turn off their vehicles, which would minimize DPM emissions. Furthermore, SMAQMD generally does not require or recommend a health risk assessment be prepared for grocery stores or shopping centers as part of the CEQA review process, although SMAQMD does explicitly indicate that one of the best ways to substantially reduce DPM emissions from delivery trucks is by providing electrical hookups in loading docks for trucks with TRUs to plug into while making deliveries (Huss 2016b). The provision of electrical outlets at loading docks would give truck operators the ability to shut off their main engines while maintaining power to the refrigeration systems and keep perishable foods at an appropriate temperature. Installing electrical outlets can lead to localized reductions in diesel emissions, thereby decreasing the potential for health risks to those that live in the vicinity. Electrical hookups for delivery trucks are included as part of the project design, as described in Chapter 2, Project Description. Based on the minimal quantity of diesel truck traffic, implementation of the applicable CARB ATCMs, and the electrical hookups in loading docks, TACs generated during operations would not be expected to result in concentrations causing significant health risks.

Health Impacts of Criteria Air Pollutants

Construction of the project would generate criteria air pollutant emissions; however, the project would not exceed the SMAQMD mass-emission thresholds. The SVAB is a nonattainment area for O_3 , PM_{10} , and $PM_{2.5}$ under the NAAQS and/or CAAQS.

VOCs and NOx are precursors to O_3 , for which the SVAB is designated as nonattainment with respect to the NAAQS and CAAQS. Thus, existing O_3 levels in the SVAB are at unhealthy levels during certain periods. The health effects associated with O_3 are generally associated with reduced lung function. Because the project involves construction and operational activities that would not result in VOC or NOx emissions that would exceed the SMAQMD thresholds, the project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

In addition to O_3 , NOx contributes to potential exceedances of the NAAQS and CAAQS for NO₂. The existing ambient NO₂ concentrations are below the NAAQS and CAAQS. Thus, project construction and operation is not expected to exceed the NO₂ standards or contribute to the associated health effects, which are primarily associated with respiratory irritation. CO tends to be a localized impact associated with congested traffic intersections. The associated CO hotspots were discussed previously (see Impact 4.1-3) and determined to be less than significant. Thus, the project's CO emissions would not contribute to the health effects associated with this pollutant.

According to the EPA, particulate matter contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Numerous scientific studies have linked particulate matter exposure to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing (EPA 2016). As with O_3 and NOx, the project would not generate emissions of PM_{10} and $PM_{2.5}$ that would exceed the SMAQMD's thresholds. Accordingly, the project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause an increase in related regional health effects for these pollutants.

In summary, the proposed project would not result in substantial emissions and exposure of sensitive receptors to TACs during construction and operation. In addition, the project would not result in a potentially significant contribution to regional concentrations of non-attainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Therefore, the project would have a **less-than-significant impact** related to exposure of sensitive receptors to substantial pollutant concentrations.

Mitigation Measures

None required.

Cumulative Impacts

The cumulative context of an air pollutant is dependent on the specific pollutant being considered. O_3 precursors are a regional pollutant; therefore, the cumulative context would be existing and future development within the entire SVAB. This means that O_3 precursors generated in one location do not necessarily have O_3 impacts in that area. Instead, precursors from across the region can combine in the upper atmosphere and be transported by winds to various portions of the air basin. Consequently, all O_3 precursors generated throughout the air basin are part of the cumulative context.

The geographic scope of the area for the proposed project cumulative analysis includes the City of Sacramento and surrounding areas within the SFNA for O_3 . The SFNA includes the counties of Sacramento, Yolo, Solano (partial), Sutter (partial), Placer (except Lake Tahoe Air Basin), and El Dorado (except Lake Tahoe Air Basin). The SMAQMD establishes emissions thresholds for regional emissions.

Particulates (fugitive dust and DPM) and TACs would result in localized impacts in close proximity to pollutant sources. There are no other active cumulative projects in the immediate vicinity of the proposed project site that are anticipated to contribute to localized TAC exposure; therefore, an analysis of the cumulative effects is not addressed below.

4.2-7: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment under an applicable federal or state ambient air quality standard (including the release of emissions that exceed quantitative thresholds for ozone precursors). Based on the analysis below the impact is *less than significant*.

The SFNA is in nonattainment for O_3 and particulate matter. Due to its nonattainment status for the federal and state ozone standards, the geographic scope of the area for the proposed project cumulative analysis includes the City of Sacramento and surrounding areas within the SFNA for O_3 . Ongoing development and operation of new land uses would generate additional emissions of O_3 precursors and particulate matter, which may adversely affect the ability of the region to achieve attainment with the applicable air quality standards. This is a significant cumulative impact.

The SMAQMD Guide to Air Quality Assessment describes cumulative air quality issues as follows:

By its very nature, air pollution is largely a cumulative impact. Ambient air quality standards are violated or approach nonattainment levels due to past development that has formed the urban fabric, and attainment of standards can be jeopardized by increasing emissions-generating activity in the region. The nonattainment status of regional pollutants is a result of past and present development within the SVAB. Thus, this regional impact is a cumulative impact, and projects would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of the regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects (SMAQMD 2016).

Given this background, the SMAQMD Guide to Air Quality Assessment describes a step-by-step approach to evaluating a project's contribution to cumulative impacts. The following discussion evaluates the potential for the proposed project's construction and operational emissions to result in a considerable contribution to the region's cumulative air quality impact.

Ozone Precursor Emissions

Construction: In accordance with the SMAQMD guidance, a project whose construction emissions would not exceed the NO_x significance threshold would not be considered cumulatively considerable and would be less than significant. As discussed in Impact 4.2-2, the project's NO_x construction emissions would not exceed the threshold, and therefore, the project's emissions of O_3 precursors would not be considerable and the project's contribution to the **cumulative impact would be less than significant**.

Operation: In accordance with the SMAQMD guidance, a project whose operational emissions would not exceed the NO_x or ROG significance thresholds would not be considered cumulatively considerable and would be less than significant. As discussed in Impact 4.2-3, the project operation would not generate NO_x or ROG emissions that exceed the threshold of significance. Therefore, the project's emissions of O_3 precursors would not be considerable and the project's contribution to the **cumulative impact would be less than significant**.

Particulate Matter Emissions

Construction: In accordance with the SMAQMD guidance, a project that implements the SMAQMD basic construction emissions control practices and whose construction emissions would not exceed the PM_{10} or $PM_{2.5}$ significance thresholds would not be considered cumulatively considerable and would be less than significant. As discussed in Impact 4.2-2, the project would implement the SMAQMD basic construction emissions control practices and would result in PM_{10} and $PM_{2.5}$ emissions that would not exceed the respective threshold, and therefore, the project's emissions of PM_{10} and $PM_{2.5}$ would not be considerable and the project's contribution to the **cumulative impact would be less than significant**.

Operation: In accordance with the SMAQMD guidance, a project whose operational emissions would not exceed the PM_{10} or $PM_{2.5}$ significance thresholds would not be considered cumulatively considerable and would be less than significant. As discussed in Impact 4.2-3, the project operation would not generate PM_{10} or $PM_{2.5}$ emissions that exceed the respective threshold of significance. Therefore, the project's emissions of PM_{10} and $PM_{2.5}$ would not be considerable and the project's contribution to the **cumulative impact would be less than significant**.

Mitigation Measures

None required.

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4.3 BIOLOGICAL RESOURCES

4.3.1 Introduction

This section describes the existing biological setting within the project site, summarizes applicable regulations, and evaluates the potential effects that the proposed Land Park Commercial Center Project (proposed project) could have on biological resources.

There were no comments received in response to the Notice of Preparation (NOP) concerning biological resources. A copy of the NOP and comments received is included in Appendix A.

Information contained in this section is based on a technical report prepared by Dudek, *Biological Resources Assessment for the Land Park Commercial Center Project* (Dudek 2015, included as Appendix C) and the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b).

4.3.2 Environmental Setting

This section describes the existing habitats in the project area and also identifies the sensitive habitats that could be affected by development of the project site. Special-status species with the potential to occur in habitats found within the project site are also described. The project site includes the former Capital Nursery, a retail nursery and sales center located at 4700 Freeport Boulevard in Sacramento, California, between Meer Way and Wentworth Avenue. The project site also includes two single family residences (1913 and 1919 Wentworth Avenue) and two surface parking lots (1927 and 2009 Wentworth Avenue). The residential properties include grass lawns with ornamental landscaping and the parking lots are paved with a few ornamental trees along the periphery and in a planted median. None of these trees meet the City's definition of Heritage Trees. Therefore, the biological assessment focuses on the former nursery site that includes the largest, undeveloped parcel.

Physical Setting

The former Capital Nursery site is vacant and contains several older storage buildings and greenhouses, as well as some open areas that were previously used for cultivating plants; a number of support structures and irrigation systems still remain on site. The walkways throughout the project site are either gravel or paved and several weedy or ornamental plant species were found sporadically throughout the site. The site is not located near any ditches, streams, culverts, or other water bodies. The project site is mostly flat with an elevation of 20 feet above sea level.

The site is bound on the north, west and south by residential development and on the east by commercial properties. The location corresponds to 38°31'59" north latitude and 121°29'45" west longitude.

Vegetation

The site is highly disturbed, and no intact vegetation communities exist. The site is characterized by a variety of non-native grasses, weedy and ornamental species; several mature trees (*Quercus* sp., *Pinus* sp., and ornamentals) occur on adjacent properties surrounding the site such that branches from these trees extend over the property fence into the project site. There are a few small ornamental trees present in the center of site near the old greenhouses.

Common Wildlife

Some common raptor and songbird species found in urban areas could use the site for foraging and possibly nesting, although none were observed nesting during the field survey. The sporadic small patches of weedy non-native vegetation found throughout the site does provide minimal cover for some urban wildlife such as small mammals and reptiles; however, surrounding urban communities that contain high levels of human activity likely decrease the probability of common wildlife species from using this parcel, although raccoon (*Procyon lotor*) and Virginia opossum (*Didelphis virginianus*) could use the site for foraging or movement. The site could potentially be used as low-quality foraging habitat by songbirds such as American robin (*Turdus migratorius*) and black phoebe (*Sayornis nigricans*). Reptiles such as northwestern fence lizard (*Sceloporus occidentalis occidentalis*) and small mammals such as mice (*Microtus* sp.) and squirrel (*Sciurus* sp.) may use the site for foraging, movement and cover.

Special-Status Species

Table 4.3-1 provides a list of the special-status species that could potentially occur in the vicinity of the project site. The field survey determined the project site does not provide habitat for any special-status plant (flora) or animal (fauna) species, and no special-status plant or animal species or their habitat were observed during the survey. In addition, no special-status or protected plant or animal species are expected to breed or otherwise use the site.

Wetlands and Wildlife Movement Corridors

No waters or wetlands or riparian habitat under state or federal jurisdiction are present on the project site. In addition, there are no wildlife corridors or nursery sites on the project site. Wildlife corridors are linear features that connect large areas of natural open space and provide avenues for the migration of animals. Wildlife nursery sites provide cover and food resources that aid in the development of young wildlife. Because the site is in an urbanized

are of the City and comprises a non-linear feature bound by existing roads and development, the site has little or no value as a potential wildlife corridor or nursery site.

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Area		
Invertebrates						
valley elderberry longhorn beetle	Desmocerus californicus dimorphus	Federally Threatened	The valley elderberry longhorn beetle is completely dependent on its host plant, elderberry (<i>Sambucus nigra</i> ssp. <i>cerulea</i>), which occurs in riparian and other woodland communities in California's Central Valley and the associated foothills. Female beetles lay their eggs in crevices on the stems or on the leaves of living elderberry plants. When the eggs hatch, larvae bore into the stems. The larval stages last for one to two years. The fifth instar larvae create emergence holes in the stems and then plug the holes and remain in the stems through pupation. Adults emerge through the emergence holes from late March through June. The short- lived adult beetles forage on leaves and flowers of elderberry shrubs	No potential to occur. Suitable habitat for this species is not present within or adjacent to the project area.		
Amphibians and Reptiles						
giant gartersnake	Thamnophis gigas	Federally Threatened/ State Threatened	Giant gartersnake is found in isolated populations restricted to the Central Valley of California. It is found in freshwater marsh and wetlands, irrigation ditches, low gradient streams and rice fields containing emergent vegetation. Adjacent upland habitat is necessary for cover and aestivation.	No potential to occur. Suitable habitat for this species is not present within or adjacent to the project area.		

Table 4.3-1 Special-Status Species with the Potential to Occur on or Near the Project Site

Table 4.3-1Special-Status Species with the Potential to Occur on or Near the Project Site

Common Name	Scientific Name	Federal/State Status	Habitat Associations	Potential to Occur in the Project Area	
Birds					
least Bell's vireo	Vireo bellii pusillus	Federally Endangered/ State Endangered	Least Bell's vireo was formerly a common and widespread summer resident below approximately 600 meters (2,000 feet) above mean sea level (amsl) elevation in the western Sierra Nevada, throughout the Sacramento and San Joaquin Valleys, and in the coastal valleys and foothills from Santa Clara County south. Least Bell's vireos primarily occupy riverine riparian habitats along water, including dry portions of intermittent streams that typically provide dense cover within 1 to 2 meters (3.3 to 6.6 feet) off the ground, often adjacent to a complex, stratified canopy.	No potential to occur. Suitable habitat for this species is not present within or adjacent to the project area.	

Sources: CDFG 2011; CDFW 2013; CNPS 2010.

4.3.3 Regulatory Setting

Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 U.S.C. 1531 et seq.), which is administered by the USFWS for most plant and animal species and the National Marine Fisheries Service for certain marine species, applies to projects that would result in impacts to federally listed threatened or endangered species. FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to take any listed species, where "take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." No federally listed species, or their habitat, was identified on the project site.

Clean Water Act

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States (as defined in the Code of Federal Regulations 33CFR 328.3[a]). Section 401 prohibits the discharge of any pollutant into waters of the United States without certification that the discharge would not violate applicable water quality standards. Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit program, which regulates "point sources" of water pollution. Section 404 requires a federal license or permit from the Army Corps of Engineers (ACOE) prior to the discharge of dredge and fill material into waters of the United States. Permit applicants must demonstrate that they have attempted to avoid or minimize impacts on the resource; however, if no further minimization of impacts is possible, the applicant is required to mitigate remaining impacts on all federal-regulated waters of the United States. In California the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) are responsible for the protection of water quality.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. Most actions that result in a taking or in permanent or temporary possession of a protected species constitute violations of the MBTA. Examples of permitted actions that do not violate the MBTA are the possession of a hunting license to pursue specific game birds, legitimate research activities, display in zoological gardens, bird banding, and other similar activities. USFWS is responsible for overseeing compliance with the MBTA. The MBTA protects over 800 species of birds.

Section 404 of the Clean Water Act

Section 404 of the federal CWA requires a project applicant to obtain a permit from the U.S. Army Corps of Engineers (USACE) before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. There are no waterways, wetlands, or aquatic resources of any kind on the project site.

State

California Endangered Species Act

The California Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The California Department of Fish and Wildlife (CDFW) administers CESA which prohibits the "take" of plant and animal species designated by the Fish and Game Commission as endangered or threatened in the state of California. CESA authorizes the taking of threatened, endangered, or candidate species if take is incidental to an otherwise lawful activity and if specific criteria are met. There are no protected or endangered species on the project site.

California Fish and Game Code Sections 3503, 3503.5, and 3513

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that elements of the proposed project (particularly vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or the U.S. Fish and Wildlife Service (USFWS).

California Fish and Game Code Sections 3511, 4700, 5050, and 5515

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as "fully protected." Fully protected species, or parts thereof, may not be taken or possessed at any time except as part of an approved Natural Community Conservation Plan (NCCP) that treats such species as "covered species" or in connection with statutory-specified actions pursuant to the "Quantification Settlement Agreement" involving water transfer from the Imperial Irrigation District to the Metropolitan Water District of Southern California. The only fully protected species with some potential to occur on the project site is white-tailed kite, discussed in detail above. The California Fish and Game Commission may authorize the collecting of such species for necessary scientific research. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFW.

California Environmental Quality Act

Although threatened and endangered species are protected by specific federal and state statutes, Section 15380(b) of the CEQA Guidelines provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after definitions in FESA and the section of the California Fish and Wildlife Code dealing with rare or endangered plants and animals. CEQA Guidelines Section 15380(b) requires public agencies to to determine whether projects would result in significant effects on species that are not listed by either the USFWS or CDFW (i.e., candidate species). Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

Local

Sacramento 2035 General Plan

The following goals and policies from the *Sacramento 2035 General Plan* Environmental Resources (ER Element; City of Sacramento 2015a) are relevant to biological resources within the project site. Because the project site is located in a developed area of the City and a majority of the project site was previously used as a retail nursery (Capital Nursery), the biological field survey determined the site does not contain any natural habitats. In addition, there are no trees that meet the City's definition of a heritage tree on the project site or within off-site areas that could be affected by project construction.

Goal ER 2.1 Natural and Open Space Protection. Protect and enhance open space, natural areas, and significant wildlife and vegetation in the city as integral parts of a sustainable environment within a larger regional ecosystem.

Policy ER 2.1.10 Habitat Assessments. The City shall consider the potential impact on sensitive plants for each project requiring discretionary approval and shall require preconstruction surveys and/or habitat assessments for sensitive plant and wildlife species. If the preconstruction survey and/or habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level or industry-recognized (if no protocol has been established) surveys shall be conducted; or (2) presence of the species shall be assumed to occur in suitable habitat on the project site. Survey Reports shall be prepared and submitted to the City and the CDFW or USFWS (depending on the species) for further consultation and development of avoidance and/or mitigation measures consistent with state and federal law. **Goal ER 3.1 Urban Forest.** Manage the city's urban forest as an environmental, economic, and aesthetic resource to improve Sacramento residents' quality of life.

Policy ER 3.1.6 Urban Heat Island Effects. The City shall continue to promote planting shade trees with substantial canopies, and require, where feasible, site design that uses trees to shade rooftops, parking facilities, streets, and other facilities to minimize heat island effects.

City of Sacramento Tree Protection and Preservation Ordinance

The City of Sacramento (City) has adopted an ordinance to protect trees as a significant resource to the community (City of Sacramento 2016). It is the City's policy to retain trees when possible regardless of their size. When circumstances will not allow for tree retention, permits are required to remove trees that are within the City's jurisdiction. Removal of, or construction around, trees that are protected by the tree ordinance are subject to permission and inspection by City arborists. The City of Sacramento Tree Service Division reviews project plans and works with City of Sacramento Public Works during the construction process to minimize impacts on street trees in the City. There are no City street trees within the project site. However, there are some trees within the parking lots adjacent to Wentworth Avenue that would be removed to accommodate the project. There are no trees that meet the City's definition of a heritage tree on the project site or within off-site areas that could be affected by project construction.

4.3.4 Impacts and Mitigation Measures

Methods of Analysis

Dudek conducted a biological survey and site visit in October 2014, for the approximately 10acre project site; a copy of the report is included in Appendix C of this Draft EIR. The purpose of the survey was to identify and characterize the biological communities present on and immediately adjacent to the project site, to record plant and animal species observed on the site, and to evaluate the site for its potential to support sensitive biological resources. Potential sensitive biological resources include special-status plant and animal species and any other resources considered sensitive by local, state, and/or federal resource agencies that could potentially be impacted by development of the project site.

The biological survey included a query of the California Natural Diversity Database (CNDDB; CDFW 2013) and the USFWS Endangered and Threatened species list and a search of existing biology reports, soil reports, aerial photographs, and other City CEQA documents and online resources. In addition, a review of policies contained in the *Sacramento 2035 General Plan* was conducted.

CEQA requires that projects analyze the potential impacts on special-status plant and animal species, as well as on sensitive habitats, wildlife corridors, and waters of the United States. Impacts on wildlife species that are not considered special-status under CEQA are generally not considered significant unless impacts are associated with the species' migration routes or movements, or the species are considered locally important. In the area surrounding the project site, other common species (e.g., skunk, raccoon, possum) would not be considered special-status species; however, impacts on their movements and migration routes would be considered significant under CEQA. Regardless of status, all nesting native bird species are protected from harm under the state Fish and Game Code and the federal MBTA.

The analysis below evaluates Scheme A. Scheme B does not include any measurable change in the project footprint that could affect biological resources; therefore, only Scheme A is evaluated.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgement, a significant impact would occur if the proposed project would:

- result in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of threatened or endangered species of plant or animal;
- interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridor;
- substantially reduce the number or restrict the range of a special-status species;
- substantially reduce the habitat of a fish or wildlife species;
- cause a fish or wildlife population to drop below self-sustaining levels;
- threaten to eliminate a plant or animal community; or
- adversely affect other special-status species or species of special concern.

Criteria Not Applicable to Proposed Project

Due to the location and characteristics of the proposed project, certain significance criteria are not applicable to the proposed project and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

During the biological survey on October 23, 2014 (see Appendix C), it was determined that no waters of the United States or wetlands were identified as occurring on the project site. Therefore, the significance criteria associated with federally protected wetlands and waters of

the United States is not analyzed further. Similarly, because the site is not within an approved Habitat Community Plan, Natural Community Conservation Plan, or other approved conservation plan, the significance criteria associated with these plans is not considered further. In addition, the biological survey did not identify any special-status plant or animal species; therefore, the project would not reduce the number or restrict the range of special-status species or adversely affect other special-status species or species of special concern and these issues are not further addressed. There are no trees that meet the City's definition of a heritage tree on the project site or within off-site areas that could be affected by project construction. Any tree removal would be required to comply with the City's tree ordinance. This issue is not further evaluated. Lastly, as noted in the biological survey, the project site does not provide high quality or even marginal habitat value and does not contain any plant species other than non-native weedy and ornamental species. The only wildlife present using the site includes some bird species and common wildlife such as small mammals and reptiles. Therefore, implementation of the proposed project would not cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community; therefore, these issues are not further addressed.

Project-Specific Impacts and Mitigation Measures

4.3-1: The proposed project could result in substantial degradation of the quality of the environment and substantially reduce the habitat of a fish or wildlife species. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

In compliance with General Plan Policy ER 2.1.10, a qualified biologist surveyed the site and prepared a Biological Technical Report that identifies any sensitive plant and wildlife species present on the site (see Appendix C). No special-status plant species or their habitats were observed during the biological survey conducted for the project site in October 2014. As discussed earlier in the Environmental Setting, there are three special-status species known to occur in the vicinity of the project site (valley elderberry longhorn beetle, giant garter snake and least Bell's vireo). There are known occurrences of many of these species within 5 miles of the project site; however, all of these native species require specific habitats to persist that are not present on the project site. The project site is unlikely to support occurrences of any special-status plant species because of its disturbed nature, history of urban activities, and the lack of specialized suitable habitats (e.g., perennial marsh, vernal pools) and soil types (e.g., gabbro soils). The biological survey concluded that, because the project site does not support habitat suitable for special-status plant or animal species no further measures or surveys would be necessary. Impacts to special-status plant and animal species would be **less than significant**.

Development of the proposed project would require building demolition, and removal of parking lots and trees. Due to the disturbed nature of the site any habitat on the site is not conducive to supporting long-term and viable populations of wildlife. However, the proposed project could affect bird nesting habitat adjacent to the site and on the site, either indirectly through on-site construction activities, or directly through removal of trees. Because both common and special-status native raptors and other avian bird species are protected by state (California Fish and Game Code) and federal (Migratory Bird Treaty Act) laws, all of the trees on the site and adjacent to the site were surveyed for raptor nests and other native bird nests during the biological survey. No nests or remnants of nests were observed in any of the trees. While there is a small potential for foraging and nesting in trees on the project site, the site's isolation from other habitat areas, relatively small size, and urban surroundings result in a low potential for these species to regularly successfully use and/or nest on the project site. However, if project construction should occur during the nesting season (March through September), there is a potential that protected nesting birds could be disturbed. This would be considered a **potentially significant impact**.

Mitigation Measures

Mitigation Measure 4.3-1 would avoid or substantially reduce impacts during project construction to nesting birds should active nests of these species occur within or immediately adjacent to the project site. This measure would also reduce impacts to any other native bird species protected by the federal MBTA and/or state Fish and Game Code regulations. Implementation of this mitigation measure would reduce impacts to these species to **less than significant**.

4.3-1: Should construction activities begin during the breeding season (March 1 through September 15), a qualified biologist shall conduct appropriate pre-construction surveys for any raptor and native bird nests within or immediately adjacent to the project site no more than 30 days before any construction activity commences. The pre-construction surveys shall be conducted between March and September and shall follow accepted survey protocols. The purpose of the surveys shall be to determine if active nests are present in the disturbance zone or within 350 feet of the disturbance zone boundary (1/4 mile for Swainson's hawk). If active nests are found, ground-disturbing activities shall be postponed or halted, and a suitable buffer from the nest shall be determined and flagged by a gualified biologist based on the species, planned construction activity, and the location of the nest. Construction activity may resume within the buffer when the nest is considered inactive by the qualified biologist, either after the eggs have hatched and the chicks have fledged, or upon failure of the nest. All active nests shall be monitored during construction activity by the qualified biologist. If adult birds are exhibiting agitated behavior, construction shall be halted and the buffer may be increased to prevent abandonment of the nest. Consultation with the California

Department of Fish and Wildlife shall be sought, as necessary. Limits of construction to avoid impacts to an active nest during construction activities shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas.

4.3-2: The proposed project could interfere with the movement of native resident or migratory wildlife species or with established native resident or migratory wildlife corridors. Based on the analysis below the impact is *less than significant*.

As described in the Environmental Setting, the project site is not part of a regional wildlife corridor as it is located in a developed area of the City surrounded by urban development and other artificial land uses. The approximately 165 acre William Land Park is located 0.13 of a mile to the north of the project site, but would not be considered a habitat corridor since the park is surrounded by development. The closest habitat corridor in the area is associated with the Sacramento River located approximately one mile west of the project site, separated by roads and residential neighborhoods.

Although there is a slight chance the project site may serve as foraging habitat for some species (discussed above under Impact 4.3-1), it does not function as part of a wildlife corridor that links large open space areas. This impact would be **less than significant**.

Mitigation Measures

None required.

Cumulative Impacts

The geographic context for the analysis of cumulative biological impacts includes the areas contained within the Sacramento Valley and adjacent foothills (identified as the region), but primarily focused on the area within the City limits. Present and probable future projects within the region (which include, but are not limited to, development in the City of Sacramento, County of Sacramento, cities of Roseville, Rocklin, Elk Grove, Galt, Woodland, counties of Yuba, Sutter, Placer and Yolo) are anticipated to permanently remove plant and wildlife resources, which could affect both common and special-status species and their habitat.

4.3-3: The proposed project could contribute to a cumulative loss of habitat for common and special-status wildlife species. Based on the analysis below the impact would be *less than significant.*

As described previously, construction and operation of the proposed project would result in the loss of marginal habitat (including trees) that, while disturbed due to prior development, could

provide some limited foraging value to raptor species. The site, while disturbed, also provides habitat for a variety of small common mammals, reptiles, and some bird species. Conversion of the site to a developed condition, when combined with other cumulative development, would result in the cumulative loss of such habitat in the region, as well as the potential displacement of common wildlife species using the site. The City's General Plan Master EIR determined that development within the City, which included development of the project site, would result in a regional significant cumulative impact on special-status species and their habitats (City of Sacramento 2015b). The cumulative loss of common species was not evaluated because the loss of these species is not considered by the City to have any effect. However, due to the heavily disturbed nature of the site, the lack of special-status species or their habitat, general lack of native vegetation, and because it is not considered optimal habitat for common species, the project's contribution to the existing cumulative impact would be **less than significant**.

Mitigation Measures

None required.

4.3.5 References Cited

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4.4 CULTURAL RESOURCES

4.4.1 Introduction

This section describes any known historic or prehistoric archaeological or built environment resources present on the site and the potential for resources to be damaged as a result of implementation of the proposed Land Park Commercial Center Project (proposed project). The regulatory requirements are also identified, potential impacts are evaluated, and mitigation measures identified. In general, cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance.

Two comments regarding cultural resources were received in response to the Notice of Preparation (NOP) that expressed concern regarding the vintage neon Raley's sign that has been in its current location since 1958. The project applicant has indicated a desire to retain the sign and incorporate it in the new Raley's store if feasible. A copy of the NOP and comments received is included in Appendix A. In addition, a letter from the Shingle Springs Rancheria requesting to be kept updated during the project was received in response to consultation required with the tribes under SB 18.

The information presented in this section is based on a *Cultural Resources Report for the Land Park Commercial Center EIR Project*, prepared by Dudek in May 2016 (included in Appendix D), as well as a review of the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b).

4.4.2 Environmental Setting

Prehistory Background

Research data has suggested two temporally distinct cultural traditions, the Early and Late Horizons (stratified Windmiller site (CA-Sac-107), as cited in the *Cultural Assessment for the Proposed McKinley Village Project, City of Sacramento, California* [Peak & Associates 2013]a). A third cultural tradition, the Middle Horizon, was identified through later work in the region. The three-horizon sequence, based on distinct changes in ornamental artifacts and mortuary practices, as well as on observed differences in soils within sites (Lillard, Heizer, and Fenenga 1939, as cited in Peak & Associates 2013), was later refined by Beardsley (1954). An expanded definition of artifacts indicative of each time period was developed, and its application extended to parts of the central California coast.

The modern view of prehistoric cultural sequences in the Central Valley allows for a more complex approach to cultural development than the horizon system's implied "Middle Horizon evolved out of Early and Late evolved from Middle." It is also generally recognized that chronological relationships are much more complex than was realized several years ago.

Ethnology

At the time of the gold rush, areas in and around the City of Sacramento were occupied by the Nisenan Indians, identified by the language they spoke. The Nisenan peoples occupied the drainages of the Yuba, Bear, and the American rivers from the Sacramento River on the west to the summit of the Sierra in the east. The Foothill and Hill Nisenan peoples were distinctive from the Valley Nisenan and were loosely organized into "tribelets" or districts with large central villages, surrounded by smaller villages. These central villages and their leaders seemed to have had power or control over the surrounding smaller villages and camps and specific surrounding territory (Beals 1933, Littlejohn 1928, Wilson and Towne 1978, as cited Peak & Associates 2013).

This same bounty was available to the river-oriented valley peoples out on the valley floor and along the natural levees of the rivers. Major north–south Indian trails along the margin of the foothills were usable year around, as well as other trails east and west along the natural levees of the stream courses. Both the valley and foothill peoples lived at the edges of rich ecotones: the rivers and the valley floor, and the valley floor and the foothills.

Gabriel Moraga led the first recorded Spanish expedition into the area between 1806 and 1808. In 1827 and 1828, Jedediah Smith led a trapping foray into the area and set up temporary camps in Nisenan territory and relationships were friendly. However, in 1833 a malaria outbreak swept through the Sacramento Valley, killing an estimated 75% of the Valley Nisenan population.

History

John Sutter arrived on the shore of the American River near its confluence with the Sacramento River in 1839. Sutter initially employed the Nisenan to help him in his operations, but later he imported large numbers of Plains Miwok from the Cosumnes River tribelets as laborers. Sutter's relations with these villages—both Miwok and Nisenan—were essentially feudal (Thompson and West 1880, as cited in the Cultural Assessment for the Proposed McKinley Village Project, City of Sacramento, CA).Sutter and his landing party established Sutter's Fort, with the promise of a Mexican land grant. The settlement's growth and permanency attracted other businessmen seeking opportunities. Sutter and the businessmen created a commercial center in the area, but it was not until the Gold Rush in 1848 that the City of Sacramento was created. The City swiftly grew into a trading center for miners supplying themselves for the gold fields.

With the discovery of gold and the subsequent influx of a large Euro-American population of miners after 1849, Nisenan numbers were further reduced by disease and genocide. Survivors who were not either sickened or murdered were ultimately forced to vacate their ancestral homes.

The City of Sacramento was incorporated in 1850, and the name was taken from a nearby river, meaning "Holy Sacrament" (see Appendix D). The waterfront location of early Sacramento made it a prime commercial town; however, severe flooding and repeating fires presented real threats to the area. The City survived these events and became the capital of California in 1854. Construction of the Sacramento Valley Railroad began during the mid-1850s, and soon the City became the terminus of California's first railroad. The Pony Express and the transcontinental telegraph followed.

As the Gold Rush declined, Sacramento became the center for the developing commercial agriculture industry (Legends of America 2003). To prepare planes to fly to Europe during World War I, Mather Field was established in 1937 and became an important base of operations during World War II. The military installations during both wars brought an influx of people to the area, many of whom stayed after World War II and prompted the development of the private sector (City-Data 2009). Following World War II, the automobile-oriented housing development soared and the remaining agricultural uses were converted to tract housing.

During the twenty-first century, when modernization came to the City, the center of the commercial district gradually moved east and the original part of Sacramento along the Sacramento River, known as the worst skid row west of Chicago. A plan was proposed to redevelop this area in the mid-1960s, following which the first historic district in the West was created and became known as Old Sacramento (Beals 1933, Littlejohn 1928, Wilson and Towne 1978, as cited in Peak & Associates 2013).

Land Park Neighborhood

The project site is located in the Land Park neighborhood, which is located south of Broadway, east of Riverside Boulevard, west of Freeport Boulevard, and north of Sutterville Road. The Land Park neighborhood in Sacramento was originally part of John Sutter's Mexican land grant known as Helvetia. Pioneer ranchers, hop growers, dairymen, and homesteaders who enjoyed the proximity to the City and the river populated the large tracts of land in the southern area currently known as Land Park. Early settlers resided around Riverside Road, which was eventually annexed to the City. The rest of the population resided along Freeport Road or Sutterville Road. Despite its inhabitants, the Land Park area used to have an odoriferous reputation. For years the City of Sacramento deposited its raw sewage across the City line at Y Street via a series of drainage ditches and sloughs. The land south of Y Street was considered the flood spill for the City at that time. During flood events the levees would open to save the

City from flooding. During this time, traveling to downtown was a difficult task, especially for residents of the south area who had to drive for miles around the inundated lands.

In 1911, businessman and hotel owner William Land, bequeathed \$250,000 to the City for development of a public park in Sacramento (Sacramento Bee 2012). The 238-acre plot of land was located north of Sutterville Road and was purchased in 1918 for \$147,000. Previously, portions of the land had been used by the City to deposit raw sewage (Sacramento Park Neighborhoods n.d.). Initially, residents were opposed to the development of a park in the present-day Land Park area and instead elected to build the park in Del Paso. The Sacramento Bee also opposed the park by running several editorials claiming that grass would not grow in that area, let alone a tree. The articles claimed that the area was simply a "swamp and hardpan" (Isidro 2005). Nonetheless, on an appeal in 1922, the court overturned the public referendum and approved the original contract, allowing development of the park to proceed. The development of William Land Park revived the appeal of the area as a residential neighborhood. Larger parcels were subdivided into smaller tracts, which were sold to individual builders for small-scale developments. Soon after the grading and sidewalk construction were completed, trees were planted along the wide-curving boulevards and major entrance roads (Sacramento Park Neighborhoods n.d.). Between the 1920s and 1940s, luxury homes were built along the streets surrounding the park. The Land Park area grew slowly and steadily until World War II, when a demand for housing converted hop fields to housing tracts, resulting in the development of neighborhoods such as College Tract, Swanston tract, and Sutterville Heights (Isidro 2005).

By 1957, the Land Park neighborhood had been fully developed. The area immediately surrounding the project site was fully developed with single-family residences, and the once vacant land on the east side of Freeport Boulevard was developed with new commercial properties. The parcels west and northwest of the project site were fully developed and mostly contained residential buildings. Most of the commercial developments within Land Park are located along Freeport Boulevard, Broadway, and Riverside Boulevard. Compared to other park neighborhoods in Sacramento, Land Park has the highest percentage of parkland to residents (Sacramento Park Neighborhoods n.d.).

Capital Nursery Company

Charles G. and Eugene R. Armstrong (the Armstrong brothers) founded the Capital Nursery Co. in 1936. The family owned company functioned as a nursery from 1936 until 2012. In 2012, the company closed all of its locations, including the flagship store in Sacramento on Freeport Boulevard (project site), Citrus Heights, Elk Grove, and Rocklin (Sacramento Bee 2014).

Status of On-Site Buildings

The project site includes 16 vacant structures that consist of the former main store building located at 4700 Freeport Boulevard, one of the first structures built on the site (Building 12) and numerous warehouse and ancillary buildings (Buildings 3 through 11 and 13 through 16), as well as two residential properties, 1913 Wentworth Avenue (Building 1) and 1919 Wentworth Avenue (Building 2), as shown on Figure 4.4-1. The ancillary buildings on the project site, Buildings 3, 4, 5, 7, 8, 10, 11, 13, 14, 15, 16 and 17 were all constructed less than 45 years ago (NETR 2011). As such, these buildings are not considered historic and were not further evaluated. Buildings 6 and 9 have been demolished and replaced (date unknown) since the initial date of construction. Research failed to identify any information indicating historical significance of these buildings; therefore, these buildings are not further evaluated.

A brief overview of those buildings with the potential to be eligible for listing as historic is provided below. Please see Appendix D for more detailed information.

Building 1 – 1913 Wentworth Avenue

The property at 1913 Wentworth Avenue (APN 017-0121-010) is a Minimal Traditional-style single-family residence built in 1950 (Sacramento County Assessor). Archival research failed to indicate any associations with important events that contributed to the broad patterns of California, City of Sacramento, or the Land Park neighborhood. The building does not embody distinctive characteristics of a particular style, type, period, or method of construction, and it has been subject to a number of alterations that have impacted the integrity of its original design. As such, the building does not appear eligible for listing under the National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) based on any of the evaluation criteria and does not meet any of the City of Sacramento's criteria for listing in the Sacramento Register.

Building 2- 1919 Wentworth Avenue

The property at 1919 Wentworth Avenue (APN 017-0121-009) is a Vernacular-style singlefamily residence built in 1938 that has been subject to a number of exterior alterations since the initial date of construction (Sacramento County Assessor). The building does not embody distinctive characteristics of a particular style, type, period, or method of construction, and it has been subject to a number of alterations that have impacted the integrity of its original design. As such, the building does not appear eligible for listing under the NRHP/CRHR based on any of the evaluation criteria and does not meet any of the City of Sacramento's criteria for listing in the Sacramento Register.

Building 12 - 4700 Freeport Boulevard

The property at 4700 Freeport Boulevard (APN 017-0121-001) is a Vernacular-style industrial/commercial structure built in 1946 (Sacramento County Assessor). Archival research reveals the main building was designed by master architect Leonard Starks. Between 1921 and 1941, Starks designed many of Sacramento's civic and commercial properties, including the Fox Senator Theater in Downtown Sacramento (1923), which was demolished in the 1970s; W.P. Fuller Company Building and the Elks Tower (1926); the addition to the California National Bank (1926); the former Alhambra Theater (1927); the Blue Anchor Building (1931); the NRHP-listed Federal Building (1933); and the NRHP-listed C.K. McClatchy High School (1949). Building records indicate the building has been subject to numerous exterior and interior alternations starting in 1956 through 1994 and is not considered representative of Leonard Stark's architectural style. The building does not embody distinctive characteristics of a particular style, type, period, or method of construction, and it has been subject to a number of alterations that have impacted the integrity of its original design. Also, the subject property appears in poor condition. As such, the building does not appear eligible for listing under the NRHP/CRHR based on any of the evaluation criteria.

Records Search

In October 2014, Dudek requested a California Historical Resources Information System (CHRIS) records search from the North Central Information Center (NCIC) to identify if any previous surveys of the project site and surrounding areas had been conducted (included a 1-mile radius). Based on the results of the records search, a total of 23 cultural resource studies were previously conducted within a 1-mile radius of the project site which included 14 recorded resources. All of the resources identified were outside of the project site. The closest resources to the project site include:

- Cook Co. (P-34-003459) located northeast of the project area on the corner of Freeport Boulevard and 20th Avenue. The property was found ineligible for the NRHP, but of local significance in 1985.
- William Land Park (P-34-003500) located north of the project area on the corner of Freeport Boulevard and 13th Avenue. The property was found ineligible for the NRHP in 1985.
- Riverside (P-34-000062) located west of the project area on the corner of McClatchy Way and Riverside Drive. The property is an archaeological site that does not appear to have been formally evaluated.

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4.4.3 Regulatory Setting

Federal

National Register of Historic Places

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that meet at least one of the following criteria:

- A. Are associated with events that have made a significant contribution to the broad patterns of our history.
- B. Are associated with the lives of persons significant in our past.
- C. Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for a NRHP listing. There are seven Criteria Considerations (Criteria Considerations A-G) that deal with properties usually excluded from listing in the NRHP, including: moved buildings; cemeteries; religious properties; birthplaces and graves; reconstructed properties; commemorative properties; and, properties that have achieved significance within the past 50 years.

In addition to meeting one of the four evaluation criteria a historic property must retain integrity in order to convey its significance. The NRHP defines integrity using seven aspects: location, design, setting, materials, workmanship, feeling, and association.

No buildings were identified as being eligible for listing on the NRHP.

State

Office of Historic Preservation

The State of California implements the NHPA through its statewide comprehensive cultural resources surveys and preservation programs. The Office of Historic Preservation (OHP), as an office administered within the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historical

Resources Inventory. The State Historic Preservation Officer is an appointed official who implements historic preservation programs within the state's jurisdiction.

California Register of Historical Resources

In California, the term "historical resource" includes, but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code (PRC) Section 5020.1(j)). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1(a)). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, listed below. According to PRC Section 5024.1(c)(1-4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the California Register of Historic Resources (CRHR) if it can be demonstrated that sufficient time has passed to understand its historical importance (14 California Code of Regulations (CCR) 4852(d)(2)).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

No buildings were identified as being eligible for listing on the CRHR.

California Environmental Quality Act

The following CEQA statutes under the Public Resources Code (PRC) and CEQA Guidelines are relevant to the analysis of archaeological, historic, and tribal cultural resources:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b)–(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context, and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5(b)). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5(a)).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project:

(1) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or

- (2) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA (14 CCR 15064.5(b)(2)).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project would cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

If it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2(a), (b), and (c)).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); 14 CCR 15064.5(c)(4). However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC Sections 21074(c), 21083.2(h)), further consideration of significant impacts is required.
Section 15064.5 of the CEQA Guidelines assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC Section 5097.98 and the California Health and Safety Code.

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (Section 7050.5b). PRC Section 5097.98 also outlines the process to be followed in the event that human remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours (Section 7050.5c). The NAHC will notify the most likely descendant. With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

Senate Bill 18

Senate Bill 18 (SB 18; Government Code sections 65352.3, 65352.4) requires that, prior to the adoption or amendment of a general plan proposed on or after March 1, 2005, a city or county must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction.

In compliance with SB 18, the City sent a letter to the Native American Heritage Commission and received a response from the Shingle Springs Rancheria requesting to be consulted through project updates if any new information or human remains are found during project construction.

Assembly Bill 52

Assembly Bill 52 (AB 52) went into effect July 1, 2015, and requires lead agencies to consult with all California Native American tribes that have requested formal consultation at the onset of a project, or when a NOP is released. AB 52 also establishes a new class of resources to be evaluated – Tribal Cultural Resources. The NOP for this project was released in November

2015, therefore compliance with AB 52 is not required. However, the City has reached out to the tribes and no formal consultation was requested.

The City was contacted by the United Auburn Indian Community (UAIC) of the Auburn Rancheria and the Wilton Rancheria requesting formal consultation pursuant to AB 52. The City followed up with a letter on November 5, 2015 to the tribes which included a brief project description and a map showing the project location. The tribes did not request formal consultation within the required 30 days.

Senate Bill 297

This law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction; and establishes the Native American Heritage Commission to resolve disputes regarding the disposition of such remains (SB 297). It has been incorporated into Section 15064.5(e) of the CEQA Guidelines.

Paleontological Resources

Consideration of paleontological resources is required by CEQA (see Appendix G). Other state requirements for paleontological resource management are found in PRC Chapter 1.7, Section 5097.5, Archaeological, Paleontological, and Historical Sites. This statute specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute does not apply to the project because the project site is privately owned.

No state or local agencies have specific jurisdiction over paleontological resources. In addition, there is no state or local agency requirement that a paleontological collecting permit be obtained to allow for the recovery of fossil remains discovered as a result of construction-related earth moving on state or private land in a project site.

Local

City of Sacramento 2035 General Plan

The following City of Sacramento 2035 General Plan, Historic and Cultural Resources (HRC) Element (City of Sacramento 2015a), goals and policies are applicable to cultural resources. The General Plan does not include any goals or policies that address paleontological resources.

Goal HCR 2.1 Identification and Preservation of Historic and Cultural Resources. Identify and preserve the city's historic and cultural resources to enrich our sense of place and our understanding of the city's prehistory and history.

Policy HCR 2.1.1 Identification. The City shall identify historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) to provide adequate protection of these resources.

Policy HCR 2.1.2 Applicable Laws and Regulations. The City shall ensure that City, State, and Federal historic preservation laws, regulations, and codes to protect and assist in the preservation of historic and archaeological resources, including the use of the California Historical Building Code as applicable. Unless listed in the Sacramento, California, or National registers, the City shall require discretionary projects involving resources 50 years and older to evaluate their eligibility for inclusion on the California or Sacramento registers for compliance with the California Environmental Quality Act.

Policy HCR 2.1.3 Consultation. The City shall consult with the appropriate organizations and individuals (e.g., California Historical Resources Information System (CHRIS), the Native American Heritage Commission (NAHC), the CA Office of Planning and Research (OPR) "Tribal Consultation Guidelines", etc.,) and shall establish a public outreach policy to minimize potential impacts to historic and cultural resources.

Policy HCR 2.1.10 Early Project Consultation. The City shall minimize potential impacts to historic and cultural resources by consulting with property owners, land developers, and the building industry early in the development review process.

Policy HCR 2.1.11 Compatibility with Historic Context. The City shall review proposed new development, alterations, and rehabilitation/remodels for compatibility with the surrounding historic context. The City shall pay special attention to the scale, massing, and relationship of proposed new development to surrounding historic resources.

Policy HCR 2.1.15 Demolition. The City shall consider demolition of historic resources as a last resort, to be permitted only if rehabilitation of the resource is not feasible, demolition is necessary to protect the health, safety, and welfare of its residents, or the public benefits outweigh the loss of the historic resource.

Policy HCR 2.1.16 Archaeological & Cultural Resources. The City shall develop or ensure compliance with protocols that protect or mitigate impacts to archaeological, and cultural resources including prehistoric resources.

Policy HCR 2.1.17 Preservation Project Review. The City shall review and evaluate proposed development projects to minimize impacts on identified historic and cultural resources, including projects on Landmark parcels and parcels within Historic Districts, based on applicable adopted criteria and standards.

Historic Preservation Ordinance

The City of Sacramento's historic preservation program began in 1975 with the enactment of the City's first Historic Preservation Ordinance. The purpose of the Historic Preservation Ordinance is to do the following: identify, protect, and encourage the preservation of significant resources; maintain an inventory and ensure the preservation of these resources; encourage maintenance and rehabilitation of the resources; encourage retention, preservation, and re-use of the resources; safeguard city resources; provide consistency with state and federal regulations; protect and enhance the city's attraction to tourists; foster civic pride in the city's resources; and encourage new development to be aesthetically compatible with historic buildings.

Amendments to the original preservation ordinance were enacted in 2001, under Ord. 2001-027, followed by Ordinance No. 2006-063, in 2006, and, most recently, on September 30, 2013. The City completed a comprehensive update of Title 17 as part of the City's new "Planning & Development Code," formerly known as the Zoning Code. Under the new Title 17, most of the Historic Preservation Chapter was relocated to Chapter 17.604. However, the substance of the preservation sections was generally not materially changed, and still reflects the original goals listed above.

4.4.4 Impacts and Mitigation Measures

Methods of Analysis

Dudek archaeologists and architectural historians conducted a pedestrian survey of the project site on September 17, 2015 (see Appendix D). The purpose of the survey was to identify and record any potential historical resources located within the immediate project area. The survey involved walking all accessible portions of the project site and taking detailed notes and photographs of the project area and its surroundings. Because the project site is entirely developed and contains no exposed sediment, intensive-level archaeological survey methods were not warranted. Three properties were identified as requiring recordation and evaluation on the appropriate State of California Department of Parks and Recreation Series 523 forms: two single-family residences located at 1913 and 1919 Wentworth Avenue, and the former Capital Nursery property located at 4700 Freeport Boulevard.

In addition to the records search (discussed earlier) a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the

Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list was also conducted and did not identify any resources.

Dudek archaeologists also contacted the NAHC to request a review of their Sacred Lands File. The NAHC emailed a response on November 3, 2014, stating that the Sacred Lands File search "failed to indicate the presence of Native American cultural resources in the immediate project area."

Development of the proposed project would require connections to city utilities located in adjacent roadways outside of the project boundaries. The records search prepared for the project also captured proposed development outside of the project boundaries (within a 1 mile radius). No prior resources were identified in these areas.

The analysis below evaluates Scheme A. Scheme B does not include any measurable change in the project footprint that could affect cultural resources; therefore, only Scheme A is evaluated.

Thresholds of Significance

The significance criteria used to evaluate the project impacts to cultural resources are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to cultural resources would occur if the project would:

- cause a substantial adverse change in the significance of a historical or archaeological resource as defined in State CEQA Guidelines CCR Section 15064.5;
- directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature;
- adversely affect tribal cultural resources; or
- disturb any human remains, including those interred outside of formal cemeteries

Criteria Not Applicable to Proposed Project

Due to the location and characteristics of the proposed project, certain significance criteria are not applicable to the proposed project and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

The project site does not contain any geologic formations and is not located in an area of the City known for paleontological resources; therefore, the likelihood of finding a unique geologic feature or paleontological resource is extremely low. Therefore, these issues are not addressed further.

Project-Specific Impacts and Mitigation Measures

4.4-1: Project construction, including off-site utility connections could disturb, damage or destroy unidentified subsurface archaeological or historical resources as defined in CEQA Guidelines Section 15064.5. Based on the analysis below and with implementation of mitigation the impact is *less than significant*.

A formal records search prepared for the proposed project site did not identify any recorded archaeological or historical resources on the project site or within a close proximity of the project site (see Appendix D). Project construction would require building demolition (historic building resources are addressed in Impact 4.4-2), site clearing, grading, and trenching for utilities. These activities would disturb on-site soils and could unearth a previously unknown subsurface archaeological or historical resource.

The City's 2035 General Plan includes policies to reduce impacts to cultural resources. For example, General Plan Policy HCR 2.1.2 requires the City to ensure that local, state, and federal preservation laws, regulations, and codes related to archaeological resources are implemented (City of Sacramento 2015a). Policy HCR 2.1.3 requires the City to consult with the appropriate organizations and individuals (e.g., CHRIS, NAHC, and Native American groups and individuals) to minimize potential impacts to historic and cultural resources. Finally, Policy HCR 2.1.15 requires compliance with City protocols to protect or mitigate impacts to archaeological, cultural and prehistoric resources. Compliance with these policies would help to minimize potential impacts to any known or unknown archeological or prehistoric or historic resources.

However, the possibility exists that ground disturbance activities associated with construction of the proposed project could disturb previously unknown archaeological or historical resources resulting in a **potentially significant impact**.

The project would also require connections to existing off-site City utilities that would take place within existing disturbed roadway rights-of-way (ROWs), or within previously developed areas, so construction activities would involve only minimal disturbance. Construction of these improvements would be similar to construction activities discussed above. The extension of water and sewer lines would be within existing roadways and roadway ROWs. Based on the records search and given the highly disturbed nature of the area, it is unlikely that any subsurface archaeological or historic-period resources are present. As noted above, the City's General Plan includes policies to help reduce potential impacts to archaeological, cultural and prehistoric resources. However, because there is the potential, albeit small, that subsurface resources or even human remains could be present in some of these areas, impacts associated with off-site construction are also considered **potentially significant**.

Mitigation Measures

Implementation of Mitigation Measure 4.4-1(a), (b), and (c) would require the project applicant's construction contractor (Contractor) to comply with specific procedures in the event of an inadvertent discovery during project construction. The procedures require work to stop in the event a resource or human bones are discovered and an archaeologist and/or Native American representative contacted to determine the appropriate course of action depending on the resource. Compliance with these measures would ensure that the project's potential impacts to previously unidentified subsurface resources are mitigated to a **less-than-significant level**.

- **4.4-1(a)** If any cultural resources (including tribal cultural resources), such as structural features, unusual amounts of bone or shell, artifacts, or architectural remains are encountered during any construction activities, the Contractor shall implement measures deemed necessary and feasible to avoid or minimize significant effects to the cultural resources including the following:
 - Suspend work within 100 feet of the find; and,
 - Immediately notify the City's Community Development Director and coordinate any necessary investigation of the site with a qualified archaeologist or Native American representative, as needed, to assess the resource (i.e., whether it is a "historical resource" or a "unique archaeological resource" or a "tribal cultural resource"); and,
 - Provide management recommendations should potential impacts to the resources be found to be significant;
 - Possible management recommendations for identified resources could include resource avoidance or data recovery excavations, where avoidance is infeasible in light of project design or layout, or is unnecessary to avoid significant effects.
 - In addition, the Contractor in consultation with the City's Preservation Director, State Historic Preservation Officer, and if applicable, Tribal representatives, may include preparation of reports for resources identified as potentially eligible for listing in the California Register of Historical Resources.
 - (b) If a Native American site or a tribal cultural resource is discovered, the evaluation process required by Mitigation Measure 4.3-1(a) shall include consultation with the appropriate Native American representative. If Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment shall be conducted by a qualified archaeologist, who is certified by the Society of Professional Archaeologists (SOPA) and/or meets the federal standards as stated in

the Code of Federal Regulations (36 CFR 61), and by Native American representatives, who are approved by the local Native American community as scholars of the cultural traditions.

In the event that no such Native American representative is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. If historic archaeological sites are involved, all identified treatment (e.g., conduct additional archaeological surveys and provide measures to preserve the integrity or minimize damage or destruction of significant resources) is to be carried out by qualified historical archaeologists, who shall meet either the Register of Professional Archaeologists (RPA) or 36 CFR 61 requirements.

(c) If a human bone or bone of unknown origin is found during earth-moving activities, all work shall stop within 100 feet of the find, and the County Coroner shall be contacted immediately, pursuant to Section 5097.98 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission, who shall notify the person most likely believed to be a descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have taken place.

4.4-2: Project construction could disturb, damage, or destroy an unidentified historical resource as defined in CEQA Guidelines Section 15064.5. Based on the analysis below the impact is *less than significant*.

Based on historical accounts, the project site was first developed starting in 1936. By 1947 six buildings were present on the site. More buildings were added (and some replaced) between 1957 through 1993. A historic building assessment was conducted for all of the buildings slated for removal at 4700 Freeport Boulevard (former Capital Nursery site) and two residential properties located at 1913 and 1919 Wentworth Avenue to determine if any of the buildings would be eligible for listing on either the NRHP or the CRHR (see Appendix D).

A total of 16 buildings were evaluated in the *Cultural Resources Report for the Land Park Commercial Center EIR Project, Sacramento, California* (see Appendix D); including 14 buildings at the former Capital Nursery site and the two residences. The cultural resources report found none of the buildings were eligible under all state and national eligibility criteria due to a lack of significant historical associations and compromised integrity. Therefore, the properties at 4700 Freeport Boulevard, 1913 Wentworth Avenue, and 1919 Wentworth Avenue are not considered historical resources under CEQA and the impact is **less than significant**.

Mitigation Measures

None required.

4.4-3: Project construction could adversely affect tribal cultural resources¹ or disturb unknown human remains. Based on the analysis below and with implementation of mitigation the impact is *less than significant*.

As discussed above under Impact 4.4-1, project construction activities would involve grading and trenching. These activities would disturb on-site soils and could unearth human remains or previously unknown subsurface tribal cultural resources.

A review of the NAHC Sacred Lands File was conducted and the search "failed to indicate the presence of Native American cultural resources in the immediate project area" (see Appendix D). In September 2015, Dudek archeologists contacted all Native American individuals and/or tribal organizations who may have knowledge of cultural resources in or near the project area. To date, Dudek has not received any responses. In compliance with AB 52, the City contacted the United Auburn Indian Community of the Auburn Rancheria and the Wilton Rancheria² to inquire if either tribe was interested in meeting to discuss the project and the potential for tribal cultural resources to be present. The tribes did not respond within the required 30-day period; therefore, no formal consultation with the tribes is required for this project. The City also complied with SB 18 and received a list of interested tribes from the NAHC in October 2015. The City has reached out to these tribes and received one response from the Shingle Springs Rancheria requesting to be kept updated in the event any resources are unearthed during construction this would be considered a **potentially significant impact**.

Although there are no known resources on the proposed project site there is a potential that subsurface human remains could be encountered during grading, excavation, and/or construction of the proposed project. If such resources are encountered during construction, they could be damaged, destroyed, or removed. The California Health and Safety Code (CHS Section 7050.5) protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. If human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain

¹ Tribal cultural resources are generally defined as sites, features, places, and objects with cultural value to descendant communities or cultural landscapes that are included in the California Register of Historical Resources or in a local register. Sacred places, including, but not limited to, Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines.

² To date, the Auburn Rancheria and Wilton Rancheria are the only tribes that have contacted the City requesting formal consultation under AB 52.

human remains shall occur until the county coroner has examined the remains (Section 7050.5b). The Public Resources Code also requires that if there is reason to believe remains are those of a Native American, the coroner must contact the NAHC within 24 hours to identify means for treating or disposing of the remains (PRC Section 7050.5c). Compliance with California law would ensure impacts to human remains would be **less than significant**.

Mitigation Measures

If evidence of tribal cultural resources are uncovered during project construction, Mitigation Measure 4.4-1 (a) requires that all work cease within 100 feet of the find so that artifacts or remains are not damaged by equipment. Mitigation Measure 4.4-1 (b) reduces impacts to unknown tribal resources by requiring consultation with a Native American representative and conducting additional archaeological surveys and providing measures to preserve the integrity or minimize damage or destruction of any significant resources. Compliance with Mitigation Measure 4.4-1 (a) and (b) would reduce the impact to **less than significant**.

4.4-3 Compliance with Mitigation Measure 4.4-1(a) and (b)

Cumulative Impacts

This cumulative impact analysis relies on buildout of the City's 2035 General Plan and does not use a list of specific pending or reasonably foreseeable development proposals in the general vicinity of the proposed project.

The geographic scope or cumulative context for the evaluation of potential cumulative impacts on cultural resources is the greater Sacramento region (which includes El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba counties). While the project-specific impact analysis for cultural resources necessarily includes separate analyses for prehistoric resources, historicperiod resources, and human remains, the cumulative analysis combines these resources into a single, non-renewable resource base and considers the additive effect of project-specific impacts to significant regional impacts on cultural resources.

4.4-4: The proposed project could contribute to cumulative losses of prehistoric resources, historic-period resources, and human remains in the greater Sacramento region. Based on the analysis below and with implementation of mitigation the impact is *less than significant*.

According to previous cultural resource surveys and research, the greater Sacramento region has been inhabited by prehistoric and historic-period peoples for thousands of years. Urban development in the greater Sacramento region has resulted in the demolition and alteration of innumerable significant historical resources, and it is reasonable to assume that present and future development activities would continue to damage and/or destroy significant cultural resources. The cumulative impact from past, present, and probable future projects, as well as the proposed project, is potentially significant.

Numerous laws, regulations, and statutes, on both the federal and state levels, seek to protect cultural resources. These would apply to development within and outside the city. In addition, the City's 2035 General Plan provides local policies that safeguard cultural resources from unnecessary impacts. These policies include inventory and evaluation processes and require consultation with qualified archaeologists in the event that previously undiscovered cultural materials are accidentally exposed.

Because all significant cultural resources and human remains are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. Although unlikely, there is the potential the proposed project could adversely affect significant cultural resources that are unique and non-renewable members of finite classes if discovered. Therefore, the project's incremental contribution to the cumulative loss of cultural resources is considered **potentially significant**.

Mitigation Measures

Implementation of Mitigation Measures 4.4-1(a) and (b) provide specific procedures to follow in the event a resource is identified. The procedures require work to stop in the event a resource or human bones are discovered and an archaeologist and/or Native American representative contacted to determine the appropriate course of action depending on the resource. Compliance with these measures would ensure that potential impacts to previously unidentified subsurface resources are mitigated to a **less-than-significant level** and the project's incremental contribution would be reduced to less than significant.

4.4-4 Implement Mitigation Measures 4.1-1(a) and (b).

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4.5 GREENHOUSE GAS EMISSIONS

4.5.1 Introduction

This section evaluates the project's impacts related to greenhouse gas (GHG) emissions and climate change. The climate change analysis provides an estimate of the project's GHG emissions and evaluates the project's consistency with the City's Climate Action Plan (CAP) based on the City's CAP Checklist.

Comments received in response to the Notice of Preparation (NOP) that pertain to GHG emissions include a recommendation for at least one vehicle charging station in the project parking lot and a question regarding whether the project facilitates alternative modes of transportation, such as pedestrian and bicycle access rather than vehicle access. All of the GHG concerns raised are addressed in this section. A copy of the NOP and letters received in response to it are included in Appendix A. The air quality model outputs and the City's CAP checklist are included in Appendix B.

The information presented in this section is based on project plans, the California Emissions Estimator Model (CalEEMod) (used to estimate project emissions), the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b), the Sacramento Metropolitan Air Quality Management District's (SMAQMD) Guide to Air Quality Assessment in Sacramento County (SMAQMD 2016), and the City's Climate Action Plan Consistency Review Checklist (City of Sacramento 2015c).

4.5.2 Environmental Setting

The Greenhouse Effect and GHGs

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This trapping of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone (O₃), and water vapor (H₂O). Some GHGs, such as CO₂, CH₄, and N₂O, can occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases,

 CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely byproducts of fossil-fuel combustion, whereas CH_4 results mostly from off-gassing associated with agricultural practices and landfills. Human-caused GHGs, which are produced by certain industrial products and processes, have a much greater heat-absorption potential than CO_2 . They include fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃) (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Without it, the temperature of the Earth would be about 0 degrees Fahrenheit (°F) (-18 degrees Celsius (°C)) instead of its current 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH₄ is 21, and the GWP of N₂O is 310. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO₂. Thus, GHG gas emissions are typically measured in terms of tons or metric tons (MT) of CO₂ equivalent (CO₂E).¹

Contributions to Greenhouse Gas Emissions

United States Emissions. In 2013, the United States produced 6,673 million metric tons (MMT) of CO_2E . The primary GHG emitted by human activities in the United States was CO_2 . This primary GHG represented approximately 82.5% of total GHG emissions. The largest source of CO_2 , and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 77% of CO_2 emissions (EPA 2015).

State of California Emission. According to the 2013 GHG inventory data compiled by the California Air Resources Board (CARB) for the California Greenhouse Gas Inventory for 2000–2013, California emitted 459 MMT CO₂E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2015). The primary contributors to GHG emissions in California are transportation, industry, electric power production from both in-state and out-of-

¹ The CO₂E for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO₂E = (metric tons of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for CH₄ is 21, which means that emissions of 1 metric ton of CH₄ are equivalent to emissions of 21 metric tons of CO₂, and the GWP for N₂O is 310, based on the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report. The IPCC has released subsequent Assessment Reports with updated GWPs, and CARB reporting and other statewide documents are beginning to transition to the use of the GWPs in the IPCC Fourth Assessment Report. Furthermore, the use of the different GWPs will not substantially change the overall project GHG emissions, which are primarily CO₂. As such, it is appropriate to use the hardwired GWP values in CalEEMod from the IPCC Second Assessment Report.

^{4.5 –} Greenhouse Gas Emissions

state sources, agriculture, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2013 are presented in Table 4.5-1, GHG Sources in California (2013).

Source Category	Annual GHG Emissions (MMT CO ₂ E)	Percent of Total ^a
Transportation	169.02	37%
Industrial Uses	92.68	20%
Electricity Generation	90.45 ^b	20%
Residential and Commercial	43.54	9%
uses		
Agriculture	36.21	8%
High Global Warming	18.5	4%
Potential Substances		
Recycling and Waste	8.87	2%
Totals	459.28	100%

Table 4.5-1 GHG Sources in California (2013)

Source: CARB 2015.

Notes:

^a Percentage of total has been rounded.

^b Includes emissions associated with imported electricity, which account for 39.99 MMT CO₂E annually.

City of Sacramento Emissions

Based on the 2005 GHG inventory for the City of Sacramento, the transportation sector represents the largest source of GHG emissions, accounting for 48.4% of the City's annual emissions of 4.16 million metric tons of CO_2E (City of Sacramento 2012). Electricity and natural gas combustion for the operation, heating, and cooling of commercial, industrial, and residential buildings accounted for another 42.5% of annual CO_2E emissions. The other CO_2E emission sectors included in the inventory (with percent contributions reported in parentheses) were waste (5.8%), wastewater treatment (1.4%), industrial specific sources (0.7%), water related (0.3%), and municipal operations (1.9%).

Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 Intergovernmental Panel on Climate Change Synthesis Report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snowpack, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010a).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures have increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1 to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in Central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

Wildfire risk in California will also increase as a result of climate change. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. However, human activities will continue to be the biggest factor in ignition risk. It is estimated that the long-term increase in fire occurrence associated with a higher emissions scenario is substantial, with increases in the number of large fires statewide ranging from 58% to 128% above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57% to 169%, depending on location (CCCC 2012).

Reduction in the suitability of agricultural lands for traditional crop types may occur. While effects may occur, adaptation could allow farmers and ranchers to minimize potential negative effects on agricultural outcomes through adjusting timing of plantings or harvesting and changing crop types.

Public health-related effects of increased temperatures and prolonged temperature extremes, including heat stroke, heat exhaustion, and exacerbation of existing medical conditions, could be particular problems for the elderly, infants, and those who lack access to air conditioning or cooled spaces (CNRA 2009a).

4.5.3 Regulatory Setting

Federal

U.S. Environmental Protection Agency

On April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency*, the U.S. Supreme Court directed the U.S. Environmental Protection Agency (EPA) administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs—CO2, CH4, N2O, hydrofluorocarbons, perfluorocarbons, and SF6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO2, CH4, N2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following to aid in the reduction of national GHG emissions:

- 1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.
- Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- 3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances

EPA and NHTSA Joint Final Rule for Vehicle Standards

On April 1, 2010, the EPA and NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016. The joint rule is intended to reduce GHG emissions and improve fuel economy. The EPA approved the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA approved Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act (75 FR 25324–25728). The final rule became effective on July 6, 2010.

The EPA's GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO2 per mile in model year 2016, which is equivalent to 35.5 mpg if the automotive industry were to meet this CO₂ level through fuel economy improvements alone. The Corporate Average Fuel Economy standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg (75 FR 25324–25728). The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers.

In August 2012, the EPA and NHTSA approved a second round of GHG and Corporate Average Fuel Economy standards for model years 2017 and beyond (77 FR 62624–63200). These standards will reduce motor vehicle GHG emissions to 163 grams of CO2 per mile, which is equivalent to 54.5 mpg if this level were achieved solely through improvements in fuel efficiency,

for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through reductions in air conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including the following:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel-cell vehicles
- Incentives for hybrid technologies for large pickup trucks and for other technologies that achieve high fuel economy levels on large pickup trucks
- Incentives for natural gas vehicles
- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standard test procedures

State

California Code of Regulations - Title 24

Title 24 of the California Code of Regulations was established in 1978, and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. The most recent amendments, referred to as the 2013 standards, became effective on July 1, 2014. Building constructed in accordance with the 2013 standards will use 25% less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 standards. Additionally, the standards will save 200 million gallons of water per year and avoid 170,500 tons of GHG emissions per year (CEC 2012). The most recent update (2016 standards) will become effective January 1, 2017.

Title 24 also includes Part 11, known as California's Green Building Standards (CALGreen). The CALGreen standards took effect in January 2011, and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings, as well as schools and hospitals. The mandatory standards require:

- 20% mandatory reduction in indoor water use.
- 50% of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.

• Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation; 65% diversion of construction and demolition waste; 10% recycled content in building materials; 20% permeable paving; 20% cement reduction; and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements; stricter water conservation; 75% diversion of construction and demolition waste; 15% recycled content in building materials; 30% permeable paving; 30% cement reduction; and cool/solar-reflective roofs.

Assembly Bill 32

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB is also responsible for adopting regulations requiring the reporting and verification of statewide GHG emissions to monitor and enforce compliance with the established standards. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early-action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early-action GHG reduction measures under AB 32. The three original early-action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" consist of the following:

- 1. A low-carbon fuel standard to reduce the "carbon intensity" of California fuels
- 2. Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants
- 3. Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies

The additional six early-action regulations, which were also considered "discrete early action GHG reduction measures," consist of the following:

- 1. Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology
- 2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification
- 3. Reduction of PFC emissions from the semiconductor industry
- 4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products)
- 5. Requirements that all tune-up, smog check, and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency
- 6. Restriction on the use of SF_6 from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 million metric tons (MMT) of CO₂E. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for the large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO₂ in excess of specified thresholds.

On December 11, 2008, CARB approved the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) (CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and CAT early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the Scoping Plan include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewable energy mix of 33%
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions

- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

An update to the Scoping Plan was adopted in May 2014 (CARB 2014). Based on updated information, the Scoping Plan Update revises the 2020 emissions target to 431 MMT CO₂E (based on updated GWPs for GHGs) and also builds upon the initial Scoping Plan with new strategies and recommendations. The Scoping Plan Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Scoping Plan Update defines CARB's climate change priorities for the next 5 years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. Executive Order B-16-2012 directed state entities under the governor's direction and control to support and facilitate development and distribution of zero-emission vehicles (ZEVs). The Governor's executive order sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, the executive order also establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

The Scoping Plan Update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the initial Scoping Plan. These efforts were pursued to achieve the near-term 2020 goal, and have created a framework for ongoing climate action that can be built upon to maintain and continue economic sector-specific reductions beyond 2020, as required by AB 32. The Scoping Plan Update identified nine key focus areas, including energy, transportation, agriculture, water, waste management, and natural and working lands, along with short-lived climate pollutants, green buildings, and the cap-and-trade program. The update also recommends that a statewide mid-term target and mid-term and long-term sector targets be established toward meeting the 2050 goal established by Executive Order S-3-05 to reduce California's GHG emissions to 80% below 1990 levels, although no specific recommendations are made.

California Air Pollution Control Officers Association

CAPCOA is the association of air pollution control officers representing all 35 air quality agencies throughout California. CAPCOA is not a regulatory body, but it has been an active

organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues.

Local

Sacramento Area Council of Governments Sustainable Communities Strategy

In February 2016, Sacramento Area Council of Governments (SACOG), the designated metropolitan planning organization (MPO) for the Sacramento region, adopted the 2036 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (SACOG 2016). The MTP/SCS is a long-range plan for transportation projects within the planning area and focuses on cost-effective operational improvements to preserve the existing and expanded regional transportation system through 2035. The 2016 update to the MTP/SCS focused on refinement of and addressing implementation challenges to the previous (2012) plan. The SACOG Board of Directors has adopted five guiding policy themes including, land use forecast, transportation funding, investment strategy, investment timing, and plan effects which provide direction for the plan update.

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is tasked with attaining and maintaining ambient air quality standards within the project region. As part of their responsibilities, SMAQMD also provides guidance for how GHG emissions should be evaluated in CEQA analyses. In November 2014, SMAQMD established numeric thresholds of significance for construction and operational-related GHG emissions.

Sacramento Region Blueprint

In 2007, SACOG adopted the Preferred Blueprint Scenario for 2050 (Blueprint). The Blueprint depicts a way for the region to grow through 2050 in a manner consistent with the seven smart growth principals: (1) transportation choices; (2) mixed-use developments; (3) compact development; (4) housing choice and diversity; (5) use of existing assets; (6) quality design, and (7) natural resources conservation. The seven smart growth principals provide guidance for land use planners which, when implemented, would ultimately result in an overall reduction in vehicle miles traveled (VMT), emissions of criteria pollutants, and greenhouse gas emissions.

City of Sacramento 2035 General Plan

The City of Sacramento's climate change Goals and Policies are provided in the Environmental Resources (ER) Element and the Utilities (U) Element of the General Plan and are as follows (City of Sacramento 2015a).

Goal ER 6.1 Improved Air Quality. Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that contribute to climate change.

Policy ER 6.1.5 Community Greenhouse Gas Reductions. The City shall reduce community GHG emissions by 15% below 2005 baseline levels by 2020, and strive to reduce community emissions by 49% and 83% by 2035 and 2050, respectively.

Policy ER 6.1.7 Greenhouse Gas Reduction in New Development. The City shall reduce greenhouse gas emissions from new development by discouraging auto-dependent sprawl and dependence on the private automobile; promoting water conservation and recycling; promoting development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; improving the jobs/housing ratio in each community; and other methods of reducing emissions.

Policy ER 6.1.10 Coordination with SMAQMD. The City shall coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design.

Goal U.6.1 Adequate Level of Service. Provide for the energy needs of the city and decrease dependence on nonrenewable energy sources through energy conservation, efficiency, and renewable resource strategies.

Policy U 6.1.5 Energy Consumption per Capita. The City shall encourage residents and businesses to consume 25% less energy by 2030 compared to the baseline year of 2005.

Policy U 6.1.7 Solar Access. The City shall ensure, to the extent feasible, that sites, subdivisions, landscaping, and buildings are configured and designed to maximize passive solar access.

Policy U 6.1.15 Energy Efficient Appliances. The City shall encourage builders to supply Energy STAR appliances and HVAC systems in all new residential developments, and shall encourage builders to install high-efficiency boilers where applicable, in all new non-residential developments.

City of Sacramento Climate Action Plan

In order to directly address the issue of climate change and GHG emissions, the City of Sacramento adopted its CAP on February 14, 2012 and incorporated it into the 2035 General Plan, adopted in March 2015. The CAP describes GHG emissions from uses and activities within the City and establishes policies, actions, and implementation measures to reduce

existing and future GHG emissions. As part of the CAP development process, a baseline GHG emissions inventory for the year 2005 was created that determined the City of Sacramento generated approximately 4.16 MMT CO_2E in 2005. The CAP also established a GHG emissions reduction target of 15% below 2005 levels by the year 2020 and GHG reduction goals of 38% below 2005 levels by the year 2030 and 83% below 2005 levels by the year 2050. The CAP sets forth strategies and measures related to the following topics of GHG reduction:

- Strategy 1: Sustainable Land Use
- Strategy 2: Mobility and Connectivity
- Strategy 3: Energy Efficiency and Renewable Energy
- Strategy 4: Waste Reduction and Recycling
- Strategy 5: Water Conservation and Wastewater Reduction
- Strategy 6: Climate Change Adaptation
- Strategy 7: Community Involvement and Empowerment

The City intends to use the CAP to streamline CEQA review for projects that are determined to be consistent with the CAP, pursuant to Section 15183.5 of the State CEQA Guidelines.

4.5.4 Impacts and Mitigation Measures

Methods of Analysis

The issue of global climate change is inherently a cumulative issue as the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project's impact to climate change is addressed only as a cumulative impact.

In February 2012, the City developed the CAP to reduce GHG emissions pursuant to AB 32. In 2015 the City updated its General Plan and Master EIR and incorporated the 2012 CAP into the General Plan. Using the City's current CAP Consistency Review Checklist as a guide, this analysis evaluates whether the proposed project would comply with the City's CAP. A "yes" or "not applicable" response to each of the CAP Consistency Review Checklist questions would result in a determination that the proposed project complies with the City's CAP. A "no" response demonstrates the project is not fully compliant with the City's CAP and additional analysis would be required. The project complies with the City's CAP, as discussed below and shown in the CAP Checklist included in Appendix B.

CEQA Guidelines Section 15183.5 provides a procedure for the analysis and mitigation of GHG emissions through the preparation and implementation of a climate action plan that satisfies specific requirements. The City prepared the CAP with the intention that the CAP would

implement the climate change-related General Plan policies and would qualify under Section 15183.5 as a plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. Projects that demonstrate consistency with the CAP would not result in an increase in GHG emissions beyond what the City has identified and mitigated for in the CAP and the impact would be less than significant. The relationship of the project to the CAP and the CAP Consistency Checklist is discussed further under Impact 4.5-1, below.

To provide a full understanding of the proposed project's potential contribution to climate change, the project's short-term construction-related and long-term operational GHG emissions were estimated using the CalEEMod software. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, and water use. In order to establish context of the project emissions, the operational emissions of buildout of site under the existing land use designations (i.e., Alternative 2, as described in Chapter 5 of this EIR) were also modeled with CalEEMod and compared to project emissions.

The analysis addresses development of the site consistent with Scheme A. The addition of Bank of America under Scheme B would not change the footprint of development or project operation.

Thresholds of Significance

The significance criteria used to evaluate the project impacts are based on Appendix G of the CEQA Guidelines, the thresholds adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to an increase in GHG emissions and change in climate change would occur if the project would:

- impede the City or state efforts to meet AB 32 standards for the reduction of GHG emissions; or
- conflict with the City's Climate Action Plan.

Project Specific Impacts and Mitigation Measures

4.5-1: The proposed project could impede the City or state efforts to meet AB 32 standards for the reduction of greenhouse gas emissions or conflict with the City's Climate Action Plan. Based on the analysis below the impact is *less than significant*.

Construction of the proposed project would result in short-term GHG emissions through the use of construction equipment, off-site trucks hauling construction materials, and worker trips. Operation of the proposed project would result in GHG emissions from vehicular traffic, area sources (natural gas combustion, landscaping), electrical generation, water supply, and solid waste generation. These emissions are depicted in Table 4.5-2 for disclosure. Because the

project includes a general plan amendment to change land use designations for portions of the site, an operational GHG emission comparison between the project (108,165 sf commercial) and buildout of the site under existing land use designations (250,000 sf retail/commercial and 40 residential units)² is included in Table 4.5-3 to compare the project emissions to the GHG emissions attributable to the site under the current general plan designations.

To provide a full understanding of the proposed project's potential contribution to climate change, the GHG emissions associated with construction and operation of the proposed project are provided in Table 4.5-2. Trip rates and the average trip length provided by the City's traffic consultants, DKS Associates, for the project were incorporated into CalEEMod in order to match the daily trips and VMT provided for the project (DKS 2016). Notably, the average trip length for the project would be less than the regional average (4.51 miles per trip versus the regional average of 4.73 miles per trip). Also, in compliance with the City's CAP, new structures built as part of the proposed project would be required to exceed Title 24 energy standards in effect at the start of construction by 5%. This project feature is reflected in the Emissions column in Table 4.5-2. In addition, a 75% waste diversion was also assumed.

Emission Source	Emissions	
Construction 2017	416.09	
Construction 2018	298.87	
Operations – Area Sources	0.01	
– Energy Usage	828.78	
– Mobile Sources	4,178.61	
 Solid Waste 	41.72	
 Water and Wastewater 	22.32	
Total Operational	5,071.44	

Table 4.5-2 Project Generated Annual GHG Emissions – MT CO₂E/Year

Source: See Appendix B.

Buildout of the project site based on existing land use designations was also estimated with CalEEMod. Construction emissions were estimated using the same schedule as the project, with adjusted equipment hours for the Building Construction phase based on the ratio of Alternative 2 to Project building square footage. Operations include adjusted trip generation to match what DKS provided for Alternative 2, trip length adjustments per the 4.51 miles per trip average, and the 75% waste diversion consistent with AB 341 (included in Appendix B). These emissions were then compared to the project GHG emissions and are depicted in Table 4.5-3.

² Buildout of site based on existing land use designations conservatively estimated per communication with the City (Johnson 2016).

Emission Source and Year	Proposed Project (1)	Existing Land Use Designations (2)	Incremental Change of Project: (1) minus (2)
Total Construction	714.96	1,297.62	(582.66)
Operations – Area Sources	0.01	0.72	(0.71)
– Energy Usage	828.78	1,071.33	(242.55)
 Mobile Sources 	4,178.61	4,803.83	(625.22)
 Solid Waste 	41.72	30.24	11.48
- Water and Wastewater	22.32	81.46	(59.14)
Total Operational	5,071.44	5,987.58	(916.14)

Table 4.5-3 Comparison of Project Generated Annual GHG Emissions versus Buildout of the Site under Existing Land Use Designations – MT CO₂E/Year

Source: See Appendix B.

As shown in Table 4.5-3, the proposed project would result in approximately 583 MT CO₂E less GHGs during construction and 916 MT CO₂E per year less GHG emissions than operations under buildout of the existing land use designations of the site. This comparison was provided to provide context for the potential GHG emissions of the project and shows that the project would result in less GHG emissions than if the site were developed under the existing General Plan designations.

The City's CAP establishes requirements for projects to reduce a portion of their estimated GHG to assist the City in meeting state requirements to reduce GHG emissions in compliance with state law. The CAP Consistency Review Checklist includes six criteria that a project must be evaluated against. Projects that are consistent with each of the six criteria are considered consistent with Sacramento's CAP and would not have a significant GHG impact. As shown in the completed CAP Checklist in Appendix B, the project would meet the City's six CAP requirements as summarized here, because it:

- The project meets the City's 2035 General Plan for land use and urban form and includes elements from the urban form guidelines including limited setbacks, buildings with a high degree of pedestrian-oriented uses such as outdoor cafe and restaurant seating areas, parking located behind or integrated into the site, and gathering places such as plazas;
- Traffic calming measures do not apply since the project does not include any roadway improvements;
- The project incorporates pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan, including pedestrian connections to Freeport Boulevard (with the #24 Freeport bus line) and Wentworth Avenue;

- 4. The project complies with City's Bikeway Master Plan and the portions of City's Zoning Code that apply to bicycles and bike facilities, including provision of short-term and longterm bicycle parking areas for Class II and Class III parking facilities;
- 5. The project will exceed the Title 24 efficiency standards in effect at the start of construction by a minimum of 5%;
- 6. The project complies with the minimum CALGreen Tier I water efficiency and conservation standards.

The project would meet each of the six CAP Consistency Review Checklist items and is consistent with the City's CAP with respect to planning and land use strategies. As such, the project would have a **less-than-significant** impact on climate change.

In regards to consistency with Executive Order B-30-15 (goal of reducing GHG emissions to 40% below 1990 levels by 2030) and Executive Order S-3-05 (goal of reducing GHG emissions to 80% below 1990 levels by 2050), there are no established protocols or thresholds of significance for that future year analysis. However, CARB determined that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown, which matches the conclusions in the City of Sacramento 2035 General Plan MEIR, which state: "[t]he City recognizes that its long-term GHG reduction goals are ambitious and the effects of future technological innovation, regulatory requirements, and guidance from the State cannot reliably be guantified at this time... However, it is notable that projected VMT/capita is expected to decline... during buildout... which will put the City on a trajectory toward reducing GHG emissions in the largest sector" (City of Sacramento 2015b). Since the project is consistent with the City's CAP, which was developed to establish strategies to comply with AB 32 GHG reduction goals, the project would not be anticipated to hinder the state's trajectory towards meeting the long-term GHG reduction goals by 2030 and 2050. Furthermore, since the specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures cannot be identified at this time for projects.

Mitigation Measures

None required.

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4.6 HAZARDS AND HAZARDOUS MATERIALS

4.6.1 Introduction

This section describes the potential adverse effects on human health and the environment due to exposure to hazards that could result from implementation of the Land Park Commercial Center Project (proposed project). Hazards evaluated include those associated with hazardous materials including potential exposure to hazardous materials used, generated, stored, or transported in or adjacent to the project site; and existing identified or suspected soil and/or groundwater contamination. Included in the discussion is a summary of applicable hazardous materials laws, regulations, and agencies responsible for their implementation.

One comment was received regarding concerns associated with hazards in response to the Notice of Preparation (NOP) and requested that a soil study be conducted to ensure no toxins are present on site. A copy of the NOP and comments received is included in Appendix A.

Sources reviewed to prepare this section include the Phase I and Phase II Environmental Site Assessments (ESA) prepared by Geocon Consultants (Geocon 2012a and 2012b, provided in Appendix E), the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b), and the Pre-Demolition Lead Survey Report and Pre-Demolition Asbestos Survey Report, prepared by Forensic Analytic Consulting Services, Inc. (FACS 2012a, 2012b). The Phase I and II ESAs and the Lead and Asbestos reports are included in Appendix E.

4.6.2 Environmental Setting

A description of the project site and the existing environmental setting is included below. The approximately 10-acre project site is developed with a former retail nursery that includes sheds, greenhouses and office uses, surface parking lots, and two residences.

Site Description and History

The majority of the 10-acre project site served as the Capital Nursery from roughly 1936 through 2012. Prior to 1936, the project site included stables and the land in the area, including the project site, was used to grow crops. The two single-family homes located along Wentworth Avenue that are also included within the project site are currently vacant and were constructed in 1938 and 1950.

The project site is relatively flat and surrounded by commercial and residential uses. The project site is generally bound by an existing single family residential neighborhood to the west, Freeport Boulevard and commercial uses to the east, a small retail area and residences

to the north, a bank (Bank of America) and a grocery store (Raley's) to the south, as shown in Figure 2-2, Site Location, in Chapter 2, Project Description.

General topographic information for the site was obtained from the Phase I ESA, which references a Geological Survey topographic map for Sacramento East, California. The project site is flat and at an approximate elevation of 20 feet above mean sea level.

Previous Site Investigations

An Asbestos survey and lead paint survey was conducted to determine if any of the buildings contained asbestos or lead based paint. A Phase I and Phase II ESA was also conducted for the project site and the results of these reports along with information from the hazardous materials database research and the subsurface soil and groundwater investigations are all included in Appendix E. Below is a brief summary of the findings from these reports.

Pre-Demolition Lead Survey

Due to the age of the buildings a lead paint survey was conducted to determine if any of the buildings contain lead paint (see Appendix E). All of the buildings on the project site were evaluated and paint chips collected and analyzed at Forensic Analytical Laboratories, Inc. (FALI) in Hayward, California. The analysis identified lead paint as being present in a number of buildings slated for demolition. Due to the number of buildings containing lead paint the survey recommends that all the buildings slated for demolition be presumed to contain lead-based paint. Contractors removing buildings containing lead paint are required to comply with the California Occupational Safety and Health Administration (Cal/OSHA) construction safety order 8 CCR 1532 related to lead paint removal and cleanup (FACS 2012a).

Pre-Demolition Asbestos Survey

All of the buildings slated for demolition were evaluated to determine if any building material contains asbestos material (see Appendix E). Based on the survey asbestos was found in numerous buildings in the floor tiles, composite roofing materials, gypsum wallboard and wall texture, and acoustical ceiling material. Demolition of buildings containing asbestos are required to follow the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule 902 and Cal/OSHA safety orders of 8 CCR 1529 related to asbestos removal and cleanup. Section 1529 regulates construction-related asbestos exposure involving demolition of structures, removal of asbestos-containing materials, asbestos clean-up, or excavation activities that may involve exposure to asbestos (FACS 2012b).

Phase I Environmental Site Assessment

According to the Phase I ESA records search performed by Environmental Data Resources, Inc., the project site is listed on seven registers including Resource Conservation and Recovery Act-Small Quantity Generators (RCRA-SQG), Aboveground Storage Tank (AST), California Facility Inventory Database Underground Storage Tanks (CA FID UST), Historical Underground Storage Tanks (HIST UST), Statewide Environmental Evaluation and Planning System Underground Storage Tanks (SWEEPS UST), Facilities Index System (FINDS), and the Sacramento County Master List. Two permitted underground storage tanks (USTs) installed in March 1987 consisting of one 2,000-gallon regular gasoline and one 1,000-gallon unleaded gasoline were removed in July 1991 and there are no records indicating that the USTs had experienced any leaks.

The Phase I ESA records search also found ten properties located less than 1/8-mile from the project site that are known to use and store chemical substances, or are designated hazard waste generators, or polluters. These properties include Massey's Flying A Service, Duffy's Cleaners, Kwong's Shell Service, Pickvet Dallas F, Chevron #9, Corfee's Laundry and Dry Cleaners, Pay-Less Cleaners, Suds & Duds Launderette, Come & Go Market, and Arco #2124 (former). Of these ten sites, four are located south or south-east (downgradient) of the project site, four are located north-northeast (cross gradient) of the project site, one is located northwest (up gradient) of the project site and one is located east (cross- to downgradient) of the project site. Two of the properties, Come & Go Market and Arco #2124, have a closed status and based on the information regarding the extent of contamination in the groundwater are unlikely to have impacted the project site. The remaining eight properties are unlikely to have impacted the project site and position relative to the project site.

The Phase I identified recognized environmental conditions (RECs) and areas of concern including use of the site as a commercial nursery and associated use of pesticides that may impact shallow soils, petroleum storage and use for on-site vehicle repairs and maintenance, and the associated areas of concern (the former UST locations, the former septic tank pit, the vehicle maintenance area, and the vehicle storage area), and the improper storage of retail pesticides in buildings on site.

Phase II Environmental Site Assessment

The Phase II ESA was prepared to evaluate the REC and areas of concern identified during the Phase I ESA. Soil samples and groundwater samples were collected to analyze potential contaminants of concern (COCs). In May 2012, 14 borings were drilled to 4 feet depths in locations throughout the site and two additional borings were drilled to 18 feet under the former USTs to observe soil conditions and to collect representative soil samples. In all 16 borings

there was no visual evidence of hazardous substances or petroleum impacts or odors within the initial depth of exploration (4 feet). Volatile organic compounds (VOCs) were detected in one boring (boring 16) with the highest reading 5.9 parts per million along with the presence of residual hydrocarbon impacts.

Pesticide compounds (4,4'-DDD, 4,4'-DDE, 4,4'-DDT, alpha-chlordane, gamma-chlordane, chlordane, dieldrin, and heptachlor epoxide) were detected in borings 1 through 5 and 8 through 14 in amounts that do not exceed the regulatory screening criteria related to human exposure. Dieldrin was detected in borings 9, 12 and 13 at concentrations of 3.3-5.6 micrograms per kilogram (μ g/kg), which exceeds current environmental screening levels specific to the potential for groundwater leaching (Geocon 2012b, p.6, provided in Appendix E). However, the absence of dieldrin in a soil sample from 2 feet indicates that it is not leaching from the surface soil to deeper soil and therefore would not be a threat to groundwater.

Two samples from boring 12 detected the presence of metals including arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Arsenic was detected at concentrations of 2.5 and 5.0 μ g/kg, which exceed the environmental screening levels, however, this concentration is within the range of naturally occurring background concentrations of arsenic in California soils (Geocon 2012b, p. 6, provided in Appendix B). No other metals were detected in concentrations exceeding the screening levels.

Petroleum hydrocarbons including gasoline-range organics (GRO); benzene, toluene, ethylbenzene and xylenes (BTEX); and methyl tert butyl ether (MTBE) were not detected in any of the soil samples analyzed including those from borings 15 and 16. Diesel-range organics (DRO) were detected in each of the samples in concentrations ranging from 2.9-440 milligrams per kilogram (mg/kg), which does not exceed the screening levels of 450 mg/kg for DRO in a commercial land use setting.

A groundwater sample collected from boring 15 in the former gasoline UST location did not contain GRO or BTEX. DRO and motor oil-range organics were detected at concentrations of 0.13 and 0.20 milligrams per liter (mg/l) respectively, which do not exceed the drinking water screening levels of 0.21 mg/l. The report concludes the use of pesticides and petroleum on the site are minimal and do not warrant further investigation or corrective action (Geocon 2012b, p. 8, provided in Appendix B).

Sensitive Receptors

Residences are located immediately west, north and south of the project site. The closest school is Leonardo Da Vinci Elementary located 0.3 mile southeast of the project site.
4.6.3 Regulatory Setting

Federal

Hazardous Waste Management

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA.

U.S. Environmental Protection Agency

The air toxics provisions of the Clean Air Act (CAA) require EPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112 of the CAA, EPA established the National Emission Standards for Hazardous Air Pollutants (NESHAP). Air toxics regulations under the CAA specify work practices for asbestos to be followed during building demolition and renovation. The regulations require a thorough inspection where the demolition or renovation operation will occur. The regulations require the owner or the operator of the renovation or demolition operation to notify the appropriate delegated entity (often a state agency) before any demolition, or before any renovations of buildings that contain a certain threshold amount of regulated asbestos-containing material. The rule requires work practice standards that control asbestos emissions. Work practices often involve removing all asbestos-containing materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expediently as practicable. Compliance with the NESHAP standards are required for anyone handling or working around asbestos containing materials as well as the safe disposal of any building materials that contain asbestos (EPA 2016).

U.S. Department of Transportation

Transportation of hazardous materials is regulated by the U.S. Department of Transportation's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 CFR Parts 100–185.

Worker Safety Requirements

The Occupational Safety and Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementing workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

State

California Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is administered by Cal/EPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the U.S. EPA approves the California program, both the state and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

The California Code of Regulations (CCR), Title 22, Chapter 11, Article 2, Section 66261, defines hazardous waste as:

a waste that exhibits the characteristics that may: (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed or otherwise managed.

According to 22 CCR, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated, or that is being stored prior to proper disposal.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the work place. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR

337–340). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

Cal/OSHA is the agency responsible for enforcement of the construction safety orders of 8 CCR 1529 and 1532 related to asbestos and lead paint removal and cleanup. Section 1529 regulates construction-related asbestos exposure involving demolition of structures, removal of asbestos-containing materials, asbestos clean-up, or excavation activities, which may involve exposure to asbestos. Section 1532 addresses specific measures for construction workers to take if exposed to sources that contain lead, including lead-based paint.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) protects water quality in California by setting statewide policy. The SWRCB supports the nine Regional Water Quality Control Boards, (RWQCBs), which, within their areas of jurisdiction, protect surface and groundwater from pollutants discharged or threatened to be discharged to the waters of the state. For the Sacramento area, the Central Valley RWQCB (CVRWQCB) maintains jurisdiction within the subject basin. This protection is carried out by the RWQCB through the issuance and enforcement of National Pollutant Discharge Elimination System (NPDES) permits, called Waste Discharge Requirements (WDRs), regulation of leaking underground storage tanks and contaminated properties through the Leaking Underground Storage Tank (LUST) and Spills, Leaks, Investigation, and Cleanup (SLIC) programs respectively. USTs are regulated under Chapter 6.7 of the California Health and Safety Code and 23 CCR Chapter 16. The RWQCBs issue WDRs for operating and closed landfills under 27 CCR Chapters 3, Section 20950, et seq.

California Health and Safety Code

In California, the handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a Hazardous Materials Business Plan. The plan provides information to the local emergency response agency regarding the types and quantities of hazardous materials stored at a facility and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are also required to prepare a Risk Management Plan and California Accidental Release Plan, which provides information on the potential impact zone of a worst-case release, and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

The transportation of hazardous waste is regulated under Chapter 6.5 of the California Health and Safety Code. Under Section 21560, hazardous waste generators must complete a manifest

for the waste before it is transported or offered for transportation. A manifest is a shipping document that is signed by the hazardous waste generator and contains the necessary information to be in compliance with all state and federal regulations. The purpose of the manifest is to allow for the waste to be tracked from point of origin through point of disposal and for the generator or regulatory agency to verify that the waste is properly delivered without incurring any loss along the way. The enforcement agencies for the transportation of hazardous materials regulations are the California Highway Patrol and Caltrans.

Local

Sacramento County Environmental Management Department

The Sacramento County Environmental Management Department (SCEMD) is the Certified Unified Program Agency for local implementation of several hazardous materials and hazardous waste programs. SCEMD is responsible for regulating hazardous materials business plans and chemical inventory, hazardous materials storage, hazardous materials management plans, and risk management plans. The hazardous materials business plan program requires businesses in Sacramento County to prepare business emergency response plans if hazardous materials storage equals or exceeds 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. The goal of SCEMD is to protect human health and the environment by ensuring that hazardous materials and hazardous waste are properly managed.

City of Sacramento Emergency Operations Plan and Evacuation Plan

The City of Sacramento Emergency Operations Plan (EOP, April 2005), provides safeguards to minimize loss of life and property damage during natural disasters and emergencies of national defense. The City of Sacramento EOP establishes an Emergency Management Organization and assigns functions and tasks in accordance with California's Standardized Emergency Management System. The EOP includes policies, responsibilities, and procedures necessary to protect human health and safety, public and private property, and the environment from the effects of natural and anthropogenic disasters and emergencies (City of Sacramento 2005).

The City's Evacuation Plan (2008) provides evacuation-specific strategy and information to support and guide the City's Emergency Managers, Emergency Operations Center staff, and other governmental and non-governmental agencies that would be involved with an evacuation event in the City. Therefore, the Evacuation Plan serves as an amendment to the EOP. The Evacuation Plan provides evacuation routes and locations of sirens and shelters within each police patrol beat area. The City of Sacramento Fire Department maintains updated records of the emergency response and evacuation routes for the City (City of Sacramento 2008).

Sacramento Metropolitan Air Quality Management District

The SMAQMD Rule 902 implements the US EPA NESHAP requirements, specifically to limit the emissions of asbestos into the atmosphere. Rule 902 relates to building demolition and sets forth specific measures to follow when handling and disposing of asbestos material (SMAQMD 2015).

Traffic Control Plans

Chapter 12.20 of the Sacramento City Code requires the development of a traffic control plan when streets must be closed or partially obstructed for construction activities. The plan must identify the location of the work area, the street locations that will be closed or obstructed, the types and locations of traffic control devices that will be used, and the time periods when traffic control will be effect.

City of Sacramento 2035 General Plan

Applicable goals and policies of the City of Sacramento 2035 General Plan pertaining to Public Health and Safety (PHS) are presented below.

Goal PHS 3.1 Reduce Exposure to Hazardous Materials and Waste. Protect and maintain the safety of residents, businesses, and visitors by reducing, and where possible, eliminating exposure to hazardous materials and waste.

Policy 3.1.1 Investigate Sites for Contamination. The City shall ensure buildings and sites are investigated for the presence of hazardous materials and/or waste contamination before development for which City discretionary approval is required. The City shall ensure appropriate measures are taken to protect health and safety of all possible users and adjacent properties.

Policy 3.1.4 Transportation Routes. The City shall restrict transport of hazardous materials within Sacramento to designated routes.

4.6.4 Impacts and Mitigation Measures

Methods of Analysis

For purposes of this analysis, the typical use of hazardous materials and their effects were assessed based on information from the Phase I and Phase II ESAs prepared for the project site (see Appendix E) and other existing documentation used to establish existing conditions and to identify potential environmental effects based on the standards of significance presented in this section. The Phase I ESA prepared for the project site concludes that the project site is not included on a list of hazardous materials sites compiled pursuant to

Government Code Section 65962. In determining the level of significance, the analysis assumes that the proposed project would comply with all applicable federal, state and local ordinances and regulations (summarized above).

The analysis addresses development of the site consistent with Scheme A. The addition of Bank of America under Scheme B would not change the footprint of development or the analysis. There are no changes under Scheme B that would require construction activities that could potentially expose people to asbestos or other hazards. Thus, only Scheme A is evaluated.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgement, a significant impact would occur if the proposed project would:

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestoscontaining materials or other hazardous materials or situations;
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities; or
- substantially increase the risk of exposure of site occupants to inadvertent or accidental releases of hazardous substances transported on adjacent roadways or rail lines near the site.

Criteria Not Applicable to Proposed Project

Due to the location and characteristics of the proposed project, certain significance criteria are not applicable to the proposed project and therefore, are not considered potential impacts. These criteria are addressed briefly below but are not discussed further in this document.

The project site is located within the Comprehensive Land Use Plan (CLUP) for Sacramento Executive Airport. The CLUP identifies the project site as being within Zone 4, Overflight zone, which has the lowest risk of impacts from airport activities (ALUC 1999). The project site does not contain a land use recognized as hazardous to air navigation. Both grocery stores and neighborhood and community shopping centers are approved land uses within the overflight zone. Therefore, impacts associated with airports would be less than significant and are not evaluated further in this section. Additionally, the project site is not located within the vicinity of a private airstrip. Therefore, potential impacts associated with private airstrips are not evaluated further.

The project does not require dewatering during construction. Therefore, the project would have no impact associated with exposure of people to contaminated groundwater during dewatering activities and this impact is not evaluated further.

In addition, the project site has been designed consistent with the City of Sacramento Fire Department's requirements for on-site turning radii for fire trucks and does not include any uses that would physically interfere with the City's adopted emergency operations plan or evacuation plan. Therefore, interference with an adopted emergency response plan or emergency evacuation plan is not further evaluated.

Project Specific Impacts and Mitigation Measures

4.6-1: The proposed project could expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil and/or groundwater during construction activities. Based on the analysis below the impact is *less than significant.*

A majority of the project site served as the Capital Nursery from roughly 1936 through 2012, and prior to 1936 the site included stables and was used to grow crops. The remainder of the site includes surface parking and two residences. These uses do not contain contaminated soils; therefore, the analysis focuses on the former Capital Nursery portion of the site.

For any project that entails development of a site where past uses could have resulted in soil or groundwater contamination, the potential exists for the release of hazardous substances during construction. For individuals not involved in construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through dust due to soildisturbing activities (e.g., grading) during construction where previously unidentified contamination may exist. A records search performed as part of the Phase I ESA indicated that two former permitted USTs, consisting of one 1,000-gallon unleaded gasoline tank and one 2,000-gallon regular gasoline tank, were removed from the project site in July 1991. It is possible that soils with pesticides, metals, or petroleum hydrocarbons may exist in locations where agriculture activities were carried out or where pesticides and petroleum were previously stored. As required per General Plan policy PHS 3.1.1, the site soils have been investigated for contamination related to the former agricultural use and storage of pesticides and petroleum. Results from the Phase II ESA soil investigation indicate that impacts related to past use and storage of pesticides and petroleum on site are minimal and do not necessitate any corrective action, as detailed above in the Environmental Setting. Given the results of the soil sample analysis, the potential impact to people with access to the site from pesticides, metals and petroleum hydrocarbons present on the project site is considered less than significant.

Mitigation Measures

None required.

4.6-2: The proposed project could expose people (e.g., residents, construction workers) to asbestos-containing materials or other hazardous materials or situations. Based on the analysis and with implementation of mitigation the impact is less than significant.

The majority of the project site has operated as the Capital Nursery since roughly 1936 and there are 16 sheds, and other associated buildings that exist on this portion of the project site. There are two residences also within the project site that were not part of the nursery In accordance with the Asbestos Hazard Emergency Response Act, the surface materials of these buildings must be designated as "presumed asbestos-containing material" (PACM) unless proven otherwise.

A Pre-Demolition Asbestos Survey was completed for the project site in October 2012 to determine the presence of Asbestos-containing materials (ACMs) on site (FACS 2012a). ACMs were determined to be present in a number of buildings. All regulated ACMs, Category 1 ACMs and Category 2 ACMs would be removed prior to demolition according to the standards provided by the EPA, Cal/OSHA and SMAQMD. As discussed in the Regulatory Setting, the EPA, Cal/OSHA and the SMAQMD all include regulations and requirements for the demolition of buildings with ACMs, which includes using construction workers trained in the removal of ACMs. The regulations require work practice standards that control asbestos emissions. Work practice standards under the EPA for air toxics regulations would include removing all asbestoscontaining materials, adequately wetting all regulated asbestos-containing materials, sealing the material in leak tight containers and disposing of the asbestos-containing waste material as expediently as practicable. Work practice standards for Cal/OSHA are similar to the EPA, but also include the presence of an asbestos competent person for monitoring during all demolition activities, HEPA filter dust collection systems, and ventilation of enclosed or isolated areas. Additional work practices related to Category 1 and 2 ACMs would be implemented where appropriate. Work practices outlined in the SMAQMD Rule 902 for regulated ACMS including Category 1 and 2, require proper signs be posted on the construction site, containment of asbestos dust, adequate wetting and waste handling and removal standards.

The Pre-Demolition Lead Survey Report concluded that PACMs were used on multiple buildings present on the project site (FACS 2012b). During demolition of existing buildings, the Cal/OSHA Lead in Construction Standard would be followed. Applicable requirements of this standard include, but are not limited to: proper training, exposure assessment monitoring, preparation of site specific lead compliance plan, and use of personal protective equipment and hygiene

facilities. Compliance with the provisions of the EPA, Cal/OSHA, and SMAQMD Rule 902 would reduce the impact from potential exposure to ACMs and all applicable provisions of the Lead in Construction Standard would be followed by the project Contractor to reduce the risk of potential exposure to PACMs during building demolition. Impacts associated with exposure to asbestos and lead would be **less than significant**.

During project construction, gasoline, diesel fuel, lubricating oil, grease, solvents, caulking, paint, and welding gases would be used at the site. In general, small amounts of these materials would be on site at any one time. However, no acutely hazardous materials would be used during construction of the project. In addition, materials handled would not pose a significant risk to adjacent residents or construction workers because the Contractor would be required to ensure these materials would be used and stored in accordance with existing laws and regulations. Besides proper handling per label instructions and compliance with hazardous materials laws and regulations, use of hazardous materials associated with project construction would also be governed under the Construction General Permit, and handled according to the a site-specific Stormwater Pollution Prevention Plan (SWPPP), as discussed in greater detail in Section 4.7, Impact 4.7-1. All SWPPPs must have a spill response and implementation element which requires, among other things, that appropriate spill response personnel are assigned and trained, and that equipment and materials for cleanup of spills (i.e., spill kits) shall be available on site. Given implementation of existing laws and regulations, the impact associated with leaks and/or spills of construction site materials would be **less than significant**.

The Phase I and Phase II ESAs conducted on the project site investigated the presence of other hazardous materials, including petroleum products, VOCs, metals, and pesticides. Based on the investigation and laboratory results of soil and groundwater samples, it was concluded that hazardous material impacts associated with the use of pesticides and petroleum on the site are minimal and do not warrant further investigation or corrective action (Geocon 2012b, p. 8, provided in Appendix B). The investigation detected diesel range organics, pesticide compounds, arsenic, and VOCs, but not at levels or in locations that would pose a threat to human health or the environment. However, site grading and excavation activities could potentially uncover or reveal previously unidentified hazardous substances, for example, if workers observe stained soil, or detect suspicious odors. Given the Phase I and II ESAs found only low levels of soil contamination and determined such levels to not be an environmental or human health concern, the potential to uncover previously unidentified soil contamination is very low. Regardless, the impact associated with encountering previously unidentified contamination on-site is considered **potentially significant**.

Mitigation Measures

Implementation of Mitigation Measure 4.6-1 would require implementing procedures to identify and mitigate potential contamination, specifically if project construction activities newly reveals evidence of previously unidentified contaminants not identified in the Phase II ESA. Compliance with existing federal and state laws and Mitigation Measure 4.6-1, regarding the removal of asbestos and other PACMs mitigate exposure to construction workers and compliance with the Construction General Permit requires implementation of spill response procedures and keeping spill kits on-site during construction, which mitigate impacts associated with asbestos and spills to **less than significant**.

- 4.6-1 In the event that grading or construction of the proposed project reveals evidence of soil contamination (e.g., suspicious odors, non-soil material, or stained soils) a Hazardous Materials Contingency Plan shall be prepared. The plan shall be prepared by a qualified environmental professional registered in California. The plan shall identify specific measures to take to protect worker and public health and safety and specify measures to identify, manage, and remediate wastes. The plan shall include the following:
 - Contamination evaluation and management procedures:
 - o Information on how to identify suspected contaminated soil.
 - Identification of air monitoring procedures and parameters and/or physical observations (soil staining, odors, or buried material) to be used to identify potential contamination.
 - Procedures for temporary cessation of construction activity and evaluation of the level of environmental concern if potential contamination is encountered.
 - Procedures for limiting access to the contaminated area to properly trained personnel.
 - Procedures for notification and reporting, including internal management and local agencies (fire department, SCEMD, etc.), as needed.
 - o A worker health and safety plan for excavation of contaminated soil.
 - Procedures for characterizing and managing excavated soils in accordance with CCR Title 14 and Title 22.
 - Procedures for certification of completion of remediation.

4.6-3: The proposed project would not substantially increase the risk of exposure of site occupants to inadvertent or accidental release of hazardous substances transported on adjacent roadways near the site. Based on the analysis below the impact is *less than significant*.

The proposed project includes a mix of retail uses that would include a Raley's grocery store. None of the retail uses, including the grocery store, would use or store hazardous substances that could potentially expose adjacent residents or on-site employees to risk of exposure to hazardous substances. Materials/products transported to the grocery store using local roadways including Freeport Boulevard and Sutterville Road, both local collector roads, would include household hazardous materials (i.e., household cleaning and landscaping products). The transport of these products would differ very little from existing conditions because the existing Raley's grocery store is located approximately 400 feet to the south of the project site. In addition, delivery trucks are required to transport any hazardous materials within the City using designated routes, per Policy 3.1.4. Because the proposed project does not include the use of hazardous substances that could expose employees or the adjacent community to potentially dangerous hazardous materials, the impact is considered **less than significant.**

Mitigation Measures

None required.

Cumulative Impacts

The cumulative context for the analysis of potential hazardous materials impacts (including hazardous materials usage during construction, exposure to potentially contaminated soils) is generally site-specific, rather than cumulative in nature. Compliance with all applicable federal, state, and local regulations related to hazards and hazardous materials on a project-by-project basis would be required for all projects within the City. Therefore, these issues are not addressed in the cumulative impact analysis.

Public safety impacts can have the potential to combine with other impacts, depending on the type of hazard they present. This analysis addresses potential cumulative impacts resulting from construction and/or implementation of the proposed project and similar development projects within the City of Sacramento based on buildout of the City's 2035 General Plan.

The proposed project, in conjunction with other future cumulative development within the City based on buildout of the City's 2035 General Plan, would include areas designated for commercial uses. The quantities of hazardous materials that would be present during occupancy of future commercial land uses would consist of household hazardous materials. Implementation of applicable hazardous materials management laws and regulations

adopted at the federal, state, and local level would ensure cumulative impacts related to hazardous materials use remain less than significant.

Hazardous materials spills or accidents would typically be site-specific and would not combine with other uses to create a cumulative effect. Associated health and safety risks generally would be limited to those individuals using the materials or to persons in the immediate vicinity of the materials.

4.6-4: The proposed project could contribute to cumulative increase in the potential exposure of people to sites where soil and/or groundwater contamination could be present from past or current uses. Based on the analysis below the impact is *less than significant.*

For any projects in the City of Sacramento that would entail development of a site where past uses could have resulted in soil or groundwater contamination, the potential exists for release of hazardous substances during construction. For individuals not involved in construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through dust either from soil remediation activities or from soil-disturbing activities during construction where previously unidentified contamination may exist. (Other potential pathways, such as direct contact with contaminated soils or groundwater would not pose as great a risk to the public because such exposure scenarios are site-specific and would typically be confined to the construction zones).

The project, in combination with other development projects in the City, would not result in any cumulative significant effects. This assumption is based on the results of the Phase II ESA that stated impacts related to past use and storage of pesticides and petroleum on the project site are minimal and do not necessitate any corrective action. Therefore, it is extremely unlikely that any one individual outside of any particular project site construction zone would be exposed to maximum levels of construction-generated contaminated air emissions (if any) for the entire development period, even if controls were not in place.

As discussed earlier, the cumulative increase to soil or groundwater contamination is not considered significant. Therefore, project construction-related effects due to soil or groundwater contamination would not be considerable and the project would not contribute to a cumulative impact.

Mitigation Measures

None required.

4.6.5 References Cited

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4.7 HYDROLOGY, DRAINAGE, AND WATER QUALITY

4.7.1 Introduction

This section describes the existing hydrology, water quality, and drainage of the project site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the Land Park Commercial Center project (proposed project).

In response to the Notice of Preparation (NOP), several comments were received requesting information about storm drains, and expressing concern regarding flooding and drainage problems, at Meer Way and Babich Avenue in particular. These concerns are addressed in the impacts analysis. A copy of the NOP and comments received is included in Appendix A.

Information to prepare this section was obtained from the *Sacramento 2035 General Plan* (City of Sacramento 2015a), the Basin 26 Drainage Master Plan (EBCE 2000), and a Preliminary Site Stormwater Analysis prepared for the project by Cunningham Engineering (Appendix F). In addition, public agency information sources were consulted to gather regional and site-specific information; these include Federal Emergency Management Agency (FEMA) flood hazard zones, U.S. Geological Survey hydrography data (USGS 2016), and Central Valley Regional Water Quality Control Board (CVRWQCB) data on water quality, water quality objectives, and impaired water bodies.

4.7.2 Environmental Setting

Regional Hydrologic Context

The City of Sacramento (City) is located within the Sacramento River Basin at the confluence of two major rivers: the Sacramento River and the American River. The Sacramento River Basin (which includes the drainage area of the American River) is composed of approximately 27,000 square miles, and is bound by the Sierra Nevada mountain range to the east, the Coast range to the west, the Cascade range and Trinity Mountains to the north, and the Sacramento–San Joaquin Delta (Delta)/Central Sierra Nevada area to the south (City of Sacramento 2015a).

The project site is approximately 1 mile east-southeast of the Sacramento River, which in this location is also considered as part of the Sacramento-San Joaquin Delta. The Sacramento River extends over 300 miles from the Klamath Mountains in the north to the Sacramento-San Joaquin Delta. It is California's largest river, with an annual runoff of 22,000,000 acre-feet. The Sacramento River is managed by dams for power generation, flood control, water supply, recreation, fisheries, and wildlife (City of Sacramento 2015a). The I Street Bridge over the Sacramento River is the northern boundary of the Legal Delta, as defined in California Water Code Section 12220. The Sacramento River south of this point is subject to muted tidal influence (City of Sacramento 2015a).

Major storm events can produce high flows throughout the Sacramento and American River systems. Flood control facilities along these rivers consist of a comprehensive system of dams, levees, overflow weirs (diversion structures intended to ensure that flows in the river do not exceed an identified maximum level), drainage pumping plants, and flood control bypass channels. The flood control network seeks to control water flows by regulating the amount of water passing through a particular reach of the river. Urban runoff flows are directed into this system by the City via two systems: (1) conveyance to the Sacramento River and American River through sumps, pipelines, and treatment facilities; or (2) conveyance by the City's Combined Sewer Service System (CSS), along with sewage to the Sacramento Regional Wastewater Treatment Plant (SRWTP) located near Elk Grove. The project site is served by a separate storm sewer system and does not direct stormwater to the City's CSS.

Surface Water Hydrology

Hydrologic Features

There are no hydrologic features on the project site. The closest waterbodies to the project site consist of the Sacramento River, Sacramento Drainage Canal and artificial lakes (in William Land Park Municipal Golf Course and the City's Zoo), located over 0.5 mile to the west and northwest, respectively.

Drainage and Stormwater Runoff

As shown in Figure 4.7-1, the project area is within the north-central portion of drainage "Basin 26.^{*1} Drainage Basin 26 comprises an area of approximately 1,000 acres and is bounded on the north by William Land Park, on the west and east by the Southern Sacramento Railroad and the Union Pacific Railroad, respectively, and on the south by the northern edge of the Sacramento Executive Airport (EBCE 2000). Storm drainage within Basin 26 is directed to a large diameter storm drain trunk line along Freeport Boulevard, which conveys stormwater to the south. At the southern boundary of Basin 26, a City sump facility with a design capacity of 111 cubic feet per second (cfs) (i.e., "Sump 26") is used to pump stormwater into the Sacramento Drainage Canal (EBCE 2000). In this location, a 60-inch gravity bypass pipe also allows gravity flow to the canal, though its effectiveness in draining storm flows from Basin 26 depends on the water surface elevations in the canal (EBCE 2000). The Sacramento Drainage Canal follows the northern edge of the Sacramento Executive Airport and turns to the south along Freeport Boulevard and Park Village Street. The canal then continues south along the east side of Interstate 80 (I-80) before eventually discharging to the Sacramento River at Freeport Bend, adjacent to the Bill Conlin Sports Complex (Figure 4.7-1).

¹ A drainage basin or drainage shed is a geographical area of land over which all runoff flows to a single end point at its perimeter boundary. The City of Sacramento is currently composed of 128 numbered Drainage Basins.



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Locally, stormwater runoff is conveyed through underground storm drains that range in size from 12 inches to 42 inches in diameter. The network of storm drains serving the area, that includes the project site, generally directs storm flows toward the trunk line along Freeport Boulevard. Public storm drain inlets/gutters that are in or adjacent to the site consist of two curb gutters on the west side of Freeport Boulevard, and one gutter in the northwest corner of the site near the southern end of Babich Avenue (City of Sacramento 2014). The project site, including the former nursery, two homes, and a parking area, consists of approximately 154,800 square feet of impervious area, or about 36% of the total project area. The former nursery site may be served by non-public drainage inlets and pipes, which would be replaced by the proposed project. The proposed drainage system is discussed further under Impact 4.7-3.

Surface Water Quality

As shown in Figure 4.7-1, the receiving water for storm flows within Basin 26 and the project site is the Sacramento River/Sacramento–San Joaquin Delta. For the purposes of identifying beneficial uses and establishing water quality objectives, the *Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley* defines this area of the Sacramento River as the Sacramento–San Joaquin Delta due to tidal influence (CVRWQCB 2015). Beneficial uses identified for the Sacramento–San Joaquin Delta include providing water supply for municipal, agricultural, recreational and industrial uses (except hydropower generation); other beneficial uses include freshwater habitat, spawning grounds, wildlife habitat, commercial and sport fishing uses, and navigation (CVRWQCB 2015). Ambient water quality in the Sacramento–San Joaquin Delta is influenced by numerous natural and artificial sources, including soil erosion, discharges from industrial and residential wastewater plants, stormwater runoff, agriculture, recreation activities, mining, timber harvesting, and flora and fauna (City of Sacramento 2015a). The Sacramento–San Joaquin Delta is listed as "impaired" under the Clean Water Action (CWA) Section 303(d) list for chlorpyrifos, DDT, diazinon, electrical conductivity, group A pesticides, invasive Species, mercury, and unknown toxicity (SWRCB 2012).

Based on current water quality reports, the Sacramento River is an excellent source of supply for drinking water (City of Sacramento 2015a). Water from the river can be treated to meet all 22 CFR Chapter 15 drinking water standards using conventional and direct filtration processes, as well as newer membrane technologies. There are no persistent constituents in the raw waters that require additional treatment processes (City of Sacramento 2015a). Though the Sacramento River water is considered to be a good source of drinking water supply when treated, high sediment loads and upstream agricultural uses tends to degrade the quality of the raw water. During the spring and fall, irrigation tailwaters are discharged into drainage canals that flow to the Sacramento River. In the winter, runoff flows over these same agricultural areas. In both instances, flows are highly turbid and introduce large amounts of herbicides and pesticides into the drainage canals,

particularly rice field herbicides in May and June. The turbidity (i.e., clarity) of the river is changed from relatively clear to turbid from sediment laden discharges (City of Sacramento 2015a).

Urban Stormwater Quality

Constituents found in urban runoff vary as a result of differences in rainfall intensity and occurrence, geographic features, the land use of a site, as well as vehicle traffic and percent of impervious surface. In the Sacramento area, there is a natural weather pattern of a long dry period from May to October. During this seasonal dry period, pollutants contributed by vehicle exhaust, vehicle and tire wear, crankcase drippings, spills, and atmospheric fallout accumulate within the urban watershed. Precipitation during the early portion of the wet season (which typically spans from November to April) washes these pollutants into the stormwater runoff, which can result in elevated pollutant concentrations in the initial wet weather runoff (first flush). The project site is somewhat unique within Basin 26 in that it is one of the last remaining areas that has not been completely built out.

According to the Phase II Environmental Site Assessment (ESA) prepared for the project (see Appendix E), low levels of pesticide compounds (4,4'-DDE, 4,4'-DDE, 4,4'-DDT, alpha-chlordane, gamma-chlordane, chlordane, dieldrin, and heptachlor epoxide), metals (arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc) and petroleum hydrocarbons (DRO) were detected within soils on site. However, the compounds detected were below environmental and human health-based screening levels for commercial uses, or determined to be within the range of naturally occurring background concentrations (i.e., for arsenic). Given surface soils are exposed over as much as 64% of the project site, as well as its previous use as a nursery, its potential to contribute pollutants such as sediment, pesticides, and fertilizers within stormwater runoff is elevated compared to other areas within the drainage shed.

As the storm drain system is separate from the sewer system in Basin 26, aside from trash screens at the sump facilities, there is no treatment of stormwater prior to discharge to the Sacramento Drainage Canal.

Flood Hazards

High water levels along the Sacramento and American rivers are a common occurrence in the winter and early spring. The low-lying landscape of the Sacramento area, with the convergence of two large river systems, has historically made the area susceptible to flooding. An extensive system of dams, levees, overflow weirs, drainage pumping plants, and flood control bypass channels are located on the Sacramento and American rivers to protect the area from flooding. In the City of Sacramento's past, floods have been the most frequent and considerable natural hazard affecting the local environment and economy.

Overall, three different types of flood events occur in the Sacramento area: (1) flash floods along local streams due to localized and intense rainfall, (2) riverine flooding along the American and/or Sacramento Rivers due to prolonged and intense rains over all or parts of the watershed, and (3) urban stormwater flooding due to exceedance of storm drain or sump pump capacity. Riverine flooding can also be caused by dam failure or exacerbated by levee breaches in the most extreme scenarios. Conditions causing regional flood events along the American and Sacramento Rivers include prolonged rains from El Nino years, "Pineapple express" storms, and/or "rain on snow" events in the mountains. Record flood events on the Sacramento River have occurred in 1951, 1956, 1964, 1986 and 1997 (City of Sacramento 2015b).

Regulatory Flood Zones

Floodplains are illustrated on Flood Insurance Rate maps produced by the Federal Emergency Management Agency (FEMA), which show areas in the floodplain and often the flood elevation or depth. The floodplain is most often referred to as the area that is inundated by a 100-year flood event. A 100-year flood event has a 1% chance of being equaled or exceeded in any given year. An area within a designated 100-year floodplain may have substantially less protection and be susceptible to flooding on a regular basis; however, meeting 100-year flood protection is a requirement for most construction within floodplains. The 100-year flood is the national minimum standard to which communities regulate their floodplains through the National Flood Insurance Program (NFIP).

As shown in Figure 4.7-1, the project site is outside of the 100-year flood hazard zone (Zone A), but within shaded Zone X, which is defined as areas that are protected from the 100-year flows by levees (DWR 2016). The project site is protected by a non-certified flood control levee on the left bank of the American River and along the left bank of the Sacramento River. The Army Corps of Engineers has removed the levee certifications for the left bank of the Sacramento River and left and right bank of the American River levees in 2013 within the City of Sacramento. The City of Sacramento along with the Sacramento Area Flood Control Agency (SAFCA) are in the process of recertifying these levees. FEMA has not remapped this area but will in the near future, so the project site remains within a FEMA designated shaded Zone X, where no flood insurance is required. However, because there remains residual risk of flooding from catastrophically large floods (such as a 200- or 500-year flood), levee breaks, or dam failures, the City actively encourages property owners in flood-prone areas, even if outside of a federal regulatory floodplain, to purchase optional flood insurance (i.e., preferred risk policy). Though not considered regulatory floodplains, the USACE Comprehensive Study indicates the project site is within the 200- and 500-year floodplain (DWR 2016).

Starting July 2, 2016, the State of California requires the City of Sacramento to make 200-year level of flood protection findings in order to approve new development. The City of Sacramento

can make an adequate progress finding if the City has a plan in place to have 200-year level of protection by 2025. The City of Sacramento has accepted a 200-year level plan created by SAFCA to meet this adequate progress finding.

The potential for a levee breach or failure of Folsom Dam to flood the project area could occur; however, the project does not include residential uses and areas along Sutterville Road would be considered safe from levee failure flood areas. In addition, the potential for the failure of Folsom Dam is extremely unlikely considering dam safety regulations and existing projects to improve the holding capacity and reliability of the dam. State law also requires local jurisdictions to adopt emergency procedures to address emergencies including dam failure and flooding. The City's emergency procedures addresses evacuation of this area in the event of some type of catastrophic flood event or failure of Folsom Dam.

Localized Flooding / Storm Drain System Overflows

The project area is subject to localized flooding caused by overflows within the City's storm drain system serving the area. This type of flooding is not typically a threat to human health or safety, and has sometimes been characterized as shallow or "nuisance flooding." However, depending on the intensity of the storm system, such flooding can start to inundate low spots in the terrain once the hydraulic grade lines² (HGL) exceed the height of adjacent street curbs. These types of floods are typically shallow, relatively short-lived, and do not involve high-velocity flows; however, they can cause safety hazards or damage property in major storm scenarios.

The *Basin 26 Drainage Master Plan* used the Sacramento Stormwater Management Model (SSWMM96) to predict the occurrence and severity of such flooding under both a 10-year and 100-year storm scenario (ECBE 2000). The results indicate that storm drain overflows within Basin 26 are mainly due to inadequate pumping capacity at Sump 26. In locations further upstream, including the project site, the overflows are also caused by inadequate pipe capacities in conjunction with inadequate overland release paths (ECBE 2000). According to the *Basin 26 Drainage Master Plan*, storm drain overflows are predicted to result in street flooding at a number of storm drain junctions in the surrounding streets in both the 10-year and 100-year storms, as shown in Table 4.7-1. In addition, property flooding is predicted to occur in the 100-year storm at the intersection of Freeport Avenue and Wentworth Avenue. None of the junctions within Basin 26 are expected to pose a public safety hazard in even a 100-year storm, as defined by deep and/or high velocity waters³, disruption of emergency services (i.e., blocked or inaccessible), or open ditches flowing at or above bankfull depth (ECBE 2000).

² The theoretical line describing the water surface throughout a drainage system when not constrained by anything other than atmospheric pressure. It will manifest itself as the actual water surface at any facility open to the atmosphere such as a sump, manhole, drainage inlet, channel, or detention basin.

 ³ A public safety hazard is identified where surface overflow depth multiplied by velocity exceeds 6, or 3 in front of sensitive land uses (schools, day care centers, playground, etc.) (ECBE 2000).

Storm Drain	Low Groun d Elev. (ft.)	Top of Curb Elev. (ft.)	Est. Property Damage Level (ft.)	10-Year Storm		100-Year Storm	
Junction Location (No.)				Water Surface Elev. (ft)	Flooding Type	Water Surface Elev. (ft)	Flooding Type
Babich Ct. and Meer Ave. (4812)	16.6	17.1	19.1	17.6	Street	18.0	Street
Meer Ave. and Freeport Blvd. (4810)	18.2	18.7	19.0	18.3	None	18.7	Street
Freeport Blvd. between Meer Wy. and 23rd Ave. (4802)	16.4	16.9	19.0	18.1	Street	18.5	Street
Freeport Ave. and Wentworth Ave. (4207)	17.8	18.3	19.3	18.9	Street	19.4	Street and Property

Table 4.7-1

Existing Conditions Flooding Predicted by SSWMM for Area Storm Drains

Source: EBCE 2000, Tables 2-1 and 2-2.

The Preliminary Site Stormwater Analysis, included in Appendix F, used the same model and applied it to the current conditions on the project site for the 100-year 6-hour storm event. The analysis indicates a peak flow of approximately 140 cubic feet per second (cfs) is predicted to spill from a sag point in Freeport Boulevard onto the site, which would then traverse the northernmost portion of the existing site to Babich Avenue. With one exception, flood depths as calculated from the gutter flowline within surrounding streets is predicted to remain below 1 foot above the gutter flowline. At Babich and Meer, however, flood depths are predicted to be 1.43 feet above the gutter flowline. In the project area, the models show that even though the storm drain system is designed to convey stormwater to the south, the overflows are modeled to flow to the north. This reversal of flow direction only occurs when pipe capacities are reached, and are a result of localized variations in surface topography that do not necessarily mimic the subtle grades of the underground pipe network.

Groundwater

The project site is located within South American Groundwater Sub-basin of the larger Sacramento Valley Groundwater Basin, as delineated in the California Department of Water Resources (DWR) Bulletin 118 (DWR 2004).

According to the geotechnical investigation prepared for the project (see Appendix J), groundwater was not observed in geotechnical borings that ranged in depth from 5 to 16.5 feet below the ground surface (bgs). However, groundwater was encountered in one deeper geotechnical boring at about 24.5 feet bgs, and one previous boring at a depth of 4 feet bgs (Appendix J). Based on review of wells and boring logs in the surrounding vicinity, groundwater levels in the general area are expected to range between 18 and 20 feet bgs (Appendix J). However, it should be noted that groundwater levels fluctuate due to variations in rainfall, temperature and other factors such as localized pumping and seasonal variations. Additionally, the Phase II ESA for the project provides evidence of a hardpan layer on the project site that may create locally perched groundwater conditions at relatively shallow depths (Appendix E).

4.7.3 Regulatory Setting

Federal

The Clean Water Act

The CWA (33 U.S.C. 1251 et seq.), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Important sections of the act are as follows:

- CWA Sections 303 and 304 provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. California is required to establish TMDLs for each pollutant/stressor. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The impairments applicable to the project's receiving waters are described in Section 4.7.2.
- CWA Section 401 (Water Quality Certification) requires an applicant for any federal permit that proposes an activity which may result in a discharge to waters of the United States, to obtain certification from the state that the discharge will comply with other provisions of the act. No federal approvals are necessary to permit the proposed project, and thus no CWA Section 401 certification will be required.
- CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the SWRCB and the nine Regional Water Quality Control Boards, who have several programs that implement individual and general permits related to construction activities, stormwater runoff quality, and various kinds of non-stormwater discharges. The City has

a NPDES Permit from the CVRWQCB and all projects in the City are required to comply with the NPDES Permit requirement that address stormwater runoff discharges to a water of the United States (i.e., the Sacramento–San Joaquin Delta).

 CWA Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the U.S. Army Corps of Engineers and the EPA. The project is not expected to require a permit under CWA Section 404 because grading and land disturbance will not involve dredge or fill into waters of the United States.

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level this includes the EPA, the U.S. Army Corps of Engineers, the Bureau of Reclamation, and the major federal land management agencies such as the U.S. Forest Service and the Bureau of Land Management. At the state level, with the exception of tribal lands, the California EPA and its sub-agencies, including the SWRCB, have been delegated primary responsibility for administering and enforcing the CWA in California.

Federal Antidegradation Policy

The federal antidegradation policy is designed to protect water quality and water resources. The policy directs states to adopt a statewide policy that includes the following primary provisions: (1) existing instream uses and the water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

Federal Emergency Management Agency

Sacramento County and the City are participants in the NFIP, a federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 adopted a desired level of protection that would protect developments from floodwater damage associated with an Intermediate Regional Flood, a flood which is defined as a flood having an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year.

State

Porter–Cologne Water Quality Control Act

The Porter–Cologne Act (codified in the California Water Code, Section 13000 et seq.) is the primary water quality control law for California. Whereas the CWA applies to all waters of the United States, the Porter–Cologne Act applies to waters of the state, which includes isolated wetlands and groundwater in addition to federal waters. It is implemented by the SWRCB and the nine RWQCBs. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state⁴ could cause pollution or nuisance, including impacts to public health and the environment.

The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. California Water Code Section 13260 subdivision (a) requires that any person discharging waste or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the state, to file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both state and federal law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as groundwater and isolated wetlands), Waste Discharge Requirements (WDRs) are required and are issued exclusively under state law. WDRs typically require many of the same best management practices (BMPs) and pollution control technologies as required by NPDES-derived permits.

Basin Planning

The California legislature has assigned the primary responsibility to administer and enforce statutes for the protection and enhancement of water quality, including the Porter–Cologne Act and portions of the CWA, to the SWRCB and its nine RWQCBs. The SWRCB provides state-level coordination of the water quality control program by establishing statewide policies and plans for implementation of state and federal regulations. The nine RWQCBs throughout California adopt and implement Basin Plans that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems. The CVRWQCB is responsible for the protection of the beneficial uses of waters draining to the Sacramento–San Joaquin Delta, including the project area.

⁴ "Waters of the state" are defined in the Porter–Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050(e)).

The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan (California Water Code Sections 13240–13247) (CVRWQCB 2015). The most water quality-sensitive beneficial uses applicable to the Sacramento–San Joaquin Delta include REC-1 (Water Contact Recreation), WARM (Warm Freshwater Habitat), COLD (Cold Freshwater Habitat), WILD (Wildlife Habitat), and migration and spawning (MIGR and SPWN).

The NPDES and WDR programs regulate construction, municipal, and industrial stormwater and non-stormwater discharges under the requirements of the CWA and the Porter–Cologne Water Quality Control Act. The construction stormwater program and the statewide general permit for low-threat discharges are administered by the SWRCB, while the municipal stormwater program is administered by the CVRWQCB. Table 4.7-2 lists the water-qualityrelated permits that would apply to the project, each of which is further described below. General WDRs and/or NPDES permits contain effluent limitations that may be stricter than basin-wide water quality objectives, because they regulate specific categories of discharge and are designed to limit the cumulative effects of development over broad areas.

Program/Activity	Order Number/ NPDES Number	Permit Name	Affected Area
Construction stormwater program	2009-0009-DWQ/ CAS000002, as amended	NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit)	Statewide
Municipal stormwater program	R5-2015-0023/ CAS082597, as amended	Waste Discharge Requirements for Stormwater Discharges from the Municipal Separate Storm Sewer System, Sacramento County.	Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento and the County of Sacramento.
Temporary/low volume dewatering ¹	R5-2013-0074/ CAG995001	Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality	Central Valley

 Table 4.7-2

 State and Regional Water Quality-Related Permits and Approvals

Notes:

If any dewatering is required.

NPDES = National Pollutant Discharge Elimination System; MS4 = municipal separate storm sewer system; WDR = Waste Discharge Requirement

^{4.7 -} Hydrology, Drainage, and Water Quality

Construction General Permit (SWRCB Order 2009-0009-DWQ, as amended). For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs 1 acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires the development and implementation of a stormwater pollution prevention plan (SWPPP), which would include and specify water quality BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off site into receiving waters. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB. The project applicant must submit a Notice of Intent (NOI) to the SWRCB to be covered by a NPDES permit and prepare the SWPPP prior to the beginning of construction.

Soil disturbances associated with project construction are anticipated to occur over the entire project site, or about 9.9 acres; therefore, the project would require coverage under the Construction General Permit.

Municipal Stormwater Permit (CVRWQCB Order R5-2015-0023, as amended). For discharges from municipal storm sewer systems, the CVRWQCB has adopted revisions to the City's 2008 NPDES Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (Regional MS4 Permit) in April 2015. This Limited Term Permit will be in place until the City gets a new permit. The Regional MS4 Permit is designed to avoid and minimize water quality impacts attributable to discharge from the Stormwater drainage systems owned and/or operated by the co-permittees, which includes the City of Sacramento. Among other things, the provisions of the MS4 Permit require the City to implement water quality standards and Low Impact Development⁵ (LID) guidelines that apply to new development and redevelopment projects, and to incorporate implementation of such standards into the local land use permitting process and City ordinances.

The proposed project is within the boundary of areas covered by the Regional MS4 Permit and meets the definition of a priority project; as such, it is required to meet the post-construction stormwater standards contained in the MS4 Permit, and the stormwater quality control measures contained in the *Stormwater Quality Design Manual (Sacramento Region)* (Sacramento Stormwater Quality Partnership 2014). As a commercial development with an

⁵ LID is a development site strategy that if implemented correctly can maintain and reproduce the predevelopment hydrologic system. LID endeavors to mimic the predevelopment site hydrology through infiltration, interception, reuse, and evapotranspiration.

impervious area of greater than 1 acre, the project applicant is required to incorporate source control measures, LID controls, and treatment control measures into the project's design to reduce potential impacts to water quality. The project is located within an exempt area for hydromodification management requirements because the storm drain system discharges directly to the Sacramento River (Sacramento Stormwater Quality Partnership 2014).

General Order for Dewatering and Other Low-Threat Discharges to Surface Waters (CVRWQCB Order R5-2013-0074, as amended). The CVRWQCB has adopted a general NPDES permit for short-term discharges of small volumes of wastewater from certain construction-related activities. Discharges may be covered by the permit provided they are either (1) 4 months or less in duration or (2) the average dry weather discharge does not exceed 0.25 mgd. Construction dewatering and miscellaneous dewatering/low-threat discharges are among the types of discharges that may be covered by the permit. To receive coverage under this general permit, the discharger must submit a Notice of Intent to the RWQCB and describe the activity with sufficient detail to demonstrate that discharge would comply with the discharge prohibitions, effluent limitations, and receiving water limitations outlined in the order. In no case shall the discharge impair beneficial uses or violate water quality standards or cause a possible nuisance condition.

As described in the setting, the site could have shallow/perched groundwater. This permit would be required in the event dewatering discharges to the City's storm drain system would be necessary during foundation excavations, utility trenching, or other site construction activities. If the discharge is made to land (e.g., piped to an temporary infiltration/percolation basin on-site) the applicant would need to apply for coverage under the *Statewide General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality* (SWRCB Order No. 2003-0003-DWQ). The intent and procedures for coverage under this permit is similar as described above. Alternatively, the applicant may make dewatering discharges to the City's sewer system, provided it obtains authorization from the Sacramento Regional County Sanitation District (SRCSD).

State Nondegradation Policy. In 1968, as required under the federal antidegradation policy described previously, the SWRCB adopted a nondegradation policy aimed at maintaining high quality for waters in California. The nondegradation policy states that the disposal of wastes into state waters shall be regulated to achieve the highest water quality consistent with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of the state. The policy provides as follows:

a. Where the existing quality of water is better than required under existing water quality control plans, such quality would be maintained until it has been demonstrated that any change would be consistent with maximum benefit to the people of the state and would not unreasonably affect present and anticipated beneficial uses of such water.

b. Any activity which produces waste or increases the volume or concentration of waste and which discharges to existing high-quality waters would be required to meet waste discharge requirements which would ensure (1) pollution or nuisance would not occur and (2) the highest water quality consistent with the maximum benefit to the people of the state would be maintained.

Local

The Sacramento Area Flood Control Agency

SAFCA was formed in 1989 by local agencies anxious to address the deficiencies in Sacramento's flood control system identified by the ACOE following the flood of 1986. Through a joint exercise of powers agreement, the City of Sacramento, County of Sacramento, the Sacramento County Water Agency, Sutter County, the Sutter County Water Agency, the ARFCD, and Reclamation District 1000 (RD 1000) pooled their common flood-control authorities, established a management structure, and identified a program for improving Sacramento's flood control system. This program has three elements:

- 1. Ensure the structural integrity of the existing levee system;
- 2. Provide at least a 100-year level of flood protection as quickly as possible to the areas within the FEMA 100-year floodplain by, among other actions, increasing the space available for flood control at Folsom Dam and Reservoir (Folsom); and
- 3. Work toward achieving at least a 200-year level of flood protection for the Sacramento area.

City of Sacramento 2035 General Plan

The following City of Sacramento 2035 General Plan goals and policies from the Environmental Constraints (ES) Environmental Resources (ER), and Utilities (U) elements of the general plan are applicable to new development and re-development and relate to stormwater drainage, water quality, and flood hazards.

Goal EC 2.1 Flood Protection. Protect life and property from flooding.

Policy EC 2.1.11 New Development. The City shall require evaluation of potential flood hazards prior to approval of development projects [...].

EC 2.1.22 Comprehensive Flood Management, Emergency, and Evacuation Plans. The City shall maintain, implement, update, and make available to the public the local Comprehensive Flood Management Plan, Emergency Plans, and Evacuation Plans, which address emergency preparedness, evacuation, hazardous materials, protection of critical facilities, development guidelines, and flood insurance outreach to better protect citizens in the event of a major flood event. **Goal ER 1.1 Water Quality Protection.** Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American rivers, and their shorelines.

Policy ER 1.1.4 New Development. The City shall require new development to protect the quality of water bodies and natural drainage systems through site design, source controls, stormwater treatment, runoff reduction measures, best management practices (BMPs) and Low Impact Development (LID), and hydromodification strategies consistent with the city's NPDES Permit.

Policy ER 1.1.5 Limit Stormwater Peak Flows. The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.

Policy ER 1.1.6 Post-Development Runoff. The City shall impose requirements to control the volume, frequency, duration, and peak flow rates and velocities of runoff from development projects to prevent or reduce downstream erosion and protect stream habitat.

Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance.

Goal U4.1 Adequate Stormwater Drainage. Provide adequate stormwater drainage facilities and services that are environmentally sensitive, accommodate growth, and protect residents and property.

Policy U4.1.1 Adequate Drainage Facilities. The City shall ensure that all new drainage facilities are adequately sized and constructed to accommodate stormwater runoff in urbanized areas.

Policy U4.1.5 Green Stormwater Infrastructure. The City shall encourage "green infrastructure" design and Low Impact Development (LID) techniques for stormwater facilities (i.e., using vegetation and soil to manage stormwater) to achieve multiple benefits (e.g., preserving and creating open space, improving runoff water quality).

Policy U4.1.6 New Development. The City shall require proponents of new development to submit drainage studies that adhere to City stormwater design requirements and incorporate measures, including "green infrastructure" and Low Impact Development (LID) techniques, to prevent on- or off-site flooding.

City of Sacramento Stormwater Management and Control Code

The City Stormwater Management and Control Code (Chapter 13.16 of the City Code) is intended to control non-stormwater discharges to the stormwater conveyance system; eliminate discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater; and reduce pollutants in urban stormwater discharges to the maximum extent practicable. Non-stormwater discharges are prohibited except where the discharge is regulated under a NPDES permit. (See the descriptions of the NPDES in the discussions of federal and state water quality regulations above.) Discharges from specified activities that do not cause or contribute to the violation of any plan standard—such as landscape irrigation and lawn watering and flows from fire suppression activities—are also exempt from this prohibition. Discharges to the stormwater conveyance system of pumped groundwater not subject to a NPDES permit may be permitted upon written approval from the City and in compliance with the City's conditions of approval.

City of Sacramento Grading, Erosion, and Sediment Control Ordinance

The City Grading, Erosion, and Sediment Control Ordinance (Title 15, Chapter 15.88 of the City Code) sets forth rules and regulations to control land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from construction activities. With limited exceptions, grading approval must be received from the City DOU before construction. All project applicants', regardless of project location, are required to prepare and submit separate erosion and sediment control plans applicable to the construction and post-construction periods. The ordinance also specifies other requirements, such as written approval from the City for grading work within the ROW of a public road or street, or within a public easement.

City of Sacramento SQIP

The City of Sacramento SQIP provides a comprehensive plan to direct the Sacramento City Stormwater Management Program (Sacramento City Stormwater Program) and its priorities and activities through the 2008–2013 permit term. Included in the City of Sacramento SQIP is information on the Sacramento City Stormwater Program's history and accomplishments as well as a description of specific activities for the 2008–2013 permit term. The City of Sacramento Stormwater Management Program is designed to reduce stormwater pollution to the maximum extent practicable and eliminate prohibited non-stormwater discharges in accordance with federal and state laws and regulations.

City of Sacramento Floodplain Management Ordinance

This Floodplain Management Ordinance is designed to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas.

The Ordinance regulates development which is or might be dangerous to health, safety, and property by requiring at the time of initial development, or substantial improvement, methods of protection against flood damage in areas vulnerable to flooding in order to minimize flood damage. The Ordinance regulates the following developmental impacts: filling, grading, or erosion, alteration of natural flood plains, stream channels or water courses, the imposition of barriers which increase flood hazards, or any other impacts that aggravate or cause flood hazards.

4.7.4 Impacts and Mitigation Measures

Methods of Analysis

A site-specific drainage study was prepared for the project site (included as Appendix F) to do the following: (1) evaluate the potential effects of the proposed project on the City's existing storm drain system, and (2) evaluate how the proposed project intends to address the existing 100-year street overflows from Freeport Boulevard onto the northern portion of the project site. This impact analysis incorporates the results of the drainage study and identifies potential project impacts associated with drainage and storm drain capacity issues. The focus of the study was to determine whether the proposed project would exacerbate or worsen off-site flooding issues, as discussed under Impact 4.7-3.

Impacts of the environment on a project or plan (as opposed to impacts of a project or plan on the environment) are beyond the scope of required CEQA review. The impacts discussed in this section related to flooding are effects on users of the project and structures in the project site due to preexisting environmental hazards, and therefore "do not relate to environmental impacts under CEQA and cannot support an argument that the effects of the environment on the project must be analyzed in an EIR", as discussed in the Introduction to the Analysis. Nonetheless, catastrophic flooding due to levee failure or dam failure is analyzed under Impact 4.7-4 for informational purposes.

The analysis addresses development of the site consistent with Scheme A. The addition of Bank of America under Scheme B would not change the footprint of development or project operation. There are no changes under Scheme B that would potentially change the hydrology of the site. Thus, only Scheme A is evaluated.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgement, a significant impact would occur if the proposed project would:

• substantially degrade water quality;

- violate any water quality objectives or waste discharge objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project;
- create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- increase the exposure of people and/or property to the risk of loss, injury, damage, or death in the event of a levee breach or dam failure;
- substantially deplete groundwater supplies or interfere with groundwater recharge resulting in a net deficit in the aquifer volume or a lowering of the groundwater table; or
- substantially alter the existing site drainage or substantially increase the rate or amount of surface runoff which would result in flooding on or off site.

Project Specific Impacts and Mitigation Measures

4.7-1: Construction activities associated with the proposed project could generate increases in sediment and/or other contaminants which could degrade water quality and violate water quality objectives and/or waste discharge requirements set by the State Water Resources Control Board. Based on the analysis below the impact is *less than significant*.

Construction activities such as building demolition, site clearing and grading, excavation, and trenching associated with construction of the proposed facilities is expected to result in land disturbance of approximately 9.9 acres over an approximately 14-month period. An improperly managed construction site can result in temporary turbidity increases in receiving waters due to suspended soil particles and sediment in stormwater runoff, increases in dust and wind erosion, fluid spills or leaks from heavy equipment and machinery, and/or introduction of other pollutants into local waterways. Pollutants typically present on construction sites include petroleum products and heavy metals from equipment, and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Construction activities could result in water quality degradation if runoff entering receiving waters contains pollutants in sufficient quantities to exceed water quality objectives defined in the Basin Plan or TMDLs established under CWA Section 303(d). Impacts from construction-related activities would generally be short term and of limited duration.

Because implementation of the proposed project would collectively require construction activities resulting in a land disturbance of more than 1 acre, the project applicant is required to obtain coverage under the Construction General Permit (SWRCB Order 2009-0009-DWQ, as amended), which pertains to pollution from grading and project construction. Coverage under the Construction General Permit requires a qualified individual (as defined by the SWRCB) to

prepare a SWPPP to address the potential for construction-related activities to contribute to pollutants within the project's receiving waterways. The SWPPP must describe the type, location and function of stormwater BMPs to be implemented, and must demonstrate that the combination of BMPs selected are adequate to meet the discharge prohibitions, effluent standards, and receiving water limitations contained in Construction General Permit.

The following list includes examples of construction water quality BMPs that are standard for most construction sites subject to the Construction General Permit:

- Silt fences and/or fiber rolls installed along limits of work and/or the project construction site;
- Stockpile containment and exposed soil stabilization structures (e.g., visqueen, fiber rolls, gravel bags and/or hydroseed);
- Runoff control devices (e.g., fiber rolls, gravel bag barriers/chevrons, etc.) used during construction phases conducted during the rainy season;
- Wind erosion (dust) controls;
- Tracking controls at the site entrance, including regular street sweeping and tire washes for equipment;
- Prevention of fluid leaks (inspections and drip pans) from construction vehicles;
- Materials pollution management;
- Proper waste/trash management;
- Regular inspections and maintenance of BMPs.

These BMPs would be refined and/or added to as necessary by a qualitied SWPPP professional to meet the performance standards in the Construction General Permit.

To obtain coverage under the Construction General Permit, the project applicant must submit to the SWRCB a Notice of Intent and associated permit registration documents, including a SWPPP and site plan, and must obtain a Waste Discharge Identification Number. As a condition of grading permit approval, the project applicant is required to also provide the Notice of Intent and Waste Discharge Identification Number to the City, and must include the water quality BMPs on construction plans and drawings. In addition, all earthwork, grading, trenching, backfilling and compaction operations must be conducted in accordance with the City's Stormwater Management and Control Code (Chapter 13.16 of the City Code) and the City's Grading, Erosion, and Sediment Control Ordinance (Title 15, Chapter 15.88 of the City Code).

The BMPs required for coverage under the Construction General Permit and the erosion control provisions contained in City ordinances would require measures to prevent construction-related

contaminants from reaching impaired surface waters and contributing to water quality impacts within the Sacramento Drainage Canal or Sacramento–San Joaquin Delta. For these reasons, water quality impacts resulting from construction-related activities and ground disturbances would be **less than significant**.

Mitigation Measures

None required.

4.7-2: The proposed project would increase impervious surface area and commercial activities that could result in substantial long-term effects on water quality. Based on the analysis below the impact is *less than significant*.

The increase in impervious area created by the proposed project, as well as on-site activities and uses, could alter the types and levels of pollutants that could be present in project site runoff associated with project operation. Runoff from building rooftops, walkways, parking lots, and landscaped areas can contain nonpoint source pollutants such as oil, grease, heavy metals, pesticides, herbicides, fertilizers, and sediment. Concentrations of pollutants carried in urban runoff are extremely variable, depending on factors such as the following:

- Volume of runoff reaching the storm drains;
- Time since the last rainfall;
- Relative mix of land uses and densities; and
- Degree to which street cleaning occurs.

Under existing conditions, stormwater that is not infiltrated moves as sheet flow towards the nearest storm drain gutter, and if rainfall is sufficiently intense and/or long-lasting, may begin to pond in various depressions on site. The Phase II ESA found that impacts related to past use and storage of pesticides and petroleum on the site are minimal (Appendix E). However, the past uses of the site (as a nursery, and prior to that, a farm with stables) means that low levels of residual nutrients/fertilizers, pesticides, metals or petroleum hydrocarbons may remain within site soils. Given surface soils are exposed over about 64% of the site, stormwater runoff may contain elevated levels of sediment, pesticides, and/or fertilizers compared to other areas within Basin 26.

Under proposed conditions, the surface soils that are now exposed to stormwater runoff would be stripped and replaced with engineered fills that meet geotechnical specifications, since surface soils with high organic content is not suitable for use as structural fills. The site would become 88% impervious due to 378,345 square feet (8.7 acres) of buildings, pedestrian paths, parking lots, and loading/unloading zones. The remainder would consist of landscaping. The stormwater drainage system would consist of roof downspouts, drain pipes, curb gutters,
parking lot gutters and other features that would collect stormwater runoff, convey it underground through storm drain pipes varying in size from 6-inches to 24-inches in diameter, and direct it to the public storm drain system along Freeport Boulevard.

The new site configuration would eliminate the exposure of soils containing pesticides and/or fertilizers to stormwater runoff, but would introduce new uses and activities that have the potential to degrade the quality of stormwater runoff. The primary pollutants of concern that may be present in stormwater runoff from the proposed project are associated with uncovered parking areas (e.g., leaking grease/oils and fluids), landscaping and landscape maintenance (e.g., sediment, improper/excessive use of pesticides, and/or fertilizers/nutrients), commercial loading and unloading activities (i.e., product spills/leaks, and/or litter and debris), and/or improper waste management. The release of such pollutants would be localized and periodic in nature, minor in magnitude (especially in comparison to the total volume of stormwater discharges entering regional waterways), and would only occur on an improperly designed and maintained site. Nevertheless, because the cumulative effects of past projects have resulted in substantial water quality problems in the region's major waterways, and because water quality problems are generally cumulative in nature, all efforts must be made to reduce pollutant concentrations within stormwater discharges to the maximum extent practicable.

As a commercial development with an impervious area of greater than 1 acre, the MS4 Permit requires the project applicant to incorporate source control measures, LID controls, and treatment control measures into the project's design to reduce potential impacts to water quality.⁶ The project applicant is in the process of developing detailed on-site drainage designs and will be including water quality designs and BMPs to meet applicable water quality standards. Typical source control measures include the following (Sacramento Stormwater Quality Partnership 2014):

- *Efficient Irrigation:* Avoid excessive irrigation that produces runoff, implement drip irrigation where feasible, comply with local ordinances regarding drought tolerant and native landscaping, use smart irrigation controllers and regularly inspect for leaky lines.
- *Landscaping:* Use of organic fertilizers (e.g., organic wood mulch) instead of synthetic fertilizers, and proper application and watering so as to minimize leached concentrations.
- Loading/Unloading Areas: Design loading/unloading areas to minimize the chance of spills and leaks and keep and spilled/leaked materials out of the storm drain system and receiving waters. Strategies include covering loading areas, isolating the drainage area

⁶ The project is located within an exempt area for hydromodification management requirements because the storm drain system discharges directly to the Sacramento River (Sacramento Stormwater Quality Partnership 2014).

to pretreatment devices and then to the sanitary sewer system, and equipping the drainage system with emergency spill shut-off/diversion valve.

- Outdoor Storage Areas: Locate and design outdoor material storage areas so that materials do not get washed off-site with runoff and become sources of pollutants to the municipal storm drain system (covered storage, secondary containment, isolating drainage, etc.).
- **Storm Drain Inlet Markings and Signage:** Stencil or mark storm drain inlets with "no dumping" or "drains to river."
- Waste management areas: Design an enclosed area for waste and recycling storage and collection on the site so that containers cannot be knocked over and where unauthorized use or vandalism is unlikely. Drainage should be directed away from recycling/waste storage areas; connect the hydraulically isolated area to the sanitary sewer system if possible.

While the source control measures above seek to minimize sources of pollutants in runoff water, treatment control and LID measures seek to both reduce the overall volume of runoff and provide treatment of remaining pollutants in runoff through infiltration or other means. Stormwater quality treatment control measures are designed to treat the more frequent, lower flow storm events. Small frequent storm events (0.5 inch of rain and less) on the average represent over 80% of the total average annual rainfall for the Sacramento area. The water quality volume is targeted for treatment in order to reduce pollutants to the "maximum extent practicable" standard. Retention/storage facilities would be sized for either the site's 100-yr 6-hr pre/post runoff volume increment (0.47") or the required design water quality volume (volume TBD) – whichever is larger (Appendix F). According to the Preliminary Site Stormwater Analysis, the required on-site stormwater treatment storage is anticipated to be approximately 19,000 cubic feet. The project applicant plans to meet this storage requirement primarily through underground storage cells ("Contech" or equivalent) and/or stormwater treatment filters (i.e., rechargeable, self-cleaning, media-filled cartridges to absorb and retain pollutants from stormwater runoff). The results of percolation testing of site soils will inform and determine the specific methods of treatment control. In addition, stormwater planters (flow through), vegetated filter strips, and interceptor trees would be considered for the landscaped areas of the site to provide additional treatment beyond the primary means for on-site stormwater treatment.

Although detailed design of lot-level LID and treatment control measures are currently in development and have not been finalized to date, the project applicant is required to comply with the provisions for new development and redevelopment contained within the Regional MS4 Permit, in addition to local general plan policies and ordinance codes related to water quality. The project applicant would be required to comply with the City's Stormwater Management and

Discharge Control Code (Ord. 2004-042 Section 1; Ord. 98-007 Section 1), Grading and Erosion and Sediment Control Ordinance No. 93-068, and must implement BMPs to the maximum extent practicable, as outlined in guidance within the currently adopted stormwater quality design manual. Grading plans and tentative map submittals would not be approved, and thus the project would not be constructed, without review and approval of these plans by the City's Department of Utilities. General Plan Policy ER 1.1.4 further requires/ensures that new development comply with the provisions of the MS4 Permit.

The existing submittal and approval requirements associated with the Stormwater Management and Control Code, the Grading, Erosion and Sediment Control Ordinance, as well as the NPDES Regional MS4 Permit would be sufficient to ensure that the project does not result in substantial long-term effects on water quality. Accordingly, the project's impact would be **less than significant.**

Mitigation Measures

None required.

4.7-3: The proposed project could affect the rate and amount of surface runoff in a manner that could exceed the capacity of the stormwater drainage system and/or exacerbate off-site drainage or flooding issues. Based on the analysis below the impact is *less than significant*.

The development of the project site would generally maintain the size and topography of the existing sub-sheds within Basin 26, and would not include substantial re-grading sufficient to alter their boundaries or change the direction of flow in the general vicinity. The proposed onsite stormwater and drainage system would be served by a network of on-site private storm drain pipes with a single 24-inch service connection to the existing City public storm drain mainline located in Freeport Boulevard. Similar to pre-project conditions, stormwater would continue to flow toward Freeport Boulevard, and then be directed south within the main trunk line. However, the project would increase the amount of impervious surfaces by approximately 223,568 square feet (5.13 aces) due to rooftops, driveways, sidewalks, and streets (Krafka 2016). The percent of the project area covered by impervious surfaces would increase from about 36% under existing conditions to 88% under the proposed project (Krafka 2016). This increase in impervious surface could accelerate the velocity of stormwater runoff and increase the volume of stormwater that is conveyed as runoff rather than be retained and/or infiltrated into the ground.

As discussed in the setting, the project site and its surroundings are expected to be subject to storm drain overflows in 10-year and 100-year storms. These overflows are primarily expected to result in street flooding, as well as property flooding in one location (at the intersection of

Freeport Boulevard and Wentworth Avenue). In no locations are these storm drain overflows expected to cause a safety hazard. However, any project-related increase in the likelihood, extent or severity of these conditions would violate the City's "Do No Harm" policy that requires "drainage systems function as well, or better, as a result of the proposed change (or project), and that there is no increase in flooding or in water surface elevation with negative impacts to individuals, streets, structures, infrastructure, or property" (City of Sacramento 2009, p. 11-3).

Accordingly, the Preliminary Site Stormwater Analysis (Appendix F) provides an analysis of how the increase in the site's impervious cover would impact the flooding depths within the surrounding areas. Table 4.7-3 shows the results of the analysis of the 100-year, 6-hour storm event, showing no increase in the hydraulic grade lines immediately abutting the site. The pre-to post-project change in computed peak flood depth ranges from -0.02' to +0.05'. When averaged over the above nodes, the mean change is 0.00'. The analysis concludes that there is no material difference in flood depths; such small differences in computed HGLs are well within the tolerance of the model's input data (i.e., mapped spot elevations to the nearest 0.1'; mapped contours to the nearest 1'), and likely also within the accuracy of the computational methods. The depth and severity of flooding issues experienced off site is not sensitive to changes in on-site imperviousness because backups within the public storm drain lines are due to cumulative runoff volumes from a significant portion of Basin 26, which is 1,000 acres in size. At 9.9 acres, the entire project site consists of approximately 1% of the basin.

Table 4.7-3
Flooding Depths (above gutter flowline) in Abutting Street
under a 100-year, 6-hour Storm Event

Location	Pre-Project Flooding Depth (ft.) (Site at 36% Impervious)	Post-Project Flooding Depth (ft.) (Site at 88% Impervious)	Difference (ft.)
Freeport at Meer	0.67	0.67	0.00
Freeport "Sag", abutting site	0.94	0.99	+0.05
Freeport at Wentworth	0.95	0.94	-0.01
Babich at Meer	1.43	1.41	-0.02
S. Land Park/Sutterville Road	0.89	0.87	-0.02
		Average Change	0.00

Source: Appendix F

As discussed in the setting, the Basin 26 existing-conditions SSWMM model predicts a 100-year overland flow of 140 cfs from Freeport Boulevard across the northernmost part of the site to

Babich Avenue. The Preliminary Site Stormwater Analysis (Appendix F) simulated the increase in impervious surface coverage on-site (from 36% to 88%), and found that overland flow remains substantially similar at 140 cfs. With the redevelopment of the project site, it is proposed that the existing overland flow continue to be passed through the site via essentially the same route as under existing conditions. A preliminary analysis of the northerly parking lot indicates that 140 cfs can be conveyed overland from Freeport Boulevard to Babich Avenue without an increase in peak 100-year HGL in Freeport Boulevard.

Based on the above information, proposed project would maintain the existing rate and amount of surface runoff from the site, and thus would not worsen the timing, severity or extent of storm drain overflow issues currently experienced off-site. As a result, the impact with respect to this issue is **less than significant**.

Mitigation Measures

None required.

4.7-4: Development of the proposed project could increase the exposure of people and/or property to the risk of loss, injury, damage, or death in the event of a levee breach or dam failure. Based on the analysis below the impact is *less than significant.*

As discussed in the environmental setting, the proposed project is not within a FEMA Special Flood Hazard Area, as depicted by the mapped 100-year flood hazard zone (see Figure 4.7-1). Thus, there would be no on-site or off-site impacts related to placing structures within a 100-year floodplain or otherwise modifying the boundaries of the existing 100-year floodplain, which is contained within the levees along the Sacramento River. In addition, the project does not propose modification or physical alterations to these certified levees or any other SAFCA or Bureau of Reclamation lands or facilities.

Although the proposed project is located outside of the 100-year flood hazard zone, it could still be subject to residual flood hazards, such as in the event of a dam failure or levee breach. As discussed in the environmental setting, the City and County of Sacramento have prepared detailed maps showing hypothetical levee breaks, inundation levels, the time it would take for waters to rise in affected neighborhoods, and rescue and evacuation zones. Under a modeled levee breach along the east bank of the Sacramento River, the maps show floodwaters would first inundate Land Park in the vicinity of Doc Oliver Field (northwest portion of Land Park). Starting about 6-9.5 hours after the levee breach, floodwaters would begin to inundate the northeastern portion of site with 1 foot of water at the lowest elevation. Thereafter, floodwaters would slowly fill the project site to as deep as 5–7 feet after about 25 hours (Wood Rodgers 2005). Although considered highly unlikely given engineering controls, ongoing projects, and periodic inspections, inundation from failure of the Folsom Dam could occur as quickly as 8 hours from the event.

Although these would be considered unlikely worst-case flood scenarios, and could only occur in the event of catastrophic flooding (e.g., from a 200+ year storm event or dam failure), the depth of inundation would present serious public safety risks. There are areas to the west of the project, as well as areas further to the east accessible via emergency evacuation routes that are outside the hypothetical flood depths and are considered "refuge areas" during emergency operations. They would be available as a safe haven for employees or customers (who are unable to evacuate) to avoid drowning and loss of life until rescue operations can be carried out.

The need for rescue operations is considered a final measure of last resort as there are extensive emergency evacuation plans in place to provide advanced warning in the event of a major flood disaster. Besides current SAFCA and the U.S. Bureau of Reclamation efforts to provide a 200-year level of protection, the City of Sacramento has also conducted considerable emergency planning work in recognition of the significant flood hazards it faces. These procedures are outlined in detail in the City of Sacramento Plan for Floods and Other Emergencies (City of Sacramento 2008) which enhances/supplements, but does not replace, department-specific emergency operations plans, such as the DOU's Comprehensive Flood Management Plan (City of Sacramento 1996).

Given the extensive emergency management procedures in place, and the location of the project immediately adjacent to an evacuation route, its presence within dam and levee failure inundation zones does not constitute a significant impact of the project. Thus the impact would be **less than significant**.

Mitigation Measures

None required.

4.7-5: The proposed project could substantially deplete groundwater supplies or interfere with groundwater recharge. Based on the analysis below the impact is *less than significant*.

The proposed project would increase the amount of impervious surfaces; however, the effect on the amount of stormwater recharging the groundwater system would be minimal. Although it may interfere slightly with groundwater recharge due to an increase in impervious surfaces, the project site is not in a favorable groundwater recharge area due to the relatively shallow depth of groundwater and the clayey nature of soils in the region. In addition, the project does not propose the use of on-site groundwater wells and surrounding land uses are reliant on municipal water supplies rather than on-site groundwater wells. Therefore, it would not substantially deplete groundwater supplies or lower the local groundwater table. Furthermore, the project applicant has committed to implement LID and treatment control measures, which may be designed to promote groundwater infiltration. For these reasons the impact of the project on groundwater supplies and recharge would be **less than significant**.

Mitigation Measures

None required.

Cumulative Impacts

The geographic context for the analysis of cumulative hydrology, urban flooding, and surface water quality impacts is Basin 26, which defines all areas that drain to a common outlet (i.e., the Sacramento Drainage Canal). This cumulative impact analyses does not rely on any list of specific pending, reasonably foreseeable development proposals in the general vicinity of the proposed project, but assumes the basin would eventually become 100% built out (i.e., to the maximum density allowed under the 2035 General Plan and zoning code). Under current conditions, the basin is 96% built out, which means that additional/future development would only cause small incremental changes in the rate and volume of runoff, as well as water quality in a basin-wide context. This is confirmed by Appendix F, which found that storm drain overflow conditions were not sensitive to the increase in impervious surfaces resulting from the proposed project.

4.7-6: The proposed project, in addition to other projects in the watershed, could result in the generation of polluted runoff that could violate water quality standards or waste discharge requirements for receiving waters. Based on the analysis below the impact is *less than significant.*

The cumulative effects of past and current projects in the cumulative scenario have resulted in substantial water quality problems in the region's major waterways, and because water quality problems are generally cumulative in nature, all efforts must be made to reduce pollutant concentrations within stormwater discharges to the maximum extent practicable, even if the impact of an individual project appears inconsequential. Cumulatively considerable water quality issues are identified as "water quality limited" segments (or impaired water bodies) under CWA Section 303(d). These impairments are identified in Section 4.7.2, and indicate that the Sacramento–San Joaquin Delta is listed as "impaired" under the Clean Water Action (CWA) Section 303(d) list for chlorpyrifos, DDT, diazinon, electrical conductivity, group A pesticides, invasive Species, mercury, and unknown toxicity (SWRCB 2012).

For short-term effects, the proposed project, along with other projects occurring within Basin 26, would be required to comply with applicable federal, state, and local water quality regulations. The project, along with other projects over 1 acre in size, would be required to obtain coverage under the NPDES Construction General Permit, which requires project proponents to identify and implement stormwater BMPs that effectively control erosion and sedimentation and other construction-related pollutants. The City's Stormwater Quality Ordinance and grading permit approval process also require smaller projects (less than 1 acre) to implement a standard/minimum set of water quality BMPs.

The typical long-term effect of substantial increases in impervious surfaces is that peak flows within the watershed's drainages are greater in magnitude, shorter in duration, and more responsive to storm events, since a greater portion of precipitation is carried by surface runoff rather than percolated into the soil. These effects are undesirable with respect to flood hazards, water quality, and habitat quality. To the extent project components exacerbate this issue, especially in proximity to water quality-sensitive areas such as impaired waters, the project along with other future projects could result in a cumulatively significant impact.

The NPDES permits required for the Project are aimed at maintaining the beneficial uses of the water bodies in the RWQCB Basin Plan and meeting water quality objectives associated with specific pollutants of concern. Because adverse water quality and major hydrologic alterations are linked to the large-scale, cumulative effects of development projects and to commercial and/or agricultural land uses, the provisions within the NPDES permits, by their nature, seek to address cumulative conditions. Therefore, required project compliance with the Construction General Permit, MS4 Permit requirements, and local ordinances ensure that project contributions to cumulatively significant water quality impacts are reduced to below a level of significance. The water quality permits and mitigation measures are designed to address cumulative water quality issues by reducing to the maximum extent practicable the levels of pollutants entering the storm drain system.

With respect to localized flooding and exceedances of storm drain capacity, the project, like all other projects within the City of Sacramento, is required to comply with the "Do No Harm" policy, which ensures that existing conditions, including cumulatively significant conditions, are not exacerbated by development. Furthermore, the project site is one of the last under-developed parcels within Basin 26, which means there is very little future development that can exacerbate storm drain capacity issues beyond its existing condition. The project's incremental contribution to the cumulative impact is therefore, not considerable and is **less than significant**.

Consistent with this analysis, the City's 2035 General Plan Master EIR found impacts with respect to water quality, runoff/drainage, and flooding to be less than significant with implementation of applicable regulations and general plan policies. Application of the City's general plan policies related to drainage, runoff, and water quality to new development (e.g., Policy ER 1.1.4 though Policy ER 1.1.7, Policy U4.1.1, Policy U4.1.5, and Policy U4.1.6) further minimizes the potential for basin-wide impacts from development in the cumulative scenario (City of Sacramento 2015a).

Mitigation Measures

None required.

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4.8 NOISE

4.8.1 Introduction

This section describes the ambient noise environment and noise sensitive land uses proximate to the Land Park Commercial Center project (proposed project) site, identifies regulatory restrictions and policy requirements, evaluates potential impacts, and identifies mitigation measures required for implementation of the proposed project.

A number of comments regarding noise were received in response to the Notice of Preparation (NOP) that included concerns related to short-term construction noise, noise emissions from trucks and activities in loading docks, roof-top HVAC systems, and general parking lot activities. Several measures were also suggested to reduce noise emissions from loading docks, including enclosing the loading dock, establishing stringent idling limits, and construction of a separate noise barrier adjacent to the loading docks. All of the noise concerns raised and recommendations are addressed in this section. A copy of the NOP and comment letters received is included in Appendix A. The traffic and construction noise model outputs are included in Appendices B and H.

The information presented in this section is based on review of project plans, the Federal Highway Administration (FHWA) Transportation Noise Model (TNM 2.5) to estimate project related traffic noise, the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b).

4.8.2 Environmental Setting

This section provides background information and terminology relevant to the noise assessment and then describes the existing ambient noise environment that characterizes the project site and immediately adjacent properties.

Noise Background and Terminology

Fundamentals of Environmental Noise

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz (Hz). The normal frequency range of hearing for most people extends from about 20 to 20,000 Hz. The human ear is more sensitive to middle

and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting is typically used for quieter noise levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dBA.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear. Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (EPA 1973). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. A complete definition of CNEL is provided below.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this report.

- *Decibel* (dB) is a unitless measure of sound on a logarithmic scale which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.
- *A-weighted decibel* (dBA) is an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

- Equivalent sound level (L_{eq}) is the constant level that, over a given time period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the day–night average sound levels (L_{dn}) and community noise equivalent level (CNEL) scales.
- *Maximum sound level* (L_{max}) is the maximum sound level measured during the measurement period.
- *Minimum sound level* (L_{min}) is the minimum sound level measured during the measurement period.
- *Percentile-exceeded sound level* (L_{xx}) is the sound level exceeded x percent of a specific time period. L10 is the sound level exceeded 10% of the time.
- Day-night average sound level (L_{dn}). The L_{dn} is a 24-hour average A-weighted sound level with a 10 dB penalty added to the nighttime hours from 10:00 p.m. to 7:00 a.m. The 10 dB penalty is applied to account for increased noise sensitivity during the nighttime hours. Resulting values from application of L_{dn} versus CNEL rarely differ by more than 1 dB (see definition below), and therefore these two methods of describing average noise levels are often considered interchangeable.
- Community noise equivalent level (CNEL) The CNEL is the average equivalent A-weighted sound level during a 24-hour day. CNEL accounts for the increased noise sensitivity during the evening hours (7:00 p.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.) by adding 5 dB to the sound levels in the evening and 10 dB to the sound levels at night. CNEL and L_{dn} are often considered equivalent descriptors.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

Structural Noise Attenuation

Sound levels can also be attenuated by man-made or natural barriers. Solid walls or slopes associated with elevation differences typically reduce noise levels by 5 to 10 dBA (Caltrans 1980). Structures can also provide noise reduction by insulating interior spaces from outdoor noise. The outside-to-inside noise attenuation provided by typical structures in California ranges between 17 to 30 dBA with open and closed windows, respectively, as shown in Table 4.8.1.

Building Type	Open Windows	Closed Windows
Residences	17	25
Schools	17	25
Churches	20	30
Hospitals/Offices/Hotels	17	25
Theaters	17	25

 Table 4.8.1

 Outside-to-Inside Noise Attenuation (dBA)

Source: TRB 2013

Fundamentals of Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. The response of humans to vibration is very complex. However, it is generally accepted that human response is best approximated by the vibration velocity level associated with the vibration occurrence.

Heavy equipment operation, including stationary equipment that produces substantial oscillation or construction equipment that causes percussive action against the ground surface, may be perceived by building occupants as perceptible vibration. It is also common for ground-borne vibration to cause windows, pictures on walls, or items on shelves to rattle. Although the perceived vibration from such equipment operation can be intrusive to building occupants, the vibration is seldom of sufficient magnitude to cause even minor cosmetic damage to buildings.

When evaluating human response, ground-borne vibration is usually expressed in terms of root mean square (RMS) vibration velocity. RMS is defined as the average of the squared amplitude of the vibration signal. As for sound, it is common to express vibration amplitudes in terms of decibels defined as:

$$L_{v} = 20 \log \left(\frac{v_{rms}}{v_{ref}} \right)$$

Where vrms is the RMS vibration velocity amplitude in inches/second and vref is the decibel reference of 1x10-6 inches/second.

To avoid confusion with sound decibels, the abbreviation VdB is used for vibration decibels. The vibration threshold of perception for most people is around 65 VdB (which is equivalent to 0.0018 in/sec RMS). Vibration levels in the 70 to 75 VdB range are often noticeable, but generally deemed acceptable, and levels in excess of 80 VdB are often considered unacceptable (FTA 2006).

Existing Noise Conditions

Project Site Noise Levels

The project site includes the former Capital Nursery site, two residences, and parking areas. The former Capital Nursery site is vacant and contains several older storage buildings and greenhouses, assorted support structures, and open areas that were previously used for cultivating plants. The two residences, located on Wentworth Avenue, are also vacant and no noise is currently generated at the site. The site is bound on the north by single-family residences along the western half and commercial uses along a portion of the eastern half, on the south by single-family residences along the western half and by commercial uses along the eastern half, on the west by single-family residences, and on the east (across Freeport Boulevard) by commercial uses. Existing on-site noise levels are influenced by traffic along adjacent roadways and activities occurring on commercial properties to the northeast, east, and southeast of the project site.

Existing noise levels were measured at the project site boundaries adjacent to residential land uses, in order to establish baseline noise conditions against which to compare project operational noise levels, as shown in Figure 4.8-1. In order to characterize existing noise levels, three 24-hour noise measurements were performed, one apiece on the southern, western, and northern property boundaries. Sound-level measurements were performed using two different integrating sound-level meters: A Larson Davis Model 720 American National Standards Institute (ANSI) Type II, and two SoftdB Piccolo 3 Model ANSI Type IIs. ANSI Type I and Type II sound-level meters both have sufficient accuracy to be used for environmental noise evaluation. The sound-level meters were calibrated before and after each series of measurements using a Larson Davis Model CAL150 calibrator.

Table 4.8-2 summarizes the dates and start/stop times for each 24-hour measurement, as well as the calculated 24-hour weighted average noise level (CNEL). See Appendix G for data tables for each of the 24-hour measurement periods and the calculation of CNEL from the recorded hourly average values, and for a figure illustrating noise measurement locations.

Location	Dates	Start Time	Stop Time	CNEL (dBA)
Northern Property Boundary	10/22/2014	2 PM	2 PM	54
Western Property Boundary	to			53 ¹
Southern Property Boundary	10/23/2014			51

Table 4.8.2Existing Ambient Noise Measurement Results

Note:

This is the 24-hour L_{eq} value for the measurement taken along the western property boundary, which is considered to correlate relatively well with a person's subjective response to the varying noise levels throughout the measurement period (24-hours), and generally compares favorably to a CNEL value.

Existing noise levels on site, and immediately adjacent to neighboring residential land uses, are well within the City's exterior noise exposure limit of 60 dBA CNEL for low density residential use (Refer to *Section 4.8.3 – Local*, below). The City does not have a specific noise exposure limit for retail commercial uses; however, the City's exterior noise exposure for Office Buildings (Business, Commercial and Professional) is 70 dBA CNEL (City of Sacramento 2016).

Traffic-Related Noise Levels

Since roadway traffic is often a primary contributor to the noise environment in an urban setting, short-term noise measurements were also conducted along Freeport Boulevard and Wentworth Avenue, adjacent to the project site. These measurements are useful in characterizing ambient noise levels along roadways, as well as providing sound data and manual traffic counts used to calibrate the transportation noise model. A total of 2 short-term noise measurements were conducted, shown in Figure 4.8-1, Noise Measurement Locations. The results of short-term roadway traffic noise measurements are presented in Table 4.8-3.

 Table 4.8-3

 Roadway Noise Level Measurements (Existing) (dBA)

ST #	Measurement Date	Measurement Time Period	L _{eq}	L _{max}	L _{min}	Remarks
1	10/22/2014	2:30 – 2:40 PM	69.1	80.5	51.3	Freeport Boulevard, mid- point of project site
2	10/22/2014	2:50 – 3:10 PM	57.0	68.3	42.6	Wentworth Avenue, mid- point of project site



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As shown in Table 4.8-3, the average noise level for the short term measurement along Freeport Boulevard was 69.1 dBA. The measurement site is approximately 40 feet from the center line of Freeport Boulevard, and approximately at the mid-point of the project site's eastern boundary. The average noise level for the short term measurement along Wentworth Avenue was 57.0 dBA. The measurement site is approximately 20 feet from the center line of Wentworth Avenue, and approximately at the mid-point of the project site's southern boundary.

Traffic noise is generally assessed using software provided by the Federal Highway Administration (FHWA), the current version of which is titled Transportation Noise Model 2.5 (TNM 2.5). The TNM model was run based upon information found in *California Vehicle Noise Emission Levels* (Caltrans 1987) and *Technical Noise Supplement – A Technical Supplement to the Traffic Noise Analysis Protocol* (Caltrans 1998). The worksheets in Appendix G are based on the FHWA TNM 2.5 model, but provide an easier to understand format than the full model input and output data sheets. Dudek modeled the traffic noise (CNEL) associated with Freeport Boulevard and Wentworth Avenue based upon data for existing traffic trips on these roadways as provided by DKS Associates (DKS, December 2015). The modeled existing traffic noise level along Freeport Boulevard adjacent to the project site is 70 dBA CNEL, at 40 feet from the roadway center-line (at the back of sidewalk). The modeled existing traffic noise level along Wentworth Avenue adjacent to the project site is 60 dBA CNEL, at 20 feet from the roadway center-line (at the back of sidewalk). The existing noise exposure level along Wentworth Avenue, where single-family residences exist, is consistent with the exterior noise exposure limits for low density residences.

4.8.3 Regulatory Setting

Federal

Federal Highway Administration (FHWA) Standards

CFR Title 23, Part 772 sets procedures for the abatement of highway traffic noise and construction noise. Title 23 is implemented by the Federal Department of Transportation (DOT) Highway Administration (FHWA). The purpose of this regulation is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways. All highway projects which are developed in conformance with this regulation shall be deemed to be in conformance with the DOT-FHWA Noise Standards. Title 23 establishes a 67 dBA $L_{eq}(h)$ standard applicable to federal highway projects for evaluating impacts to land uses including residences, recreational uses, hotels, hospitals, and libraries [23 CFR Chapter 1, Part 772, Section 772.19].

Federal Transit Administration and Federal Railroad Administration Standards

Although the FTA standards are intended for federally funded mass transit projects, the impact assessment procedures and criteria included in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA 2006) are routinely used for projects proposed by local jurisdictions. The FTA and Federal Railroad Administration (FRA) have published guidelines for assessing the impacts of ground-borne vibration associated with rail projects, which have been applied by other jurisdictions to other types of projects. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inch/second perturbation projection vector (PPV).

State

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Noise Insulation Standards (CCR Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (CCR Title 24, Part 2). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located in an area with CNEL (or L_{dn}) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or L_{dn}) of at least 45 dBA (California's Title 24 Noise Standards, Chap. 2-35). The City of Sacramento applies the interior noise criterion of CNEL 45 dBA for single-family residences, in addition to multi-family residential structures.

Local

City of Sacramento 2035 General Plan

The following goals and policies from the City's 2035 General Plan Environmental Constraints (EC) Element are relevant to the assessment of noise effects associated with the proposed project.

Goal EC 3.1 Noise Reduction. Minimize noise impacts on land uses and human activity to ensure the health and safety of the community.

Policy EC 3.1.1: Exterior Noise Standards. The City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in Table EC 1 [Table 4.8-4], to the extent feasible.

	Highest Level of Noise Exposure That Is Regarded as "Normally Acceptable"
Land Use Type	" (L _{dn} " or CNEL ")
Residential—Low Density ^d Single-Family, Duplex,	60 dBA ^{e, f}
Mobile Homes	
Residential—Multi-family ^g	65 dBA
Urban Residential Infill ^h and Mixed-Use Projects ^{i, j}	70 dBA
Transient Lodging—Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing	70 dBA
Homes	
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation,	75 dBA
Cemeteries	
Office Buildings—Business, Commercial and	70 dBA
Professional	
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

Table 4.8-4Exterior Noise Compatibility Standards for Various Land Uses

Source: Governor's Office of Planning and Research, State of California General Plan Guidelines 2003, October 2003.

^b L_{dn} or Day Night Average Level is an average 24-hour noise measurement that factors in day and night noise levels.

^c CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.

^a As defined in the Guidelines, "Normally Acceptable" means that the "specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements."

^d Applies to the primary open space area of a detached single-family home, duplex, or mobile home, which is typically the backyard or fenced side yard, as measured from the center of the primary open space area (not the property line). This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.

- ^e dBA or A-weighted decibel scale is a measurement of noise levels.
- ^f The exterior noise standard for the residential area west of McClellan Airport known as McClellan Heights/Parker Homes is 65 dBA.
- ^g Applies to the primary open space areas of townhomes and multi-family apartments or condominiums (private year yards for townhomes; common courtyards, roof gardens, or gathering spaces for multi-family developments). These standards shall not apply to balconies or small attached patios in multistoried multi-family structures.
- ^h With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High) Urban Center (Low or High), Urban Corridor (Low or High).
- ⁱ All mixed-use projects located anywhere in the City of Sacramento
- ^j See notes d and g above for definition of primary open space areas for single-family and multi-family developments.

Policy EC 3.1.2: Exterior Incremental Noise Standards. The City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in Table EC-2 [Table 4.8-5], to the extent feasible.

Table 4.8-5

Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA)

Residences and buildings where people normally sleep ^a		Institutional land uses with primarily daytime and evening uses ^b	
Existing L _{dn}	Allowable Noise Increment	Existing Peak Hour L_{eq}	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

Source: FTA, Transit Noise Impact and Vibration Assessment, May 2006. **Notes:**

This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.

^b This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

Policy EC 3.1.5: Interior Vibration Standards. The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

Policy EC 3.1.7: Vibration. The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archaeological sites and require all feasible measures be implemented to ensure no damage would occur.

Policy EC 3.1.8: Operational Noise. The City shall require mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded.

Policy EC 3.1.10: Construction Noise. The City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

Policy EC 3.1.11: Alternatives to Sound Walls. The City shall encourage the use of design strategies and other noise reduction methods along transportation corridors in lieu of sound walls to mitigate noise impacts and enhance aesthetics.

City of Sacramento Municipal Code

Chapter 8.68 of the City of Sacramento Municipal Code contains applicable noise regulations within City Limits, as listed below:

Section 8.68.060 – Exterior Noise Standards:

- a. The noise standards that apply to all agricultural and residential properties are:
 - 1. From seven a.m. to ten p.m. the exterior noise standard shall be fifty-five (55) dBA.
 - 2. From ten p.m. to seven a.m. the exterior noise standard shall be fifty (50) dBA.
- b. It is unlawful for any person at any location to create any noise which causes the noise levels when measured on agricultural or residential property to exceed for the duration of time set forth following, the specified exterior noise standards in any one hour by:

Cumulative Duration of the Intrusive Sound	Allowance Decibels
Cumulative period of 30 minutes per hour	0
Cumulative period of 15 minutes per hour	+5
Cumulative period of 5 minutes per hour	+10
Cumulative period of 1 minute per hour	+15
Level not to be exceeded for any time per hour	+20

Source: Sacramento City Code, 2012.

c. Each of the noise limits specified in subsection B of this section shall be reduced by five dBA for impulsive or simple tone noises, or for noises consisting of speech or music.

d. If the ambient noise level exceeds that permitted by any of the first four noise categories specified in subsection B of this section, the allowable noise limit shall be increased in five dBA increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

8.68.080 Exemptions

The following activities shall be exempted from the provisions of this chapter:

- A. School bands, school athletic and school entertainment events. School entertainment events shall not include events sponsored by student organizations;
- B. Activities conducted on parks and public playgrounds, provided such parks and public playgrounds are owned and operated by a public entity;
- C. Any mechanical device, apparatus or equipment related to or connected with emergency activities or emergency work;
- D. Noise sources due to the erection (including excavation), demolition, alteration or repair of any building or structure between the hours of seven a.m. and six p.m., on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, and between nine a.m. and six p.m. on Sunday; provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order. The director of building inspections may permit work to be done during the hours not exempt by this subsection in the case of urgent necessity and in the interest of public health and welfare for a period not to exceed three days. Application for this exemption may be made in conjunction with the application for the work permit or during progress of the work;
- E. Noise sources associated with agricultural operations provided such operations take place between the hours of six a.m. and eight p.m.; provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order;
- F. Any mechanical device, apparatus or equipment which are utilized for the protection or salvage of agricultural crops during period of adverse weather conditions or when the use of mobile noise sources is necessary for pest control; provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order;

- G. Noise sources associated with maintenance of street trees and residential area property provided said activities take place between the hours of seven a.m. and six p.m.;
- H. Tree and park maintenance activities conducted by the city department of parks and community services; provided, however, that use of portable gasoline-powered blowers within two hundred (200) feet of residential property shall comply with the requirements of Section 8.68.150 of this chapter;
- I. Any activity to the extent provisions of Chapter 65 of Title 42 of the United States Code, and Articles 3 and 3.5 of Chapter 4 of Division 9 of the Public Utilities Code of the state of California preempt local control of noise regulations and land use regulations related to noise control of airports and their surrounding geographical areas, any noise source associated with the construction, development, manufacture, maintenance, testing or operation of any aircraft engine, or of any weapons system or subsystems which are owned, operated or under the jurisdiction of the United States, any other activity to the extent regulation thereof has been preempted by state or federal law or regulation;
- J. Any noise sources associated with the maintenance and operation of aircraft or airports which are owned or operated by the United States. (Ord. 2010-021 § 10; prior code § 66.02.203)

4.8.4 Impacts and Mitigation Measures

Methods of Analysis

The analysis of existing and future noise environments is based on observations, noise level measurements, and computer modeling. Existing noise levels were monitored at selected onsite and off-site locations using ANSI Type I and II sound level meters for general environmental noise measurement instrumentation. Traffic noise modeling involved the calculation of existing and future traffic noise levels along roadway sections where the proposed project would contribute additional vehicle trips, as provided by the project traffic consultant, using the FHWA model. Vibration from transportation sources was not evaluated in detail because it is not common for vibration from motor vehicles traveling on paved roads to cause disturbance or substantial annoyance in these areas.

The analysis addresses development of the site consistent with Scheme A. The addition of Bank of America under Scheme B would not change the footprint of development or the analysis. There are no changes under Scheme B that would affect noise. Therefore, only Scheme A is evaluated.

Construction Noise and Vibration

Construction noise and vibration levels were determined qualitatively using equipment noise and vibration reference levels developed by the FTA. For construction noise, this analysis assumed that compliance with conditions specified in the City's Noise Ordinance. Specifically, limiting construction to the hours of 7 a.m. to 6 p.m., Monday through Saturday, and between 9 a.m. and 6 p.m. on Sunday would avoid the potential for significant noise impacts associated with project construction by not allowing construction activities to occur during the evening hours when people are sleeping. For construction vibration, this analysis used the City standards for structural damage and the FTA's vibration impact thresholds for annoyance within residences. In summary, these thresholds specify that for damage, in existing and/or planned residential and commercial structures, vibration-peak-particle velocities greater than 0.5 inches per second; for annoyance, 80 vibration velocity level in decibels (VdB) at residences and buildings where people normally sleep, for infrequent events. In addition, a review of policies contained in the City of Sacramento 2035 General Plan was conducted.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgement, a significant impact would occur if the proposed project would:

- result in construction noise levels that violate the standards in the City of Sacramento Noise Ordinance or cause a substantial temporary increase in ambient noise levels;
- result in exposure to ambient exterior noise levels that exceed standards in the City's General Plan;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to project operation; or
- expose existing residential and commercial areas to vibration peak-particle velocities greater than 0.5-inch per second or vibration levels greater than 80 VdB due to project construction and/or operation.

Criteria Not Applicable to Proposed Project

Due to the location and characteristics of the proposed project, certain significance criteria are not applicable to the proposed project and therefore, are not considered potential impacts. These criteria are addressed briefly below and are not discussed further in this document.

With respect to the interior noise threshold of 45 dBA L_{dn} , Table 4.8-1 indicates the minimum attenuation performance of California structures with windows closed is 25 dBA L_{dn} . The

maximum allowable exterior noise exposure level for any type of residential land use is 70 dBA L_{dn} (Table 4.8-4, Urban Infill Residential). Consequently, compliance with the maximum exterior noise level of 70 dBA L_{dn} would result in residential interior noise levels of no greater than 45 dBA. Therefore a separate analysis for interior noise levels associated with project operational noise is not necessary.

Project-Specific Impacts and Mitigation Measures

4.8-1: Short-term construction noise levels could violate the City of Sacramento Noise Ordinance or cause a substantial temporary increase in ambient noise levels. Based on the analysis below and with implementation of mitigation the impact is less than significant.

Construction of the proposed project would generate noise that could expose nearby receptors (residences) to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures. Noise from construction equipment generally exhibits point source acoustical characteristics. A point source sound is attenuated (or reduced) at a rate of 6 decibels per doubling of distance from the source for "hard site" conditions and at 7.5 decibels per doubling of distance for "soft site" conditions. These rules apply to the propagation of sound waves with no obstacles between source and receivers, such as topography (ridges or berms) or structures. The range of maximum noise levels for various types of construction equipment is provided in Table 4.8.6. Typical operating cycles may involve two minutes of full power, followed by three or four minutes at lower levels.

Equipment	Typical Sound Level (dB) - 50 feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85

Table 4.8.6Construction Equipment Noise Emission Levels

Equipment	Typical Sound Level (dB) - 50 feet from Source
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scraper	89
Truck	88

Table 4.8.6Construction Equipment Noise Emission Levels

Source: FTA 2006.

Whereas Table 4.8-6 shows the noise level of individual pieces of equipment, the noise levels shown in Table 4.8-7 take into account operation of multiple pieces of construction equipment simultaneously, and lists the typical overall noise levels that would be expected for each phase of construction. These noise levels are based on surveys conducted by the United States Environmental Protection Agency in 1971. In the time since 1971, regulations have been enforced to improve noise generated by certain types of construction equipment to meet worker noise exposure standards. Also, because of stringent air quality emissions standards, newer, cleaner, and quieter heavy equipment is used on most construction projects in California. Thus, construction phase noise levels indicated in Table 4.8-7 represent "worst-case" conditions. As the table shows, the highest noise levels are expected to occur during the grading/excavation and finishing phases of construction.

Table 4.8-7Outdoor Construction Noise Levels by Phase

Construction Phase	Noise Level At 50 Feet (dBA)
Ground Clearing/Demolition	84
Grading/Excavation	89
Foundations	78
Structural	85
Finishing	89

Source: EPA 1971.

As shown in Table 4.8-7, construction-related noise levels could reach up to 89 dBA L_{eq} at residential property lines to the north and west of the project site. The City of Sacramento

exempts construction activity noise from standard exterior noise exposure limits, if conducted during specific limited daytime hours. The Ordinance requires noise generating construction activities (including demolition, excavation, and building construction), be restricted to the hours between 7:00 a.m. and 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday (City of Sacramento, Chapter 8.68, Section 8.68.060 and 8.68.080). This ensures that sensitive receptors are not disturbed by early morning or late night activities. However, the City's 2035 General Plan includes Policy EC 3.1.10, which states "the City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses, and to minimize impacts on these uses, to the extent feasible." Due to the proximity of residences to the project site and the potential for construction noise to be an annoyance, the impact is considered a **potentially significant impact**.

Mitigation Measures

Mitigation Measure 4.8-6 (a) through (c) would avoid or substantially reduce construction noise impacts upon adjacent residences by requiring construction equipment be in good working order to minimize noise, locating noisy pieces of construction equipment away from residences, and constructing the wall adjacent to the northern and western project boundaries early in the construction phase to help block the intrusion of construction noise on adjacent neighbors. Installation of the 10-12 foot masonry wall along the project's northern and western property boundaries would reduce average construction noise levels on the adjacent residential properties by approximately 10 - 14 dBA.

Implementation of these mitigation measures would reduce impacts to less than significant.

- **4.8-1 (a)** All construction equipment employing an internal combustion engine shall be equipped with suitable exhaust and intake silencers which are in good working order.
- (b) Stationary construction equipment such as generators or compressors shall be located on site as far away from adjacent residential property boundaries as is practicable.
- (c) To reduce construction noise levels on adjacent properties, the proposed 12-foot tall masonry wall along the western property boundary and 10 to 12-foot tall masonry wall along the northern property boundary shall be installed as early in the construction process as is practicable.

4.8-2: Existing residential and commercial areas could be exposed to vibration peak-particle velocities greater than 0.5-inch per second or vibration levels greater than 80 VdB due to project construction. Based on the analysis below the impact is *less than significant*.

During demolition, land clearing, and construction activities for the proposed project groundborne vibration would be produced by the heavy duty construction equipment. The most important equipment relative to generation of vibration, and the vibration levels produced by such equipment, is illustrated in Table 4.8-8.

Equipment	PPV at 25 Feet (Inches Per Second)	Approximate Ground Vibration Level 25 feet (VdB)
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Drill Rig / Auger	0.089	58
Jackhammer	0.035	87
Small Bulldozer	0.003	79

Table 4.8-8Vibration Velocities for Typical Construction Equipment

Source: FTA 2006.

As shown in Table 4.8-8, use of heavy equipment (e.g., a large bulldozer) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet. The nearest residences to the project site would be approximately 50 feet from the most substantial and periodic heavy equipment activity (construction of the Grocery store, Shops 1 and Tenant buildings) and could experience vibration levels of 0.04 inches per second PPV. Vibration levels at these receptors would not exceed the FTA building damage threshold of 0.5 inches per second PPV. A large bulldozer has a vibration level of 87 VdB measured at 25 feet, at the nearest residences (50 feet) this level would be attenuated to approximately 78 VdB, which is less than the City's threshold of 80 VdB. Vibration between 70 and 80 VdB could be noticeable, but is generally not considered annoying or destructive. As such, construction-related vibration associated with the proposed project would result in a **less-than-significant impact**.

Mitigation Measures

None required.

4.8-3: Noise from parking lot activities could result in noise levels at adjacent residential properties which exceeds exterior noise exposure limits. Based on the analysis below the impact is *less than significant*.

The proposed project would provide at-grade parking on the project site. Various noise events, including people talking, shopping carts, and noise related to automobile movement near driveways, car alarms, car horns, door slams, and tire squeals, may occur within the proposed parking areas. These sources typically range from about 30 to 66 dBA at a distance of 35 feet (Gordon Bricken & Associates 1996), and are generally short-term and intermittent. Parking lots have the potential to generate noise levels that exceed 60 dBA on neighboring properties,

depending on the location of the source; however, noise sources from the parking lot would be different from each other in kind, duration, and location, so that the overall effects would be separate and in most cases would not affect noise-sensitive receptors at the same time.

Using the middle of the reported range for parking lot noise (i.e., 48 dBA at 35 feet) as an average noise value for parking lot activity, the average parking lot noise level at the project's northern property boundary would be 58 dBA. The proposed 10 to 12- foot high masonry wall along the northern property boundary would reduce this noise level to 48 dBA at the adjacent residential properties; this noise level from parking lot activity would fall below the most restrictive level of the City's exterior noise standards (Section 8.68.060 of the Municipal Code), which limits exterior noise levels at residential properties to 50 dBA (from 10 p.m. to 7 a.m.). Assuming store operation in the period from 6:00 a.m. to 10:00 p.m., with an hourly L_{eq} of 48 for each of these hours, the CNEL at the northern property line from parking lot activities would be 51 dBA. A row of buildings, including the Raley's grocery store, separate the main parking lot from residences to the west, providing both a greater separation distance and a second noise barrier (in addition to the 12-foot tall wall along the western property line) which would further reduce residual noise levels from parking lot activities at western residences.

Parking lot noise at the northern property boundary, given the proposed 10 to 12-foot high masonry wall along the northern boundary (which would also block traffic noise from Freeport Boulevard), would be well within the City's noise element exterior noise exposure limit of 60 dBA CNEL. Thus, parking lot activity would result in a **less-than-significant impact**.

Mitigation Measures

None required.

4.8-4: Noise from roof-mounted mechanical equipment could result in noise levels at adjacent residential properties which exceeds exterior noise exposure limits. Based on the analysis below the impact is *less than significant*.

The primary mechanical equipment for the proposed project that could affect exterior noise levels on adjacent properties is roof-mounted heating-ventilation-air-conditioning (HVAC) equipment. According to the project architect, each of the smaller buildings (not including the Grocery store) would have a single HVAC package unit installed near the center of the roof. The Grocery store would have a large HVAC unit in the middle of the roof, and up to four smaller units distributed around the remainder of the roof. Based upon the size (square footage) of each of the retail stores, Dudek identified reasonable capacity HVAC units for each building. A 3-ton capacity HVAC unit was assumed for the 12,000 square foot buildings; one 7.5-ton and three 3-ton capacity HVAC units were assumed for the Grocery store. For mechanical equipment noise

assessment, Dudek used published sound power ratings for representative HVAC package units of these capacities (York XP Series, 2015). According to the architecture plans, the Grocery store would be 25 feet tall around the sides and rear of the building, increasing to up to 39 feet at the highest point on the east side (front) of the building facing the parking lot; the roof elevation for the smaller buildings (Shops 1 through 5 and the Tenant Building) would range from 22 to 25 feet. The roofs would be flat, with a perimeter or parapet wall extending a minimum of 3.5 feet above the surface elevation of the roof. The HVAC units average a height of 3 feet, and therefore the parapet wall would provide adequate visual screening of the equipment. The parapet wall would also function as a partial noise barrier to reduce noise levels on the ground around the buildings. Dudek used a conservative roof height of 22 feet above grade and a parapet height of 3.5 feet above the roof surface for evaluation of noise propagation from the roof-mounted equipment (a higher roof elevation and/or a higher parapet height would decrease the sound levels at the ground around the building, therefore using the lowest roof elevation and parapet height results in a conservative analysis).

In order to assess noise levels from mechanical equipment operations along the common property boundary of the project site and neighboring residential properties to the west and north, distance measurements were completed from the mechanical equipment locations to these property lines. Standard acoustic calculations were then performed to determine the distance attenuated noise level at selected representative points along the property lines for each of the mechanical noise sources, and the sum of the noise sources. On the western property boundary, calculations were performed for the mid-point of the shops extending south from the grocery store, and at the mid-point of the grocery store, and at the mid-point of the mid-point of the northern property line, calculations were performed at the mid-point of the grocery store, and at the mid-point of the grocery store.

The noise calculations were performed to consider the contribution of all eleven HVAC units at the selected points along the site property boundary. However, noise at the western property boundary from the HVAC units along the Freeport Boulevard frontage would be largely shielded by the row of buildings on the west side of the site. Likewise, HVAC noise from southern shops (Shops 1 and Tenant) would be shielded by northerly buildings, reducing their contributions along the northern property line. Consequently, the calculation of potential HVAC noise along the property boundaries is overly conservative, because it does not take into account the attenuation which would be provided by intervening structures. Nonetheless, the calculations demonstrate noise levels from mechanical equipment would not be significant, even without considering the attenuation effects from on-site structures.

The noise levels (L_{eq}) from the combined noise levels of all of the roof-mounted HVAC equipment, are indicated in Table 4.8-9. These average noise levels assume operation of all of the HVAC units simultaneously. When all of the HVAC equipment operates continuously

throughout a given hour, the calculated noise levels at each selected property boundary locations would represent the hourly average. In all cases, the noise level at adjacent residences from continuous operation of all proposed roof-mounted HVAC equipment would be well below the most restrictive level of the City's Municipal Code (Section 8.68.060), which limits exterior noise levels at residential properties to 50 dBA (from 10 p.m. to 7 a.m.). Assuming operation of the retail center from 6:00 a.m. to 11:00 p.m. daily (reflecting the hours of operation for the Raley's grocery store), and using the average hourly noise levels at the selected property line locations, the resulting CNEL values are also provided. This would be a worst-case assumption, in that HVAC units would not be anticipated to operate continuously on all of the buildings throughout the business day.

	Noise Level at Property Boundary		
		Average Noise Level	
Equipment	Property Line	(dBA L _{eq})	CNEL
11 HVAC Units	West - Adjacent to Shops Mid-point	28	30 (1)
	West – Adjacent to Grocery store Mid-point	26	28 (1)
	North – Adjacent to Grocery Mid-point	26	28 (1)
	North – Mid-point of Project Site	28	30 (1)

Table 4.8-9Mechanical Equipment Operation Noise Summary of Results

Note:

1 Assumes continuous operation 6 AM to 11 PM during commercial center business hours.

Because the calculated noise levels from mechanical equipment at the residential property boundaries would be more than 10 dBA less than noise levels from parking lot or loading dock activities (discussed below), the contribution of mechanical equipment noise would remain inconsequential to the total project related noise levels at the property boundaries. In other words, mechanical noise contributions would not increase project noise levels at the project boundaries.

The results of the mechanical equipment operations noise analysis indicate that the proposed project would comply with the City's Noise Element Policy Criteria and Municipal Code Noise Ordinance restrictions and mechanical equipment operations would result in noise at residential property boundaries that are in each case well below the 60 dBA CNEL limit. Therefore, the impact is **less than significant**.

Mitigation Measures

None required.

4.8-5: Noise from loading dock activities (including back-up alarms) during project operation could result in excessive noise exposure levels for nearby residences. Based on the analysis below the impact is *less than significant*.

Noise impacts due to retail store loading dock activities include truck traffic arrivals and departures, back-up alarm use while backing into the loading dock, and truck off-loading activities at the loading dock area. The loading area for the grocery store would include a depressed loading dock that includes two truck bays for larger trucks and a compactor. The loading dock would be recessed 4 feet on the southern side of the building. To minimize noise, the loading dock would be screened with a 12-foot-high masonry wall separating the residences to the west. The closest residential property line is located approximately 50 feet west of the western building façade adjacent to the proposed loading dock area; the individual truck bays would be approximately 75 feet and 88 feet from the western property line. The remainder of the shops in the center would receive deliveries from step-side trucks that would maneuver and park in the store parking lot.

The existing Raley's grocery store currently receives 30–40 deliveries per week with a majority of the deliveries occurring between 6:00 a.m. and noon. It is anticipated a similar number of deliveries would occur for the new Raley's grocery store. This equates to an average of one delivery truck operation at the loading dock per hour, seven days per week between 6:00 a.m. and noon. Trucks in the loading area would be instructed by Raley's not to leave their engines idling and to turn off their vehicles.

To determine typical loading dock and truck circulation noise levels associated with the proposed project, Dudek used reported noise level measurement data collected at a Safeway Store loading dock during a peak morning hour (County of Shasta 2009). The Safeway Store¹ was determined to be a comparable project to the proposed Raley's store because of the capacity of the loading dock (number of simultaneous trucks accommodated) and nature of the store operation and related truck activity (semi-trucks delivering groceries, some equipped with cooler units). For the Safeway project, noise level measurements were conducted at a distance of 50 feet from the loading dock. During the one hour sample of loading dock noise levels, there were three semi-truck arrivals (including back-up alarm use to approach the loading dock) and four semi-truck departures, unloading activities, and delivery by four step side delivery trucks.

The noise level measurements were conducted for a one hour period, during a busy hour of loading dock operations nearly four times the average activity level anticipated at the proposed

¹ The existing Raley's was not used for this analysis because it does not have a loading dock similar to that proposed for the new Raley's; the existing Raley's dock is a single truck capacity, which connects to a platform - not to openings in the building through which goods can be directly transferred. The referenced study was a twin-bay loading dock, very similar to the proposed new Raley's loading dock.

project's loading dock. The analysis indicated that during a busy hour of loading dock operations, the measured hourly L_{eq} noise level was 60 dBA at a distance of 50 feet from the loading dock, with a peak noise level of 80 dBA (associated with back-up alarm use).

The closest neighbor to the proposed loading dock is at a distance of 50 feet, the same distance as the reported noise level measurements. However, the proposed 12 foot high masonry wall along the project's western property boundary (between the loading dock and the closest neighbor) would reduce the loading dock noise levels to 48 dBA L_{eq} at the property line for this closest neighbor. This loading dock noise level would comply with the most restrictive level of the City's Municipal Code (Section 8.68.060), which limits exterior noise levels at residential properties to 50 dBA (from 10 p.m. to 7 a.m.). Assuming loading dock operation in the period from 6:00 a.m. to 10:00 p.m., with an hourly L_{eq} of 48 for each of these hours, the CNEL at the western property line from loading dock operations would be 51 dBA.

The closest loading dock truck bay to the western property boundary is approximately 75 feet from the property boundary. The path of travel for a truck backing into the bay would also be 75 feet from the property boundary. The peak noise level associated with back-up alarm use (lasting approximately 3 minutes per hour) at the project western property boundary would be 75 dBA, given the 75 foot separation. The proposed 12-foot tall wall would reduce the back-up warning noise level on the residential property side of the wall by 16 dBA, to 59 dBA at the closest neighbor. According to Section 8.68.060 of the City's Municipal Code, between 7 a.m. and 10 p.m., noise up to 10 dBA greater than the acceptable level of 55 dBA L_{eq} is allowed for no more than 5 minutes per hour; back-up alarms would be anticipated to occur up to three minutes per hour, and therefore the daytime limit for back-up alarm swould 65 dBA. The overnight (from 10 p.m. to 7 a.m.) limit for the infrequent back-up alarm noise would be 60 dBA (10 dBA greater than the allowable 50 dBA limit), lasting no more than 5 minutes per hour. Proposed back-up alarm use for up to three minutes per hour, resulting in a noise level of 59 dBA at the closest residence would comply with the daytime and nighttime restrictions in the City's Municipal Code, resulting in a **less-than-significant impact**.

The loading dock area is also proposed to contain a trash compactor. To determine typical commercial trash compactor noise levels, Dudek used reported noise level measurement data collected at a Wal-Mart store (City of Santa Rosa 2006). Recorded noise levels from the commercial trash compactor operation were 58 dBA L_{eq} , with a maximum of 62 dBA, at a distance of 25 feet. This level would be reduced to 52 dBA L_{eq} at the western property line (the western property line is 50 feet away, which is a doubling of the reference distance for the compactor noise; therefore the average sound level would be 6 dBA less, or 52 dBA L_{eq}). Even if the trash compactor were operated during truck delivery activities, the combined noise level at the property line from trash compactor and delivery activities would be 61 dBA L_{eq} . This combined average noise level from the trash compactor and truck delivery operation would be

reduced by the proposed masonry wall to 51 dBA at the closest neighbor. This combined loading dock and trash compactor noise level is compliant with the daytime (7 a.m. to 10 p.m.) restriction of 55 dBA contained in Section 8.68.060 of the City's Municipal Code. Typically a trash compactor of this type would only be operated for approximately 5 minutes, two or three times per day. The operation of the trash compactor would therefore not be anticipated to affect the CNEL value at the adjacent property line associated with delivery activities carried out in the loading dock area.

Loading dock noise at the closest residential property with the proposed masonry wall would be well within the City's noise element exterior noise exposure limit of 60 dBA CNEL. Furthermore, with the proposed masonry wall, the loading dock noise would be the same level as the existing noise level along this property line (53 dBA CNEL), representing no increase over ambient noise levels. The measured ambient noise level at this property line results from traffic noise along Freeport Boulevard and Wentworth Avenue, and commercial operations on adjacent properties; including the existing Raley's store and other businesses in the immediate area. The proposed 12-foot tall masonry wall would substantially block and reduce the noise from these sources at the eastern property line; therefore, the loading dock CNEL would not be greater than currently exists along this property line for these other noise sources. In addition, the peak noise level associated with back-up alarm use (59 dBA) is anticipated to comply with the City's noise ordinance requirements (no greater than 10 dBA over the normal exposure limit of 55 dBA for 5 minutes in any hour between 7 a.m. and 10 p.m.; nor greater than 10 dBA over 50 dBA for 5 minutes in any hour between 11 p.m. and 7 a.m.). Therefore, loading dock operational noise levels would result in a **less-than-significant impact**.

Mitigation Measures

None required.

4.8-6: Long-term project operations could result in vibration impacts upon nearby residences. Based on the analysis below, the impact is *less than significant*.

The proposed project would not include stationary sources or uses that could create groundborne vibration, such as industrial equipment, manufacturing operations, or heavy equipment use. Operational ground-borne vibration on site and in the project vicinity would be generated by vehicular and truck traffic. Project-related off-site traffic-related vibration levels would not be perceptible at sensitive receptors. Heavy-duty vehicles do not typically generate perceptible vibration because of rubber tires and suspension systems (FTA 2006). Most issues associated with heavy-duty vehicle vibration are related to a pothole, bump, expansion joint, or other variations in the roadway surface. Assuming that on-site paving and the surrounding local roadways are maintained in adequate repair, vibration levels associated with heavy-duty truck
deliveries to the project would not be perceptible at sensitive receptors. Thus, project-related operational vibration would result in a **less-than-significant impact.**

Mitigation Measures

None required.

4.8-7: Proposed project vehicle trips could result in off-site roadway noise level increases that impact noise sensitive land uses located along such roadways. Based on the analysis below, the impact is *less than significant*.

The primary noise-related effect the proposed project could have off site is an increase in traffic, which is the main source of noise in most urban areas. Project-related traffic noise levels were examined along roadways by the City's transportation consultant, DKS Associates, where the project would principally contribute vehicle trips. Trip volume calculations, including volumes along Freeport Boulevard, Wentworth Avenue, Sutterville Road, Fruitridge Road, South Land Park Drive, and Meer Way are included in Appendix H.

Acoustical calculations using standard noise modeling equations adapted from the FHWA noise prediction model were performed for the following scenarios: Existing, Existing Plus Project, Cumulative, and Cumulative Plus Project. With regard to Meer Way, which provides access to the residential neighborhood to the north of the project site, DKS Associates determined the proposed project would not add vehicle trips to this road during either the morning or evening peak hours of transportation.² Therefore, traffic noise levels associated with Meer Way are predicted to be equal for the four analysis scenarios.

The modeling calculations take into account the posted vehicle speed, average daily traffic volumes for each scenario, and the estimated vehicle mix (i.e., automobiles, medium and heavy trucks). The model assumed "pavement" propagation conditions, or a hard site surface. Noise levels are indicated at the edge of pavement (which varies from 20 to 40 feet from the roadway centerline). Noise levels at greater distances from the roadway centerline would be lower due to attenuation provided by increased distance from the noise source. Generally, noise from heavily traveled roadways would experience a decrease of approximately 3 dBA for every doubling of distance from the roadway. The noise model does not take into account the sound-attenuating effect of intervening structures, barriers, vegetation, or topography. Therefore, the noise levels at noise-sensitive uses located along these roadways.

Future increases in traffic, with and without the proposed project, are provided in Table 4.8-10.

² Morning peak hour is typically between 7:00–9:00 a.m. and evening peak hour is typically between 5:00–7:00 p.m.

Roadway Segment	Existing dBA CNEL	Exist + Project dBA CNEL	Cumulative dBA CNEL	Cumulative + Project dBA CNEL
Freeport Boulevard Sutterville N. to Sutterville S	70.1	70.3	70.4	70.6
Freeport Boulevard Sutterville S. to Wentworth	69.7	70.0	70.1	70.4
Freeport Boulevard Wentworth to Fruitridge	69.8	70.6	70.2	70.9
Sutterville Road West of Freeport	65.5	65.8	66.1	66.4
Wentworth Avenue West of Freeport	60.0	62.1	60.1	62.2
Fruitridge Road West of Freeport	67.6	68.0	68.0	68.3
South Land Park Drive Sutterville to Fruitridge	62.1	62.1	62.1	62.1
Meer Way West of Freeport			52.0	

Table 4.8-10Project-Related Traffic Noise Levels

Source: Appendix G

Proposed project-related traffic noise increases would be well below the perceptible threshold of in increase in 3 dBA for all the evaluated roadways, compared to existing roadway noise levels. The proposed project would also increase the roadway noise level by less than 3 dBA in the cumulative scenario. In fact, traffic noise levels would increase less than 3 dBA CNEL on all roadways, when comparing existing noise levels to those from cumulative plus the proposed project. Therefore, the proposed project would have a **less-than-significant impact** on off-site roadway traffic noise levels.

Mitigation Measures

None required.

Cumulative Impacts

The cumulative context for traffic noise is the traffic volume increases on Freeport Boulevard and Wentworth Avenue, and to a lesser extent traffic along Sutterville Road, Fruitridge Road, and South Land Park Drive resulting from buildout of the City's 2035 General Plan and the anticipated increase in traffic volumes along these roadways. The project traffic analysis considered the addition of traffic trips from cumulative projects as identified by the City.

Non-transportation noise sources (e.g., project operation) and construction noise impacts are typically project-specific and highly localized (i.e., these do not generally affect the community noise level at distances beyond several hundred feet). Construction activities associated with proposed or future development within the area would contribute to cumulative noise levels, but in a geographically limited and temporary manner. As other development occurs in the area, noise from different types of uses (e.g., traffic, aircraft, fixed noise sources) would continue to combine, albeit on a localized basis, to cause increases in overall background noise conditions within the area. As a result, such sources do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

4.8-8: The proposed project, in addition to cumulative development in the in South Land Park neighborhood, could increase traffic noise that exceeds the City's noise standards. Based on the analysis below, the impact is *less than significant*.

The analysis of off-site project-related traffic noise levels included an evaluation of traffic volumes and resulting roadway traffic noise levels from cumulative projects. The evaluation concluded that roadway traffic levels, even with cumulative project contributions, would not reach significant levels when compared against existing roadway traffic noise levels. Existing cumulative noise would be less than significant.

Based upon the foregoing discussion, cumulative noise impacts to which the project would contribute are considered **less than significant.**

Mitigation Measures

None required.

4.8.5 References Cited

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4.9 PUBLIC SERVICES AND UTILITIES

4.9.1 Introduction

This section describes existing public services (police and fire protection, and parks and recreation) and public utilities (water supply, wastewater treatment, solid waste collection and disposal, energy resources), that would serve the project site, and identifies anticipated demand for these services resulting from development of the Land Park Commercial Center Project (proposed project).

Comments received in response to the Notice of Preparation (NOP) included two comments regarding the height of the fence for the fire access area, material of the fire access road, and effects of the project on fire response time. A copy of the NOP and letters received in response to the NOP are included in Appendix A.

Information to prepare this section was obtained from the *Sacramento 2035 General Plan* (City of Sacramento 2015a) and *Master Environmental Impact Report for the City of Sacramento 2035 General Plan* (MEIR) (City of Sacramento 2015b), the *City of Sacramento Utilities Department*, and individual service providers.

4.9.2 Environmental Setting

This section describes existing police and fire protection as well as parks and recreation in the project area. Additionally, existing water and wastewater systems for the City of Sacramento (City) that serve the project area are identified, as well as existing information on solid waste collection and disposal and energy supply.

Police Protection

Police protection services within the City are provided by the Sacramento Police Department (SPD). The California Highway Patrol (CHP) and Regional Transit Police Department also provide police services within the City. The CHP Valley Division provides law enforcement services for all traffic-related incidents in ten counties throughout California including Sacramento County (CHP 2016). Additionally, the CHP responds to all incidents on state highways, state-owned buildings, and state property within the City. The Regional Transit Police Department is responsible for monitoring light rail stations, light rail trains, buses, bus routes, regional transit riders, and other associated transit needs with regard to safety.

Sacramento Police Department

According to the SPD 2014 Annual Report (SPD 2014), the SPD is organized into four offices: Office of the Chief, Office of Operational Services, Office of Investigations, and Office of Specialized Services. The Office of Operations is responsible for providing the SPD's frontline services. These include the Patrol Division (the North Command, the East/Central Command and the South Command facilities) and the Communications Division (911 call center).

The SPD is divided into four larger areas of command (north, central, east, and south) which are overseen by a captain (SPD 2014). There are six districts that make up these four command areas and each district is composed of three or four beats which are overseen by a lieutenant (SPD 2014). The Joseph E. Rooney Police Facility (South Command) is located at 5303 Franklin Boulevard, approximately 1.4 miles northwest of the project site. The South Command Facility responds to calls in the southwestern (District 4) and southeastern (District 5) portion of the City. The project site is located within District 4, which is divided into three beats and serves Broadway, Land Park, Pocket and the Executive Airport. Beat 4A, which includes the project site, and beat 4B are overseen by a single lieutenant. Two other lieutenants are responsible for beats 4C and 5A, and 5A and 5B respectively (SPD 2014). The South Command Facility staff is overseen by a single captain. The Public Safety Center, located at 5770 Freeport Boulevard, approximately 0.80 mile south of the site provides services for filing and requesting reports, sign off of tickets, and towing vehicle releases (SPD 2016a).

Due to funding restrictions the SPD reduced the number of police officers hired from the end of 2007 through 2011 and did not hire any new officers during this time frame (City of Sacramento 2015a). At the end of 2014, the SPD had 988 full-time equivalent positions with 723 sworn positions (SPD 2014). At the end of 2014, there were 82 positions filled by the SPD and the SPD expects growth to continue throughout 2015 (SPD 2014). The general goal for SPD staffing is two sworn officers for every 1,000 residents and one civilian support staff for every two sworn officers (City of Sacramento 2015a). In 2015, the SFD had 639 sworn officers and 303 civilian support staff (SPD 2016b). Based on the U.S. Census Bureau estimate for the 2015 City of Sacramento's population (490,712 people), the current staffing ratio is 2 police officers per 1,533 residents and 1 civilian support staff per 2.1 sworn officers.

Fire Protection

All fire and emergency service providers in the County of Sacramento have developed a Joint Powers Authority (JPA) in favor of a unified service area dispatch system. Under the JPA agreement, all emergency calls are routed through a central dispatch center. Therefore, the closest station to the emergency call location would provide services to that call.

Sacramento Fire Department

The Sacramento Fire Department (SFD) provides fire suppression, emergency medical services, technical rescue, hazardous materials mitigation and response, fire prevention, fire investigation,

code enforcement, and public education, and contributes to disaster preparedness throughout the 146 square miles of the City and fire districts of Pacific–Fruitridge and Natomas (SFD 2013).

The SFD is divided into the following three divisions: the Office of the Fire Chief, the Office of Operations, and the Office of Administrative Services. Emergency response for the community is directed and managed by the Office of Operations. Firefighters provide quick and effective response to medical emergencies, fires, vehicle crashes, special rescues, hazardous material incidents, disasters, and many other types of emergencies. Administrative and support functions of the SFD, including fire prevention, training, technical services, facility planning, and human resources, are provided by the Office of Administrative Services.

In addition, the SFD has an Emergency Medical Services Division (EMS) and a Fire Prevention Division. The EMS Division provides paramedic transport services in the City, which includes the Advanced Life Support and Transportation Program. The Advanced Life Support and Transportation Program deploys twelve 24-hour ambulances along with up to two additional flex ambulances during peak hours throughout the City and contracted areas. The EMS Division develops partnerships with local hospitals and community organizations in the prevention and review of infant, child, and elderly deaths; sexual assaults; domestic violence; and child and adult abuse. The Fire Prevention Division provides the community with a fire-safe environment through a variety of ongoing activities and operations and is responsible for fire investigations, new development review, weed abatement, and code enforcement.

The SFD currently maintains over 500 fire fighter personnel operating from 24 stations which deploy 24 engine companies, 8 truck companies, 1 rescue company, 13 advance life support ambulances, and 3 battalion chiefs (SFD 2012).

SFD has fire stations strategically located throughout the City to provide assistance to area residents. The general goal for the SFD is one fire station per 16,000 residents. Each fire station operates within a specific district that covers an approximately 1.5-mile geographical radius area around the station (City of Sacramento 2015a). All but one of these stations is currently staffed with four personnel consisting of a Captain, an engineer and two firefighters. Ambulances are staffed with two firefighter/paramedics or a firefighter/paramedic and firefighter/emergency medical technician combination. Station 12, located less than 1 mile from the project site at 4500 24th Street, is the closest responding SFD station to the project site. SFD has a response time goal of having their first responding company arrive within four minutes to provide fire suppression and paramedic services (City of Sacramento 2015a).

Parks and Recreation

City of Sacramento Department of Parks and Recreation

The City of Sacramento Parks and Recreation Master Plan (PRMP) identifies 10 Community Plan Areas within the City. The proposed project site is located within Community Plan Area 2, Land Park (PA2). Within PA2 there are a total of nine City-owned or City-controlled neighborhood and community serving parks, one bike trail, two regional parks and one regional parkway. The combined acreage of the parks within PA2 is approximately 305.91 acres (City of Sacramento DPR 2009).

Currently, the City provides approximately 3.4 acres of neighborhood and community park per 1,000 persons citywide (City of Sacramento 2015a). The City's current standard for the provision of parkland is 5 acres per 1,000 people (Chapter 16.64 of the Municipal Code). The closest park to the project site is William Land Regional Park located at 3800 Land Park Drive, approximately 0.19 mile north of the site. William Land Regional Park has approximately 166.5 developed acres and includes the following amenities: adventure play area, amphitheater, three attractions – Fairytale Town, Funderland and the Sacramento Zoo, a basketball court, golf course, jogging path, lakes, picnic areas, restrooms, rock garden, six softball fields, three soccer fields, a village green and a wading pool (City of Sacramento DPR 2016a). The nearest neighborhood/community park is Belle Cooledge Park South located at 5900 South Land Park Drive, approximately 1.12 miles southwest of the site. This 6.11 acre park includes group picnic areas, an adventure area and a tot lot (City of Sacramento DPR 2016b).

Water Supply

Supply Sources

The City of Sacramento is the water purveyor for the proposed project. The City relies on both surface water and groundwater for municipal and industrial uses. Water to serve the project would come from surface water sources. The City's water supply is obtained from three sources:

- Surface water from the American River
- Surface water from the Sacramento River
- Groundwater

The City owns and operates two water diversion and treatment facilities: the E.A. Fairbairn Water Treatment Plant (FWTP) and the Sacramento River Water Treatment Plant (SRWTP). The FWTP diverts water from the American River, and the SRWTP diverts water from the Sacramento River. In 2003, the City finished an expansion of the SRWTP increasing its

maximum capacity from 110 million gallons per day (mgd) to 160 mgd. The City's most recent Urban Water Management Plan (2015 UWMP) estimates the reliable capacity to be 135 mgd, although additional improvements are scheduled to be completed in 2016 to restore the reliable capacity to 160 mgd (City of Sacramento 2016a). The expansion of the FWTP in 2005 increased the maximum capacity from 100 mgd to 200 mgd (City of Sacramento 2015a). Although the maximum capacity of the FWTP is 200 mgd the current permitted capacity is 160 mgd (City of Sacramento 2016a).

The City has a Sacramento River permit (Permit 992) to divert up to 225 cubic feet per second (cfs) and 81,800 acre-feet year (AFY) from the Sacramento River. In addition the City has four water right permits authorizing diversions of up to 589,000 AFY of American River water. However, the City's American River water rights scale and the maximum diversion for the year 2035 is 245,000 AFY (City of Sacramento 2009b).

The City overlies two sub-basins of the Sacramento Valley Groundwater Basin. According to the City's 2015 UWMP, the City currently operates 20 active municipal groundwater supply wells and 5 irrigation wells within the City's service area north of the American River, and 2 active municipal groundwater supply wells and 9 irrigation wells south of the American River (City of Sacramento 2016a). The City pumps groundwater from both sub-basins, although approximately 95% of the amount pumped by the City is pumped from the North American sub-basin. The total pumping capacity of the City's municipal supply wells is approximately 20.6 mgd, and is expected to increase to approximately 25 mgd after rehabilitation projects and new wells are completed(City of Sacramento 2016a).

According to the City's 2015 UWMP, the City supplied potable water to approximately 138,847 water customers in the City's water service area. The potable water customers are primarily residential, with approximately 93% of the City's customers being residential; approximately 6% commercial/institutional, and 1% irrigation. In addition to supplying water to domestic retail customers, the City also provides water on a wholesale and wheeling basis to other districts and purveyors (City of Sacramento 2016a).

Storage

The City operates twelve storage reservoirs, each with a capacity of 3 million gallons (mg), except for the Florin Reservoir, which has a capacity of 15 mg. A new storage tank in the southern portion of the City is expected to be completed in 2017 with a capacity of 4 mg. In addition to the reservoirs, five water clearwells are located at the water treatment plants and together maintain an on-site storage of approximately 45 mg. This water is used to meet the City's water demand for fire flows, emergencies, and peak hours.

Water Conservation

Water conservation practices were institutionalized through City ordinances as early as 1967 and have consistently evolved. In 1991, the City became a signatory to the California Urban Water Conservation Council's Memorandum of Understanding (MOU). The purpose of the MOU is to expedite implementation of reasonable water conservation measures in urban areas and to establish appropriate assumptions for use in calculating estimates of reliable future water conservation savings.

The City's water conservation program currently includes the following: residential plumbing retrofit; system water audits; leak detection and repair; conservation programs for large landscape, commercial, industrial and institutional accounts; rebate programs for high-efficiency washing machines and ultra-low flush toilets; public information and school education programs; a water waste prohibition ordinance; and a water conservation coordinator (City of Sacramento & Maddus Water Management 2013).

The City's Water Conservation Ordinance (effective December 9, 2009) limits residents and businesses watering and vehicle washing to specific times during dry months and specific days during winter months. The adoption of a Stage Two Water Shortage Contingency Plan (January 14, 2014) further limits watering restrictions to before 10:00 a.m. or after 7:00 p.m. two days per week dependent on address. Additionally, overwatering is prohibited and no watering is permitted within 48 hours of measurable rainfall. Fines for violation of the City's water conservation codes are doubled during this declared water shortage (City of Sacramento 2016b).

Severe Drought Conditions

Table 7-7 in the 2015 UWMP gives the normal water year supply and demand from 2020-2040 and Table 7-11 details the supply and demand comparison during first, second and third dry years from 2020-2040. At buildout of the General Plan in 2035 during a normal water year and during first, second and third dry years the projected supply is 294,419 AFY and the projected demand is 149,213 AFY (City of Sacramento 2016a). In 2045 during a normal water year and during first, second and third dry years the projected supply is 294,419 AFY and the projected demand is 175,841 AFY (City of Sacramento 2016a). Under all types of drought conditions, the City possesses sufficient water supply entitlements to meet the demands of its customers up to the year 2045, which includes buildout of the *Sacramento 2035 General Plan*. Tables 7-2 through 7-4 show that there is 100% reliability for the City's water supply sources in average water years and years 1, 2, and 3 of multiple dry water years (City of Sacramento 2016a). It is important to note that this assumes that wells and surface water treatment capacity would be rehabilitated and expanded as needed.

The 2015 UWMP addressed four stages of drought conditions including water alert, water warning, water crisis and water emergency. The City's Water Shortage Contingency Plan (WSCP) establishes actions and procedures to manage water supply and demand during these four stages of water shortages. According to Table 8-1 in the 2015 UWMP, water supply would need to be reduced by up to 20% during water alerts, up to 30% during water warnings, up to 40% during water crises and up to 50% during water emergencies (City of Sacramento 2016a).

Project Area Water Infrastructure

Based on review of the City's 2014 Water Maps, the City has an existing public water system consisting of multiple public water mains adjacent to the project site in Wentworth Avenue, Sherwood Avenue, and Freeport Boulevard. The project's proposed water infrastructure system would use existing connections where feasible and abandon any connections determined inadequate for the project. Pipes with 2-inch to 4-inch diameter would connect to the existing water mainlines in Wentworth Avenue and Freeport Boulevard and would provide individual water service to each parcel. A common irrigation system would be used to irrigate the entire project site with water from the existing water main located in Wentworth Avenue. In accordance with City standards water and irrigation would be metered with City approved backflow devices (City of Sacramento 2014).

Existing public fire hydrants are distributed along the public roadways adjacent to the project site. Water for fire services would also include backflow devices, but would not be metered in accordance with existing City policies. The project's fire service water system would include a separate, private looped system, with multiple points of connection to the City's system to increase on-site fire supply and pressure. The minimum lines would be 8-inches in diameter, with connections to the existing mainline in Wentworth Avenue, Freeport Boulevard, and Sherwood Avenue. On-site private fire hydrants and individual building fire sprinkler services would be served by the on-site system.

Wastewater Collection and Treatment

Wastewater treatment for all development within the City is provided by the Sacramento Regional Wastewater Treatment Plant (SRWWTP), which is owned and operated by the Sacramento Regional County Sanitation District (SRCSD). The SRCSD is responsible for the regional conveyance, wastewater treatment, and wastewater disposal for all waters collected by the City Department of Utilities (DOU), Sacramento Area Sewer District (SASD)(formerly County Services District [CSD-1]), and the cities of Citrus Heights, Elk Grove, Folsom, Rancho Cordova, Sacramento, and West Sacramento, and the communities of Courtland and Walnut Grove (SRCSD 2008). Local wastewater collection trunk lines and pumping facilities within the City are operated by the City's DOU and the SASD. The wastewater collection service area boundaries of

the DOU encompass approximately two-thirds of the area within the City limits, including the project site. The project site is served by a separated sewer and storm drain system.

Sacramento Regional County Sanitation District

The SRCSD provides large pipeline conveyance of wastewater from SASD, the cities of Citrus Heights, Elk Grove, Folsom, and West Sacramento, unincorporated areas of the County, and the City of Sacramento to the WTP. All wastewater flows from the project site within the separated sewer system would be transported to SRCSD regional conveyance facilities and ultimately the SRWWTP for treatment.

New permit requirements adopted by the Central Valley Regional Water Quality Control Board and the State Water Resources Control Board in 2010 (last amended in 2013) require the SASD to substantially reduce the total concentration of nitrogen and ammonia levels in its effluent (City of Sacramento 2015a). Additionally, recycled water requirements in Title 22 of the California Code of Regulations (CCR) require the SASD to install tertiary filtration treatment and disinfection for pathogen removal. To be in full compliance with the National Pollution Discharge Elimination System (NPDES) permit the standards for nitrogen and ammonia must be met by May 2021 and Title 22 compliance must be achieved by May 2023 (City of Sacramento 2015a).

Sacramento Regional Wastewater Treatment Plant

The SRWWTP currently has a permitted discharge flow of 181 mgd Average Dry Weather Flows (ADWF). As of the most recent NPDES permit in 2010, the current ADFW is approximately 141 mgd. The existing SRWWTP does not have the proper infrastructure to meet the stricter requirements of the NPDES 2010 permit. Therefore, the EchoWater Project was approved in September 2014, and is currently under construction and scheduled to be completed by 2023. The EchoWater Project does not change the capacity of the SRWWTP, but includes a variety of construction projects designed to meet current NPDES requirements including installation of a biological nutrient removal activated sludge facility, a primary effluent pumping station, a returned activated sludge pumping system, flow equalization basins, a chemical storage and feed system, a 330 mgd filtration/filter influent pumping station, odor control facilities, and a disinfectant contact basin which will bring the SRWWTP into compliance will all NPDES 2010 permit requirements (SRCSD 2014).

Project Area Wastewater Infrastructure

Based on review of the City's 2014 Drainage/Sewer maps, there are existing sewer main lines ranging in size from 9-inches to 12-inches in diameter adjacent to the project site in Wentworth Avenue, Sherwood Avenue and Freeport Boulevard.

Solid Waste

The Sacramento Department of Public Works, Recycling, and Solid Waste Division collects all of the single-family residential solid waste and a small portion of the commercial solid waste in the City. Commercial solid waste in the City is collected by 1 of 11 franchised haulers and is sent to private transfer stations to be processed and disposed at various facilities, including the Sacramento County Kiefer Landfill, Yolo County Landfill, and L and D Landfill (SWA 2016a). Food waste collected by private franchised haulers is diverted to one of two SWA-Certified Putrescible Organics facilities, Clean World SATS Biodigester or Clean World UC Davis Biodigester (SWA 2016b). Construction waste collected by private franchised haulers is diverted to one of three SWA-Certified Construction and Debris Waste Sorting facilities, Florin-Perkins Public Disposal, L&D Landfill, or Sierra Waste (SWA 2016c).

Refuse from the south region of the City, including the project site, is transported to the Sacramento Recycling and Transfer Station located at 8491 Fruitridge Road and refuse from the north region of the City is transferred to the Sacramento County North Area Recovery Station (City of Sacramento 2015a). Solid waste from both locations is hauled to Sacramento County Kiefer Landfill or the Lockwood Landfill. The Sacramento Recycling and Transfer Station is limited to 2,500 tons of solid waste per day, under its Solid Waste Facilities Permit (Permit No. 34-AA-0195). The Sacramento Kiefer Landfill is owned and operated by the County of Sacramento Public Works Department, and has a maximum daily disposal limit of 10,815 tons per day, under its Solid Waste Facilities Permit (34-AA-0001). Kiefer Landfill has a remaining capacity of approximately 112.9 million tons, which is currently expected to be enough capacity to remain open until the year 2064 (CalRecycle 2016). The Lockwood Landfill, located in Sparks, Nevada, is owned and operated by a private firm, Waste Management Inc. The Lockwood Landfill does not have a maximum daily disposal limit, but on average accepts approximately 5,000 tons per day (Nevada Division of Environmental Protection 2016). The Lockwood Landfill is planned for expansion that would increase the landfill's capacity enough to continue operation for at least the next 100 years in order to accommodate planned future growth (Waste Management 2011).

The City now computes waste diversion in terms of per capita disposal instead of percentage. The 50% per capita disposal target is the amount of disposal per person per day that is approximately equal to the City's 50% diversion requirement. To meet the 50% diversion rate, the City must dispose not more than their 50% per capita disposal target. For the City, this 50% per capita disposal target is 6.9 pounds/person/day for residents and 10.8 pounds/person/day for employees. Actual disposal rates for the City are 5.5 pounds/person/day for residents and 8.8 pounds/person/day for employees (CalRecycle 2015).

Sacramento Regional Solid Waste Authority

The Sacramento Regional Solid Waste Authority (SWA) assumes the responsibilities for solid waste, recycling, and disposal needs in the Sacramento area. Current members include the City of Sacramento, the City of Citrus Heights, and the unincorporated area of Sacramento County. The SWA regulates commercial solid waste collection by franchised haulers through ordinances. The Sacramento County Waste Management and Recycling Division provides staffing for the SWA.

Energy

Energy Consumption

California's major sources of energy are petroleum products (i.e., gasoline, diesel, and oil), electricity, and natural gas. In 2014 California generated 296,843 gigawatt hours (GWH) of electricity including: 121,934 GWH from natural gas, 1,011 GWH from coal, 46 GWH from oil, 17,027 GWH from nuclear, 16,478 GWH from hydroelectric, 42,461 GWH from renewables, 16 GWH from other sources, 12,370 GWH from direct coal imports and 85,500 GWH from other imports (CEC 2016a). An overview of electricity and natural gas consumption statewide and on the local level is provided below.

Electricity

Electricity supply in California involves a complex grid of power plants and transmission lines located in the western United States, Canada, and Mexico. Approximately 22% of the California's electricity is imported from the 11 western-most states, Canada, and Mexico.

Based upon data and reports compiled by the California Energy Commission (CEC), in 2014, Californians consumed 293,268 gigawatt hours of electricity. California produces roughly 68% of its electricity from power plants located within the state and from plants that are outside of the state, but owned by California utilities. About 32% is imported electricity from the Pacific Northwest and the American Southwest. In 2014, the total electricity imported was 94,360 gigawatt hours (CEC 2016b).

Electricity usage in California varies substantially by the type or function of the building, type of construction materials used, and the efficiency of each electrical device within the building. The average annual usage of electricity is roughly 13 kilowatts (kWh)/square foot for all commercial buildings (Itron 2006). In 2014, the County's non-residential energy consumption was 6262.27 million kilowatts (ECDMS 2016).

Natural Gas

In 2012, California's natural gas demand for industrial, residential, commercial and electric power generation was 2,313 billion cubic feet. The natural gas was used to produce electricity (45%), in industrial uses (25%), in residential uses (21%), in commercial uses (9%). Approximately 15% of the natural gas was produced within California, with the balance imported from the Rockies, Southwest, and Canada (CEC 2016c).

Natural gas usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all gasconsuming devices within a building.

City of Sacramento

The Sacramento Municipal Utilities District or SMUD provides electric power for the City of Sacramento. SMUD is the sixth largest publicly owned utility in the country in terms of customers served. SMUD gets electricity from a variety of sources, including hydrological dams; cogeneration plants; and advanced renewable sources such as wind, solar and biomass/landfill gas power; and obtains additional energy on the wholesale market. The Cosumnes Power Plant is SMUD's largest source of energy generating enough electricity to power 450,000 single-family homes (SMUD 2016). SMUD is continuing to add to their green energy sources with the Upper American River Project provides approximately 1.8 billion kilowatt-hours of electricity, enough to power approximately 180,000 single-family homes (SMUD 2016).

Pacific Gas and Electric (PG&E) provides natural gas service to the City of Sacramento. The PG&E service area stretches north–south from Eureka to Bakersfield and west–east from the Pacific Ocean to the Sierra Nevada mountains. Northern California-sourced gas supplies come primarily from gas fields in the Sacramento Valley. In 2014, PG&E's customers obtained on average 2.6 billion cubic feet per day of natural gas (PG&E 2016).

The City's Climate Action Plan (City of Sacramento 2012) establishes energy conservation goals of zero net energy in all new construction by 2030 and a 15% overall reduction in all existing residential and commercial buildings by 2020. Conservation strategies to reach these goals include supporting SMUD's smart grid, tree foundation shade trees, and incentive programs for lighting, appliance, and electronic rebates; setting standards for water and energy conservation in remodeled residential and non-residential buildings; requiring Tier 1 CalGreen building standards be met with new development; and requiring large commercial, industrial and residential developments to add renewable energy systems.

4.9.3 Regulatory Setting

Federal

Water

Federal Water Pollution Control Act

The Federal Water Pollution Control Acct (33 U.S.C. 1251 et seq.), otherwise known as the Clean Water Act (CWA), sets forth national goals that waters shall be "fishable, swimmable" waters (CWA Section 101 (a)(2)). To enforce the goals of the CWA, the U.S. Environmental Protection Agency (U.S. EPA) established the National Pollutant Discharge Elimination System (NPDES) program. NPDES is a national program for regulating and administering permits for discharges to receiving waters, including non-point sources. Under Section 1251 (b) of the CWA, Congress and the U.S. EPA must recognize and preserve the primary responsibilities and rights of states concerning the reduction of pollution in water resources.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) of 1974 gave the U.S. EPA the authority to set standards for contaminants in drinking water supplies. The U.S. EPA was required to establish primary regulations for the control of contaminants that affected public health and secondary regulations for compounds that affect the taste, odor, and aesthetics of drinking water. Under the provisions of the SDWA, the California Department of Health Services (DHS) has the primary enforcement responsibility. Title 22 of the California Administrative Code establishes DHS authority, and stipulates state drinking water quality and monitoring standards.

Wastewater

National Pollution Discharge Elimination System Permit

Discharge of treated wastewater to surface water(s) of the United States, including wetlands, required a NPDES permit. In California, the Regional Water Quality Control Boards (RWQCB) administers the issuance of these federal permits. Obtaining a NPDES permit requires preparation of detailed information, including characterization of wastewater sources, treatment and processes, and effluent quality. Whether or not a permit may be issued, the conditions of a permit are subject to many factors such as basin plan water quality objectives, impaired water body status of the receiving water, historical flow rates of the receiving water, effluent quality and flow, the air quality State Implementation Plan (SIP), the California Toxics Rule, and established total maximum daily loading rates for various pollutants.

Federal and State Clean Water Act

The Porter-Cologne Water Quality Control Act gives the ultimate authority over California water rights and water quality policy to the California State Water Resources Control Board (SWRCB). The Porter-Cologne Act also established nine Regional Water Quality Control Boards (RWQCBs) to ensure that water quality on local/regional levels is maintained. The project site is under the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB).

Electricity and Natural Gas

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) regulates and oversees the energy industries in the interests of the American public. The Energy Policy Act of 2005 gave FERC additional responsibilities including interstate commerce, licenses and inspections, energy markets, and penalizing energy organizers and individuals who violate FERC rules in the energy market.

State

Fire Protection

Uniform Fire Code

The Uniform Fire Code (UFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seg. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code), and fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

Parks and Recreation

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fee are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park. playground, and recreational facilities or the development of public school grounds.

Water

Porter–Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne) gives the ultimate authority over California water rights and water quality policy to the California SWRCB. The Porter-Cologne also established nine RWQCBs to ensure that water quality on local/regional levels is maintained. The subject property is under the jurisdiction of the CVRWQCB.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610–10656). The act requires that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 AFY shall prepare and adopt an Urban Water Management Plan (UWMP). Water suppliers are required to prepare an UWMP within a year of becoming an urban water supplier and update the plan at least once every 5 years. It is the intention of the legislature to permit levels of water management planning commensurate with the number of customers served and the volume of water supplied. The City's 2015 UWMP was adopted in June 2016.

Wastewater

General Waste Discharge Requirements for Sanitary Sewer Systems

The General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems were adopted by the SWRCB in May 2006. These WDRs require local jurisdictions to develop a sewer system

management plan (SSMP) that addresses the necessary operation and emergency response plans to reduce sanitary sewer overflows. The WDRs require that the local jurisdiction approve the SSMP, and the Sacramento City Council approved the City's SSMP on April 21, 2009.

Solid Waste

California Integrated Waste Management Act - AB 939

To minimize the amount of solid waste that must be disposed of by transformation (i.e., recycling) and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25% of all solid waste from landfill facilities by January 1, 1995, and 50% by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan.

Assembly Bill 1018 and Senate Bill 1016

AB 1018 was signed into law in June 2012 and addresses recycling requirements for businesses that generate 4 or more cubic yards of commercial solid waste per week to arrange for recycling services. The bill also addresses recycling requirements for multifamily residential dwellings with 5 or more units, regardless of the amount of waste generated; local jurisdiction requirements for education, outreach, monitoring and reporting; and CalRecycle review.

SB 1016 enacted in 2007 changes the process for bi-annual review of a jurisdiction's source reduction and recycling element and allows the California Integrated Waste Management Board to make a finding whether each jurisdiction is in compliance with the act's diversion requirements based on the jurisdiction's change in its per capita disposal rate. No longer is a diversion rate used to calculate compliance with AB 939, but a per capita disposal rate is used that calculates the number of pounds of solid waste diverted, divided by the total population, divided by 365 days.¹

Energy

California Energy Commission

The CEC is the state's primary energy policy and planning agency. Created by the Legislature in 1974, the CEC has five major responsibilities: forecasting future energy needs and keeping historical energy data; licensing thermal power plants 50 MW or larger; promoting energy

¹ The 50% equivalent disposal total for each year shall be multiplied by 2,000, divided by the population of the jurisdiction in that year, and then divided by 365 to yield the 50% equivalent per capita disposal for each year.

efficiency through appliance and building standards; developing energy technologies and supporting renewable energy; and planning for and directing state response to energy emergencies. With the signing of the Electric Industry Deregulation Law in 1998 (AB 1890), the CEC's role includes overseeing funding programs that support public interest energy research; advancing energy science and technology through research, development, and demonstration; and providing market support to existing, new and emerging renewable technologies.

California Public Utilities Commission

The CPUC regulates privately owned electric, telecommunications, natural gas, water, and transportation companies, in addition to household goods movers and rail safety. The CPUC is responsible for ensuring that customers have safe, reliable utility service at reasonable rates, protecting against fraud and promoting the health of California's economy.

California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24 Building Standards)

The CEC administers Title 24 Building Standards, which were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. California's building efficiency standards are updated on an approximately 3-year cycle. The 2016 Standards will continue to improve upon the current 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2016 Standards will go into effect on January 1, 2017, following approval of the California Building Standards Commission (CEC 2016d).

Warren-Alquist Energy Resources Conservation and Development Act

The Warren-Alquist Act gives statutory authority over energy resources to the CEC. The CEC regulates energy resources coordinating research into energy supply and demand problems and to reduce the increase of energy consumption.

Local

Police Protection

City of Sacramento 2035 General Plan

The following goals and policies from the *Sacramento 2035 General Plan* Public Health and Safety (PHS) Element are applicable to the provision of police services.

Goals PHS 1.1 Crime and Law Enforcement. Work cooperatively with the community, regional law enforcement agencies, local government and other entities to provide quality police service that protects the long-term health, safety, and well-being of our city, reduce current and future criminal activity, and incorporate design strategies into new development.

Policy PHS 1.1.2 Response Time Standards. The City shall strive to achieve and maintain optimal response times for all call priority levels to provide adequate police services for the safety of all city residents and visitors.

Policy PHS 1.1.3 Staffing Standards. The City shall maintain optimum staffing levels for both sworn police officers and civilian support staff in order to provide quality police services to the community.

Policy PHS 1.1.4 Timing of Services. The City shall ensure that development of police facilities and delivery of services keeps pace with development and growth in the city.

Policy PHS 1.1.7 Development Review. The City shall continue to include the Police Department in the review of development proposals to ensure that projects adequately address crime and safety, and promote the implementation of Crime Prevention through Environmental Design principles.

Policy PHS 1.1.8 Development Fees for Facilities. The City shall require development projects to contribute fees for police facilities.

Fire Protection

City of Sacramento 2035 General Plan

The following goals and policies from the *Sacramento 2035 General Plan* Public Health and Safety (PHS) Element are applicable to the provision of fire protection and emergency services.

Goal PHS 2.1 Fire Protection and Emergency Medical Services. Provide coordinated fire protection and emergency medical services that address the needs of Sacramento residents and businesses and maintain a safe and healthy community.

Policy PHS 2.1.2 Response Time Standards. The City shall strive to maintain emergency response times that provide optimal fire protection and emergency medical services to the community.

Policy PHS 2.1.3 Staffing Standards. The City shall maintain optimum staffing levels for sworn, civilian, and support staff, in order to provide quality fire protection and emergency medical services to the community.

Policy PHS 2.1.4 Response Unit and Facilities. The City shall provide additional response units, staffing, and related capital improvements, including constructing new fire stations, as necessary, in areas where a fire company experiences call volumes exceeding 3,500 in a year to prevent compromising emergency response and ensure optimum service to the community.

Policy PHS 2.1.5 Timing of Services. The City shall ensure that the development of fire facilities and delivery of services keeps pace with development and growth of the city.

Policy PHS 2.1.11 Development Fees for Facilities and Services. The City shall require development projects to contribute fees for fire protection services and facilities.

Goal PHS 2.2 Fire Prevention Programs and Suppression. The City shall deliver fire prevention programs that protect the public through education, adequate inspection of existing development, and incorporation of fire safety features in new development.

Policy PHS 2.2.2 Development Review. The City shall continue to include the Fire Department in the review of development proposals to ensure projects adequately address safe design and on-site fire protection and comply with applicable fire and building codes.

Policy PHS 2.2.3 Fire Sprinkler Systems. The City shall promote installation of fire sprinkler systems in new commercial and residential development, and shall encourage the installation of sprinklers in existing structures when it is reasonable and not cost prohibitive.

Policy PHS 2.2.4 Water Supply for Fire Suppression. The City shall ensure that adequate water supplies are available for fire-suppression throughout the city, and shall require development to construct all necessary fire suppression infrastructure and equipment.

Policy PHS 2.2.9 Development Review for Emergency Response. The City shall continue to include appropriate emergency responders (e.g., Fire Department staff) in the review of development proposals to ensure emergency response times can be adequately maintained.

Sacramento City Code

Section 8.100.540 of the Sacramento City Code states that all buildings or portions thereof shall be provided with the degree of fire resistive construction as required by the California Building Code for the appropriate occupancy, type of construction, and location on property or in fire zone, and shall be provided with the appropriate fire-extinguishing systems or equipment required by the California Building Code. Chapter 15.36 includes numerous codes relating to the inspection and

general enforcement of the City of Sacramento fire code; control of emergency scenes; permits; general provisions for safety, fire department access, equipment, and protection systems; and many standards for fire alarm systems, fire extinguisher systems, commercial cooking operations, combustible materials, heat producing appliances, exit illumination, emergency plans and procedures, and so on.

Parks and Recreation

City of Sacramento Municipal Code

Chapter 12.72 – Park Buildings and Recreational Facilities

The City's Municipal Code includes regulations associated with building and park use, fund raising, permit procedures, and various miscellaneous provisions related to parks. Park use regulations include a list of activities that require permits for organized activities that include groups of 50 or more people for longer than 30 minutes, amplified sound, commercial and business activities, and fund-raising activities. This code also includes a list of prohibited uses within parks such as unleashed pets, firearms of any type, drinking alcoholic beverages; or smoking near children's playground areas.

Chapter 16.64 – Parks and Recreational Facilities

Chapter 16.64 of the Municipal Code provides standards and formulas for the dedication of parkland and in-lieu fees. These policies help the City acquire new parkland. This chapter sets forth the standard that 5 acres of property for each 1,000 persons residing within the City be devoted to local recreation and park purposes. Under the appropriate circumstances, the subdivider shall, in lieu of dedication of land, pay a fee equal to the value of the land prescribed for dedication to be used for recreational and park facilities which will serve the residents of the area being subdivided.

Chapter 18.44 – Park Development Impact Fee

Chapter 18.44 of the City's Municipal Code imposes a park development fee on residential and nonresidential development within the City. Fees collected pursuant to Chapter 18.44 are primarily used to finance the construction of park facilities. The park fees are assessed upon landowners developing property in order to provide all or a portion of the funds which will be necessary to provide neighborhood or community parks required to meet the needs of and address the impacts caused by the additional persons residing or employed on the property as a result of the development. A Park Development Fee shall be paid by the project applicant based on the rate of \$0.42 per square foot for commercial retail uses (City of Sacramento DPR 2015).

City of Sacramento Parks and Recreation Master Plan 2005–2010

The City of Sacramento Parks and Recreation Master Plan 2005–2010 (City of Sacramento DPR 2009) outlines policies intended to protect and invest in parks and recreation infrastructure and programs to ensure that venues and activities are available to adequately serve the growing population. The Master Plan establishes priorities, an agenda for the Department of Parks and Recreation, appropriate expectation for service delivery and guides policy decision making by City staff and officials.

City of Sacramento 2035 General Plan

The following goals and policies from the *Sacramento 2035 General Plan* Education, Recreation and Culture (ERC) Element are applicable to the provision of parks and recreation.

Goal ERC 2.2 Parks, Community and Recreation Facilities and Services. Plan and develop parks, community and recreation facilities, and services that enhance community livability, improve public health and safety, are equitably distributed throughout the City, and are responsive to the needs and interests of residents, employees, and visitors.

Policy ERC 2.2.9 Small Public Places for New Development. The City shall allow new development to provide small plazas, pocket parks, civic spaces, and other gathering places that are available to the public, particularly in infill areas, to help meet recreational demands.

Goal ERC 2.5 Funding. Secure adequate and reliable funding for the acquisition, development, rehabilitation, programming, and maintenance of parks, community facilities, recreation facilities, trails, parkways, and open space areas.

Policy ERC 2.5.4 Capital Funding. The City shall fund the costs of acquisition and development of City neighborhood and community parks, and community and recreation facilities through land dedication, in lieu fees, and/or development impact fees.

Water

City of Sacramento Design Standards

Section 13 of the City's Design Standards sets forth requirements regarding the design and operation of water distribution facilities. Those requirements include standards for pipe design, fire hydrants, and specific requirements for residential, commercial, and industrial water service.

City of Sacramento Urban Water Management Plan

The City's 2015 UWMP, adopted in June 2016, is based on the City's 2035 General Plan. Information from the 2015 UWMP was used for this analysis.

Sacramento 2035 General Plan

The following goals and policies from the *Sacramento 2035 General Plan* Utilities (U) Element are applicable to utilities and service systems.

Goal U 2.1 High-Quality and Reliable Water Service. Provide water supply facilities to meet future growth within the City's Place of Use and assure a high-quality and reliable supply of water to existing future residents.

Policy U 2.1.9 New Development. The City shall ensure that water supply capacity is in place prior to granting building permits for new development.

Policy U 2.1.12 Water Conservation Enforcement. The City shall continue to enforce City ordinances that prohibit the waste or runoff of water, establish limits on outdoor water use, and specify applicable penalties.

Policy U 2.1.15 Landscaping. The City shall continue to require the use of waterefficient and river-friendly landscaping in all new development, and shall use water conservation gardens (e.g., Glen Ellen Water Conservation Office) to demonstrate and promote water conserving landscapes.

Policy U 2.1.16 River-Friendly Landscaping. The City shall promote "River Friendly Landscaping" techniques which include the use of native and climate appropriate plants; sustainable design and maintenance; underground (water-efficient) irrigation; and yard waste reduction practices.

Wastewater

Sacramento City Code

Chapter 13.08 of the Sacramento City Code sets requirements for permitted discharges to the sewer service system. There are provisions for charges and fees for customers, pretreatment, private sewer or storm drain lines, structures overlying public utilities, swimming pools and fish ponds, air conditioning and refrigeration devices, interruptions and discontinuation of service, inspections, and construction of sewer and storm drain facilities.

Sacramento Regional County Sanitation District

In 2004, the SRCSD passed the Sewer Impact Fee Ordinance requiring fees to be paid to the SRCSD for any users connecting to or expanding sewer collection systems, to mitigate the impact on the SRWWTP and conveyance systems.

Sacramento 2035 General Plan

The following goals and policies from the Sacramento 2035 General Plan Utilities (U) Element are applicable to utilities and service systems.

Goal U 3.1 Adequate and Reliable Sewer and Wastewater Facilities. Provide adequate and reliable sewer and wastewater facilities that collect, treat and safely dispose of wastewater.

Policy U 3.1.1 Sufficient Service. The City shall provide sufficient wastewater conveyance, storage, and pumping capacity for peak sanitary sewer flows and infiltration.

Goal U 4.1 Adequate Stormwater Drainage. Provide adequate stormwater drainage facilities and services that are environmentally sensitive, accommodate growth, and protect residents and property.

Policy U 4.1.4 Watershed Drainage Plans. The City shall require developers to prepare watershed drainage plans for proposed developments that define needed drainage improvements per City standards, estimate construction costs for these improvements, and comply with the City's National Pollutant Discharge Elimination System (NPDES) permit.

Policy U 4.1.5 Green Stormwater Infrastructure. The City shall encourage "green infrastructure" design and Low Impact Development (LID) techniques for stormwater facilities (i.e., using vegetation and soil to manage stormwater) to achieve multiple benefits (e.g., preserving and creating open space, improving runoff water quality).

Policy U 4.1.6 New Development. The City shall require proponents of new development to submit drainage studies that adhere to City stormwater design requirements and incorporate measures, including "green infrastructure" and Low Impact Development (LID) techniques, to prevent on- or off-site flooding.

Solid Waste

Sacramento Regional Solid Waste Authority

The SWA is a joint powers authority of the County and the cities of Sacramento and Citrus Heights. The SWA Board of Directors consists of elected officials from the County and the member cities. The SWA regulates commercial solid waste collection by franchised haulers through SWA ordinances. Among other things, SWA ordinances require franchised haulers to achieve 30% recycling and to offer recycling programs to multifamily complexes.

As discussed above in the Environmental Setting, actual disposal rates for the City are 5.5 pounds/person/day for residents and 8.8 pounds/person/day for employees, which exceed the per capita equivalent of the 50% diversion rate of 6.9 and 10.8 pounds/person/day, respectively.

Sacramento Municipal Code

Chapter 17.616, Recycling and Solid Waste Disposal Regulations, of the Sacramento City Code provides regulations concerning recycling and solid waste disposal. Policies within the Code include guidelines regarding the location, size, and design features of recycling and trash enclosures, which are necessary to lengthen the lifespan of landfills and meet state mandated goals for waste reduction. Commercial retail sales are required to provide a recycling volume of 1 cubic yard/8,000 square feet with a minimum container size of 90-gallons. Development standards for recycling require that receptacles are screened from public view, signs are permanently posted or painted to list types of materials that may be disposed in each receptacle and receptacles may not be located in any required parking space. Approved materials for building receptacles include walls a minimum of 6 feet in height and constructed of solid masonry material with decorative exterior surface finish, solid heavy gauge metal gates designed to secure gates when in the closed position, a concrete apron constructed either in front of each enclosure or at the point of receptacle pick up and must be paved, and enclosures must be designed to allow 18 feet of overhead clearance whenever crane lifted dome recycling receptacle are used.

Construction and Demolition Debris Ordinance

The City's Construction and Demolition (C&D) Ordinance regulates building permits with valuation greater than \$100,000, and all down-to-the-ground demolitions. Passed in January 2009, the C&D Ordinance requires permit holders to recycle certain material from debris generated on a project site. This debris must be hauled by the permit holder, waste generator, or franchised hauler to an SWA-certified mixed C&D facility. Construction debris would be recycled in compliance with the City's ordinance.

Sacramento 2035 General Plan

The following goals and policies from the *Sacramento 2035 General Plan Utilities* (U) Element are applicable to utilities and service systems.

Goal U 5.1 Solid Waste Facilities. Provide adequate solid waste facilities, meet or exceed State law requirements, and utilize innovative strategies for economic and efficient collection, transfer, recycling, storage, and disposal of refuse.

Policy U 5.1.14 Recycled Materials in New Construction. The City shall encourage the use of recycled materials in new construction.

Policy U 5.1.15 Recycling and Reuse of Construction Wastes. The City shall require recycling and reuse of construction wastes, including recycling materials generated by the demolition and remodeling of buildings, with the objective of diverting 85 percent to a certified recycling processor.

Energy

Sacramento 2035 General Plan

The following goals and policies from the *Sacramento 2035 General Plan* Utilities (U) Element are applicable to utilities and service systems.

Goal U 1.1 High-Quality Infrastructure and Services. Provide and maintain efficient highquality public infrastructure facilities and services throughout the city.

Policy U 1.1.5 Growth and Level of Service. The City shall require new development to provide adequate facilities or pay its fair share of the cost for facilities needed to provide services to accommodate growth without adversely impacting current service levels.

Policy U 1.1.11 Underground Utilities. The City shall require undergrounding of all new publically owned utility lines, encourage undergrounding of all privately owned lines in new developments, and work with electricity and telecommunications providers to underground existing overhead lines.

Goal U 6.1 Adequate Level of Service. Provide for the energy needs of the City and decrease dependence on nonrenewable energy sources through energy conservation, efficiency, and renewable resource strategies.

Policy U 6.1.5 Energy Consumption per Capita. The City shall encourage residents and businesses to consume 25 percent less energy by 2030 compared to the baseline year of 2005.

Policy 6.1.7 Solar Access. The City shall ensure, to the extent feasible, that sites, subdivisions, landscaping, and buildings are configured and designed to maximize passive solar access.

4.9.4 Impacts and Mitigation Measures

Methods of Analysis

This section evaluates project impacts on existing public services and utilities and service systems that would serve the project site. The *Sacramento 2035 General Plan* and MEIR, the City of Sacramento 2015 UWMP, and information from service and utility providers were all referenced to evaluate the project's potential effects and increase in demand on existing public services and utilities and service systems. This impact analysis also evaluates the ability of the SPD and SFD to serve the proposed project and whether the proposed project would generate an increase in demand for fire and policies services resulting in the need to construct additional facilities for staff or equipment.

For utilities and service systems, the impact analysis is based on consideration of the increase in demand for water supply, wastewater conveyance and treatment, solid waste disposal, and energy generated by the proposed project compared to the thresholds of significance listed below. The analysis includes consideration of whether existing service systems are adequate to accommodate the proposed project's demand and whether the proposed project would require modifications to existing facilities or construction of new facilities. The project's increase in demand for water, wastewater, and solid waste are quantified below. Note, the increase in demand for utilities is not quantified for Scheme B because the amount of square footage is smaller under Scheme B compared to the proposed project. Therefore, for the purposes of the analysis the proposed project depicts a worst case scenario. Because the project does not include a residential component the increase in demand for school services is not evaluated.

Water

The analysis of impacts to water supply was based on water demand generated by the proposed project compared to the thresholds of significance listed below. The expected water demand for the proposed project was determined based on water demand factors provided by the City's Department of Utilities for the additional six retail shops and the water demand of the existing Raley's store. The existing Raley's water usage in 2015 was approximately 8.78 acre

feet per year (AFY) based on information provided by Raley's (pers comm. Mueller) Table 4.9-1 shows the anticipated water demand for the six additional retail shops.

Proposed Use	Demand Factor (AFY ¹ /employee)	Number of New Employees	Total Demand (AFY)
Urban Corridor Low Density ²	0.04	120 ³	4.8
		Total	4.8

Table 4.9-1 Proposed Project Water Demand

Source: City of Sacramento 2013 Notes:

¹ AFY = Acre-feet per year

² Assuming General Plan Amendment to Urban Corridor Low Density

³ Number of employees corresponds to only employees of the six additional retail shops.

The total water demand for the proposed project would be approximately 13.58 AFY. For a conservative estimate this includes Raley's existing water demand in addition to the new water demand from the six new shops. However, Raley's water demand would be expected to decrease due to a 5,000 square foot reduction in the building footprint, a higher efficiency building, and additional water conservation measures, as required by the City's new General Plan policies and the CALGreen Tier 1 water efficiency and conservation standards. Therefore, this represents a conservative estimate of the project's overall water demand.

Wastewater

The analysis of impacts to wastewater treatment services is based on a wastewater treatment demand generated by the proposed project compared to the thresholds of significance listed below. The equivalent single-family dwelling (ESD) unit refers to the average wastewater flow generated by an ESD which is approximately 310 gallons per day (gpd). The equivalent factor for commercial development assumes 6 ESDs per acre with a flow rate of 1,900 gpd (Sacramento Area Sewer District 2013). Wastewater usage for the existing Raley's store was not available; however, generally wastewater usage is commensurate with the amount of water used. For the purposes of this EIR, wastewater usage for Raley's in 2015 is based on the amount of water used by the store not including the amount of water used for irrigation. Irrigation water flows to the City's storm drains and is not treated by the Wastewater Treatment Plant. Raley's wastewater usage in 2015 was approximately 8.14 AFY. Table 4.9-2 shows the projected volume of wastewater generated by the six additional retail shops based on ESD equivalent factors.

Proposed Use	Units/Acres	ESD Equivalent Factor ¹	Average Daily Wastewater (gpd)	Average Annual Wastewater (ac ft/yr) ³
Commercial Development	1.22 acres ²	6.0 ESD/acre	2,318	2.60
		Total	2.318	2.60

Table 4.9-2Proposed Project Wastewater Generation

Source: Table 201-1: ADWF Summary, SASD 2013. Notes:

¹ 6 ESD/acre = 1,900 gpd

² Acreage corresponds to building footprints of six new retail shops (53,165 square-feet)

³ Acre-feet per year (equivalent to 1.73 million gallons per year)

The total wastewater demand for the proposed project would be approximately 10.74 AFY (9,588 gpd). For a conservative estimate this includes Raley's existing wastewater generation in addition to the new wastewater demand from the six new shops. However, it is likely that Raley's wastewater usage would be lower because not all water used at the project site would flow to and be treated by the wastewater treatment plant. Therefore, using the project's total water usage in 2015 to estimate wastewater usage represents a conservative estimate.

Solid Waste

The analysis of impacts to landfill capacity is based on the amount of solid waste that would be generated by the proposed project compared to the thresholds of significance listed below. The City computes waste diversion in terms of per capita disposal instead of percentage. The 50% per capita disposal target is the amount of solid waste disposed of per person per day that is approximately equal to the 50% diversion requirement under AB 939. To meet the 50% diversion rate, the City must dispose not more than their 50 percent per capita disposal target. For the Sacramento jurisdiction, this 50% per capita disposal target is 6.9 pounds/person/day for residents and 10.8 pounds/person/day for employees (CalRecycle 2015).

The solid waste generated for the existing Raley's store is not available; therefore, Table 4.9-3 shows the projected volume of solid waste generated for the entire project based on solid waste generation rates provided in the City's 2035 General Plan MEIR. This generation rate is equal to the target 50% per capita disposal target. The City is currently achieving an actual diversion rate of 8.8 pounds per person per day for commercial uses (CalRecycle 2015). However, for the purposes of this analysis, the more conservative 10.8 pounds/employee/day number is used to calculate the amount of solid waste generated.

Proposed Use	Unit of Measurement ¹	Generation Rate	Waste Generated Daily (Approx.)	Waste Generated Annual (Approx.)
Commercial Use	235 Employees	10.8 pounds/ employee/day	2,538 pounds/day	463.2 tons/year
		Total	2,538 pounds/day	463.2 tons/year

Table 4.9-3Proposed Project Solid Waste Generation

Source: City of Sacramento 2015a.

Number of employees corresponds only to employees of the six additional retail shops.

Electricity/Natural Gas

Potential electricity and natural gas services were evaluated by comparing existing capacity and facilities for the services against future demands associated with the proposed project. The analysis of SMUD and PG&E's ability to supply electricity and natural gas, respectively, was based on personal communication and information contained in the City's 2035 General Plan MEIR.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in the City's general plan and previous environmental documents, and professional judgment, a significant impact would occur if the proposed project would do any of the following:

Services and Recreation:

- require, or result in, the construction of new, or the expansion of existing, facilities related to the provision of police protection, the construction of which could cause significant environmental impacts;
- require, or result in, the construction of new, or the expansion of existing, facilities related to the provision of fire protection, the construction of which could cause significant environmental impacts;
- cause or accelerate a substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the General and/or Community Plans;

Utilities:

• increase demand for potable water in excess of existing supplies;

- result in inadequate capacity in the City's water supply facilities to meet the water supply demand, so as to require the construction of new water supply facilities;
- result in the determination that adequate water or wastewater capacity is not available to serve the project's demand in addition to existing commitments;
- require or result in either the construction of new wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental impacts;
- require or result in either the construction of new solid waste facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects; or
- require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Project-Specific Impacts and Mitigation Measures

4.9-1: The proposed project could increase demand for police and fire services requiring the need to construct new facilities, or expand existing facilities. Based on the analysis below the impact is *less than significant.*

Police

The proposed project would add approximately 108,165 square-feet of development including a grocery store (Raley's), six new retail buildings, and 235 employees to the approximately 10-acre project site in the Land Park neighborhood in the City of Sacramento requiring police protection. The closest police station to the project is the Joseph E. Rooney Police Facility (South Command), located at 5303 Franklin Boulevard, approximately 1.4 miles northwest of the project site. The SPD's unofficial staffing goal is 2 sworn officers per 1,000 residents and 1 civilian support staff per 2 sworn officers. It is assumed the demand for police services at the new grocery store would remain the same as the existing store. The primary change would be associated with the additional six retail shops. The proposed project does not include any new residential uses which would increase the residential population of the service area.

In accordance with the City's 2035 General Plan Policy PHS 1.1.7, the project design would be subject to review and approval by the SPD to ensure that adequate police services would be provided and to incorporate environmental design principals aimed at crime prevention. The 40-foot setback along the western boundary of the project site, behind the proposed grocery store, would be gated to prevent access. The SPD has reviewed the site plan and has not noted any concerns with the project from a security perspective. The proposed project would not require additional police officers be hired or existing police facilities be expanded to accommodate more

equipment or staff. Additionally, the project would pay development fees as required by General Plan Policy PHS 1.1.8. These development impact fees would contribute to funding for facility improvements and services identified by the SPD as needed in the future. Therefore, the impact to police services would be **less than significant**.

Fire

The proposed project has been designed in compliance with the requirements of all applicable building and fire codes including the UFC, UBC, CBC, and the SFD, which required a 40-foot setback behind the proposed grocery store to provide required fire access. Station 12, located less than 1 mile from the project site at 4500 24th Street, is the closest responding SFD station to the project site. Under the Joint Powers Authority agreement all emergency calls in the City are routed through a central dispatch center and the station closest to the emergency call location would respond. The general goal for the SFD is one fire station per 16,000 residents. Each fire station operates within a specific district that covers an approximately 1.5-mile geographical radius area around the station (City of Sacramento 2015a). Development of the proposed project would increase the demand for fire protection and emergency services; however, the project does not include any residential development which would increase population in the service area. As with police services, the demand for fire services for the new grocery store is assumed to be the same as the existing store. The change would primarily be associated with the addition of six retail shops.

The Sacramento 2035 General Plan includes the following policies that require projects be designed to address fire safety. Specifically, Policies PHS 2.2.2, PHS 2.2.3, PHS 2.2.4 and PHS 2.2.9, which require projects be subject to review and approval by the SFD to ensure all buildings comply with applicable fire and building codes, include on-site fire protection equipment and fire suppression infrastructure such as sprinkler systems and fire hydrants, and ensure adequate emergency response can be maintained. The proposed project would also be required to contribute fees for fire protection services and facilities under Policy PHS 2.1.11. These development impact fees would contribute to funding for facility improvements and services identified by the SFD as needed in the future. The proposed project would comply with the fire-related goals and policies of the City's General Plan and would not increase demand for fire protection services that would require additional firefighters, or equipment necessitating expansion of the existing facility. Therefore, impacts related to fire protection services would be considered **less than significant**.

Mitigation Measures

None required.

4.9-2: The proposed project could cause or accelerate the physical deterioration of existing parks or recreational facilities or create a need for construction or expansion of recreational facilities beyond what was anticipated in the City's General Plan or Land Park Community Plan. Based on the analysis below the impact is *less than significant*.

The project site is located with the Land Park Community Planning Area. The combined acreage of neighborhood and community parks within the Land Park Community Planning Area is approximately 305.91 acres (City of Sacramento DPR 2009). The closest City park to the project site is William Land Park, located approximately 0.19 mile north. The closest neighborhood/community park is Belle Cooledge Park South, located approximately 1.12 miles southwest of the project site. The proposed project does not include the development of residences which would require access to park facilities that could cause or accelerate physical deterioration of existing parks and recreational facilities.

General Plan Policy ERC 2.2.9 allows for provision of small plazas and other gathering spaces within new development projects to help meet recreational demands. As discussed in Chapter 2, Project Description, the proposed project would include a plaza area in front of Shops 2 that would provide seating, landscaping, and places for people to gather. An additional courtyard area would be provided as part of Shops 1 (refer to Figure 2-4). The proposed project would be required to pay development impact fees under Chapter 18.44 of the City's Municipal Code. The City's current park fees for commercial and retail is \$0.42 per square foot (City of Sacramento DPR 2015). Park fees are used to finance construction of new park facilities or improvement of existing park facilities. Payment of park fees by the project applicant to the City would ensure the impact to parks would be **less than significant**.

Mitigation Measures

None required.

4.9-3: The proposed project could result in an increase in demand for potable water in excess of existing supplies and result in inadequate capacity in the City's water supply facilities to meet demand requiring the construction of new water supply facilities. Based on the analysis below the impact is *less than significant*.

The City of Sacramento is the designated water service provider for the project site. The project would connect to the City's existing public water system which consists of multiple public water mains adjacent to the project site in Wentworth Avenue, Sherwood Avenue, and Freeport Boulevard. Pipes with 2-inch to 4-inch diameter would connect to the existing water mainlines in Wentworth Avenue and Freeport Boulevard and would provide individual water service to each parcel. A common irrigation system would be used to irrigate the entire project site with water

from the existing water main located in Wentworth Avenue. The project has been designed to comply with the CALGreen Tier 1 water efficiency and conservation standards to reduce the demand for potable water both for domestic as well as irrigation. The City's existing water infrastructure and conveyance system has adequate capacity to serve the project site.

The proposed project's estimated water demand of 13.58 AFY (0.012 mgd) would require treatment at either the SRWTP or the FWTP prior to delivery to the project site. The six additional retail shops would increase the existing project site's (e.g. existing Raley's store) water demand by 55.2% (4.8 AFY). As noted previously, this is a very conservative estimate of the increase in demand for water to serve the project. As discussed in the Environmental Setting, the SRWTP and the FWTP have a combined reliable capacity of 295 mgd. The project's estimated water demand would require approximately 0.004% of the City's treatment capacity. At buildout of the General Plan in 2035, for both normal water years and dry years 1, 2 and 3, the projected supply is 294,419 AFY and the projected demand is 149,213 AFY (City of Sacramento 2016a). As noted in the Environmental Setting, according to the 2015 UWMP there is 100% reliability for the City's water supply sources in average water years and years 1, 2, and 3 of multiple dry water years through the year 2045 (City of Sacramento 2016a). There would be sufficient capacity to serve the project and the project would not result in inadequate capacity nor require the construction of new water treatment facilities. Therefore the project's impact on water supply treatment and distribution facilities would be **less than significant**.

Mitigation Measures

None required.

4.9-4: The proposed project could exceed existing wastewater capacity to serve the project's demand in addition to existing commitments and result in either the construction of new or expansion of existing wastewater treatment facilities. Based on the analysis below the impact is *less than significant*.

The proposed project would construct 108,165 sf of retail space on an approximately 10-acre site. Existing sewer main lines ranging from 6-inches to 12-inches in diameter that would serve the project are located adjacent to the site in Wentworth Avenue, Sherwood Avenue and Freeport Boulevard. The proposed on-site improvements would include 8-inch sewer lines with a single 8-inch connection to the City's existing sewer mainline in Wentworth Avenue. Sewer flows from the proposed project would ultimately be conveyed to the SRWWTP for treatment prior to being discharged into the Sacramento River. The SRWWTP's current ADWF is approximately 141 mgd, with a permitted capacity of 181 mgd with a daily PWWF of 392 mgd. The SRWWTP currently has excess capacity of 40 mgd. As discussed in the Methods of Analysis section above, the project is anticipated to generate a total of approximately 9,588 gpd which equates to 0.009588 mgd. The six
additional retail shops would increase wastewater demand by 31.9% (2,318 gpd) in addition to the existing wastewater demand from the Raley's store. As noted previously, this is a very conservative estimate of the increase in demand for wastewater. The project's total wastewater demand represents approximately 0.024% of the excess capacity and 0.005% of the permitted daily capacity of the SRWWTP. There is adequate capacity to accommodate the incremental increase in wastewater flows generated by the proposed project. The SRWWTP has adequate capacity to serve the proposed project without adverse impacts to current service levels or the need to expand existing facilities. Therefore, the project's impact would be **less than significant**.

Mitigation Measures

None required.

4.9-5: The proposed project could require the expansion or construction of new solid waste facilities which could cause significant environmental effects. Based on the analysis below the impact is *less than significant*.

The proposed project would contribute to an increase in demand for solid waste hauling and disposal services associated with the development of new retail uses. Although the amount of solid waste generated by the existing Raley's store is not available, it is assumed that the proposed project would generate approximately 2,358 pounds per day (based on current demand rates, which is equivalent to 463.2 tons per year) of solid waste, which meets the City's 50% diversion rate, as shown in Table 4.9-3.

Waste hauling and disposal services would be provided by private franchised haulers or the City. As discussed in the environmental setting, solid waste from the south region of the City, including the project site, is transported to the Sacramento Recycling and Transfer Station to be sorted prior to being transported to either the Kiefer Landfill or the Lockwood Landfill. The Sacramento Recycling and Transfer Station is limited to accepting 2,500 tons of solid waste per day, under its Solid Waste Facilities Permit (Permit No. 34-AA-0195). Kiefer landfill is the primary municipal solid waste disposal facility used by the City and is permitted to accept up to 10,815 tons per day under its Solid Waste Facilities Permit (Permit No. 34-AA-0001). Kiefer Landfill accepts an average of 6,300 tons per day and has a remaining capacity of approximately 112.9 million tons, which is currently expected to be enough capacity to remain open until year 2064 (CalRecycle 2016). The Lockwood Landfill has a capacity of 302.5 million cubic yards and does not have a maximum daily disposal limit, but on average accepts approximately 5,000 tons per day including waste from the City of Sacramento (Nevada Division of Environmental Protection 2016). The Lockwood Landfill is planned for expansion that would increase the landfill's capacity enough to continue operation for at least the next 100 years in order to accommodate planned future growth (Waste Management 2011). In addition, all construction debris would be recycled in compliance with the City's C&D Ordinance.

Solid waste generated by project operation would equal 0.01% of the daily permitted waste accepted by the Kiefer landfill. The Kiefer and Lockwood landfills have sufficient capacity to serve the proposed project and would not require the expansion of existing facilities to accommodate the project. Therefore, the project's impact related to increased demand for solid waste services would be **less than significant**.

Mitigation Measures

None required.

4.9-6: Operation of the proposed project could require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities. Based on the analysis below the impact is *less than significant*.

Natural gas services in the project area are provided by PG&E. PG&E consistently updates demand projections to ensure that their system has ample capacity to continue to provide service to all its customers. PG&E has stated it can supply natural gas upon buildout of the *Sacramento 2035 General Plan* without jeopardizing existing services or projected service commitments (City of Sacramento 2015a). SMUD provides electricity to the project area. In compliance with Policy U 1.1.11, new electrical infrastructure would be installed underground. PG&E and SMUD are currently providing natural gas and electricity to the project area and would also provide service to the project site. Both service providers are able to adequately serve the project site using their existing infrastructure and no facilities off site would require expansion to accommodate the project. In addition, the proposed project has been designed to meet and exceed by 5% the current California Building Energy Efficiency Standards (Title 24 2013 standards). The proposed project includes energy efficient features such as low flow plumbing fixtures; energy efficient HVAC systems; LED lighting; low VOC paints and adhesives; interior daylighting; and energy efficient building envelopes including windows and insulation, consistent with the California Green Building Code.

Therefore, impacts related to increased demand on electric and natural gas infrastructure would be **less than significant**.

Mitigation Measures

None required.

Cumulative Impacts

The cumulative impact analysis includes projected buildout under the Sacramento 2035 General Plan.

The geographic area for the cumulative analysis for the provision of police services is the service boundary of the SPD, which coincides with the Sacramento City limits. The geographic area for the provision of fire services is the service boundary of the SFD, which encompasses 146 square miles of the City of Sacramento and the fire districts of Pacific-Fruitridge and Natomas. The geographic scope for parks and recreation is based on development within the City.

In addition to buildout of the *Sacramento 2035 General Plan*, the cumulative context for water supply, wastewater treatment, solid waste and energy includes buildout of the specific service area for each utility provided including recently approved and reasonably foreseeable development with the boundaries of the SRWTP and FWTP service area for water, the SRCSD service area for wastewater, the SWA service area for solid waste and the PG&E and SMUD service areas for energy.

4.9-7: The proposed project could contribute to a cumulative increase in demand for police and fire protection services that could result in the need for new or physically altered facilities. Based on the analysis below the impact is *less than significant.*

Police

Implementation of the proposed project would contribute toward a cumulative increase in demand for police services within the City of Sacramento. According to the 2035 General Plan MEIR, new police facilities and staff would be required to serve General Plan buildout conditions, which assumes re-development of the project site with a more intense use. The MEIR has evaluated the increase in demand for police protection services and concluded that cumulative impacts to police protection would be **less than significant** with implementation of City goals and policies that ensure availability of adequate services for buildout. Therefore, the proposed project would not contribute to an existing cumulative impact.

Fire

Implementation of the proposed project would contribute toward a cumulative increase in demand for fire protection and emergency services within the City of Sacramento. According to the MEIR, new fire protection personnel and facilities and staff would be required to serve General Plan buildout conditions, which assumes re-development of the project site with a more intense use. The MEIR has evaluated the increase in demand for fire protection and emergency services and concluded that cumulative impacts to fire protection and emergency services would be **less than significant** with implementation of City goals and policies that ensure availability of adequate services for buildout. Therefore, the proposed project would not contribute to an existing cumulative impact.

Mitigation Measures

None required.

4.9-8: The proposed project could contribute to a cumulative increase in demand for parks and recreation facilities. Based on the analysis below the impact is *less than significant.*

Development of the proposed project could result in an increased demand for park and recreation facilities. The City's 2035 MEIR determined that currently 1,452 acres of parks are provided outside of the Central City. Based on the 2010 population estimate for the area outside of the Central City (approximately 379,361 people), the City is providing approximately 3.83 acres per 1,000 residents, which meets the proposed service level of 3.5 acres per 1,000 residents. The MEIR concluded that cumulative impacts to parks outside the Central City would be **less than significant** with implementation of General Plan policies to ensure adequate park facilities would be provided and maintained. The project does not include an increase in the City's population and the proposed project would not contribute to an existing cumulative impact.

Mitigation Measures

None required.

4.9-9: The proposed project could contribute to a cumulative increase in demand for water supply in excess of existing supplies. Based on the analysis below the impact is *less than significant*.

Implementation of the proposed project would increase the demand for potable water in the City. The 2035 General Plan MEIR determined that the increase in demand for water associated with the buildout of the general plan was less than significant because the City's existing water rights permits and U.S. Bureau of Reclamation contract would be sufficient to meet total retail and wholesale water demand. The MEIR also determined that during extremely dry years or "conference years" the City would maintain appropriate supply to serve water demand through 2035. For conference years, 2035 water demand would need to decrease by 4% in order for the City to maintain appropriate supply to serve demand. The City's UWMP Contingency Plan requires a 20% reduction during warning alters, 30% during water warnings, 40% during water crises, and 50% during water emergencies, which would be achieved through implementation of policies in the *Sacramento 2035 General Plan*, and the City's Water Conservation Program and Water Conservation Ordinance. With implementation of the City's water conservation requirements the City could provide adequate potable water supply even during conference years. Therefore, the existing cumulative impact is **less than significant** and the proposed project would not contribute to an existing cumulative impact.

4.9 – Public Services and Utilities

Mitigation Measures

None required.

4.9-10: The proposed project could contribute to a cumulative increase in the demand for water and wastewater treatment, which could result in inadequate capacity and require the construction of new or expansion of existing wastewater treatment facilities. Based on the analysis below the impact is *less than significant.*

Water Treatment

As discussed above in Impact 4.9-8, the City has sufficient water supply entitlements to meet demand associated with the buildout of the *Sacramento 2035 General Plan*. However, the General Plan MEIR determined that implementation of the *Sacramento 2035 General Plan* would result in an increase in demand for potable water in excess of the City's existing diversion and treatment capacity. This could result in the need for construction of new water supply facilities, which would be considered a potentially significant cumulative impact.

The General Plan includes policies to ensure that the City provides sufficient funding to meet project water demand and that development does not outstrip the availability of adequate water diversion and treatment capacity. As discussed above in impact 4.9-3, the project's demand represents less than 1% of the City's treatment capacity. The project's incremental contribution to the existing cumulative impact would be small and insignificant. Therefore, the project's contribution would not be considerable, and the cumulative impact is considered **less than significant**.

Wastewater Treatment

The 2035 General Plan MEIR concluded that cumulative impacts on wastewater demand were less than significant with implementation of General Plan policies. It was determined that the existing 181 mgd ADFW capacity of the SRWWTP would be sufficient for at least 40 more years due to water conservation and reduction in water using industries reversing the growth in wastewater. Additional decreases in growth are anticipated to continue through ongoing installation and use of water meters as well as compliance with conservation measures such as the state Water Conservation Act of 2009. Therefore, the cumulative impact is **less than significant** and the proposed project would not contribute to an existing cumulative impact.

Mitigation Measures

None required.

4.9-11: The proposed project could contribute to a cumulative increase in solid waste, which could result in either the construction of new solid waste facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects. Based on the analysis below the impact is *less than significant.*

According the 2035 General Plan MEIR, the City would be producing an additional 181,380 tons of solid waste per year. Compliance with the 50% diversion rate would reduce the total amount of solid waste sent to landfills to approximately 90,690 tons per year. The Kiefer landfill has an estimated remaining capacity of 112.9 million tons and is estimated to be enough capacity to remain open until 2064. Additionally, the Lockwood landfill has a remaining capacity of approximately 32.5 million tons which is expected to be enough to remain open until 2035. The Lockwood landfill is planned for an expansion that would increase the landfill's capacity for the next 100 years in order to accommodate planned future growth. Cumulative development under the *Sacramento 2035 General Plan* was determined would not result in the need to expand existing landfills or construct a new landfill creating a cumulative impact. Cumulative impacts to solid waste facilities were determined to be a **less than significant;** therefore, the proposed project would not contribute to an existing cumulative impact.

Mitigation Measures

None required.

4.9-12: The proposed project could contribute to a cumulative increase in energy demand, which could result in the need for construction of new energy production and/or transmission facilities or expansion of existing facilities. Based on the analysis below the impact is *less than significant*.

The 2035 General Plan MEIR determined that PG&E and SMUD would be able to adequately serve buildout of the *Sacramento 2035 General Plan* and that cumulative impacts would be less-than-significant with implementation of City goals and policies and continued support for renewable energy resources and promotion of clean energy programs by SMUD and PG&E. Therefore, the cumulative impact is **less than significant** and the proposed project would not contribute to an existing cumulative impact.

Mitigation Measures

None required.

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4.10 TRANSPORTATION AND CIRCULATION

4.10.1 Introduction

This transportation and circulation section discusses existing and cumulative transportation and circulation conditions associated with the proposed Land Park Commercial Center project (proposed project). The analysis includes consideration of motorized vehicle traffic impacts on roadway capacity, vehicle-miles travelled (VMT), and potential impacts to transit, bicycle, and pedestrians. In addition, an evaluation of construction impacts is also included. Quantitative transportation analyses have been conducted for the following scenarios:

- Existing (without project)
- Existing Plus Project
- Cumulative (no project)
- Cumulative Plus Project

For more details of the project, please see "Project Land Use and Circulation" later in this section and Chapter 2, Project Description.

Comments received in response to the NOP (see Appendix A) focused on several aspects of the project related to transportation and circulation. All relevant transportation comments raised are addressed in this section. A summary of the comments received is provided as follows:

Pedestrian Access

Many comments focused on the importance of pedestrian access to the project site. Improved pedestrian access, both on-site and on the surrounding street system, were mentioned. New and improved pedestrian crossings were identified, particularly with regard to Freeport Boulevard. There were opposing comments on providing (or not providing) pedestrian access via the neighborhood streets to the west and north of the project.

Bicycle Access

Similar to the comments on pedestrian access, improved bicycle access was repeatedly mentioned. Sacramento Area Bicycle Advocates (SABA) provided specific details regarding on-site design as well as improvements along Freeport Boulevard.

Truck (Delivery) Vehicles

Heavy vehicle (truck) access was mentioned, including requests for time restrictions.

On-Site Circulation

Several commenters addressed on-site circulation, citing deficiencies with regard to conflicts between automobile, truck, pedestrian, and bicycle access. Circulation connections to adjacent commercial properties were also mentioned.

Freeport Boulevard Traffic Control

The need for improved traffic signal control, for automobile, pedestrian, and bicycle traffic, was mentioned.

Neighborhood Traffic Impacts

The majority of NOP comments focused on traffic impacts on the adjacent residential streets, both directly to the north and west of the project site, as well as to the east across Freeport Boulevard. Cut-through traffic, particularly related to congestion at nearby traffic signals, was mentioned. Several commenters proposed solutions, including traffic calming devices and closing streets to through traffic.

Documents reviewed for this section include the *Sacramento 2035 General Plan* (City of Sacramento 2015a), the *2010 Sacramento City/County Bikeway Master Plan* (City of Sacramento 1995), the City of Sacramento Pedestrian Master Plan (City of Sacramento 2006), and the Caltrans' State Route 99 and Interstate 5 Corridor System Management Plan (Caltrans 2009).

Information referenced in the preparation of this section includes data from the regional travel model provided by the Sacramento Area Council of Governments (SACOG), freeway ramp and intersection traffic count data collected by All Traffic Data, and freeway traffic count data provided by Caltrans. Supporting traffic documentation is included in Appendix H.

4.10.2 Environmental Setting

The existing roadway, transit, bicycle, and pedestrian transportation systems within the study area are described below. Figure 4.10-1 illustrates the roadway system near the project site.

Roadway System – Local Access

Direct access to site is provided by Freeport Boulevard and Wentworth Avenue. Other roadways providing access include Sutterville Road, Meer Way, Stacia Way, Fruitridge Road, and Land Park Drive.



Freeport Boulevard forms the eastern boundary of the site. Freeport Boulevard is a four-lane, north–south arterial roadway. To the north, Freeport Boulevard extends to the Central City. To the south, Freeport Boulevard extends to the community of Freeport, where it becomes River Road. Near the site, Freeport Boulevard has a signalized intersection with Wentworth Avenue/Stacia Way.

Wentworth Avenue is a two-lane, east–west street that forms the southern boundary of the site. It begins at Freeport Boulevard, and extends through a residential area to Del Rio Road to the west. Several traffic calming devices have been installed on Wentworth Avenue west of the site.

East of Freeport Boulevard, Wentworth Avenue becomes *Stacia Way*. This two-lane, east–west street continues about 0.2 mile to Joaquin Way through a residential area. There are traffic calming devices along Stacia Way.

Meer Way is a two-lane, east-west residential street about 130 feet north of the site. To the west of Freeport Boulevard, it extends one block to Babich Avenue. To the east of Freeport Boulevard, Meer Way extends about 0.3 mile to Larson Way. There are traffic calming devices along Meer Way east of Freeport Boulevard. The Meer Way intersection with Freeport Boulevard is controlled by stop signs on the Meer Way approaches. Meer Way traffic approaching Freeport Boulevard is limited to right turn movements. There are marked crosswalks at this intersection.

Sutterville Road is an east–west arterial roadway about 0.1 mile north of the site. Sutterville Road is offset by about 0.2 mile at its signalized intersections with Freeport Boulevard. To the west, Sutterville Road extends about one mile to Interstate 5 (I-5). To the east, it extends about 0.9 mile to Franklin Boulevard. East of Franklin Boulevard, it becomes 12th Avenue, providing access to SR 99. Sutterville Road has two to four through travel lanes.

Fruitridge Road is an east–west arterial roadway about 0.5 mile south of the site. To the west, it extends about 0.7 mile to Land Park Drive. East of Land Park Drive, it becomes Seamas Avenue, providing access to I-5. To the east, Fruitridge Road extends for over eight miles to Mayhew Road. Fruitridge Road to the east provides access to SR 99. Fruitridge Road is four-lanes wide in the site vicinity.

Land Park Drive is a north–south major collector roadway located about 0.5 mile west of the site. To the north, Land Park Drive extends to the Central City. To the south, Land Park Drive extends into the Pocket Area of the City of Sacramento.

Roadway System – Freeway Access

Regional freeway access to the site is provided primarily by the north–south I-5 and State Route 99 (SR 99) freeways. I-5 is located about 0.9 mile west of the site, while SR 99 is located about 1.2 miles east of the site. Access to I-5 is via Sutterville Road and Fruitridge Road/Seamas Avenue. Access to SR 99 is via Sutterville Road/12th Avenue and Fruitridge Road.

Pedestrian System

The pedestrian system near the site consists primarily of the sidewalk system along City streets. Most streets near the site, including Freeport Boulevard, Wentworth Avenue, Stacia Way, and Meer Way, have sidewalks along both sides. Most nearby residential streets also have sidewalks on both sides, although there are exceptions, including a few streets without any sidewalks. The streets without sidewalks are located several blocks from the project site, and are not on major pedestrian access routes.

There are marked crosswalks at all study area signalized intersections. As mentioned previously, the unsignalized intersection of Meer Way and Freeport Boulevard also has marked crosswalks.

Bicycle System

On-street bike lanes currently exist on Freeport Boulevard south of the Sutterville Road (north) intersection. There are also bike lanes on Sutterville Road west of Freeport Boulevard. There is a marked bike route on Wentworth Avenue, extending west from Freeport Boulevard to Del Rio Road via local streets. Figure 4.10-2 illustrates the existing and proposed bicycle system in the site vicinity.

Transit System

The Sacramento Regional Transit District (RT) operates 67 bus routes and 38.6 miles of light rail covering a 418 square-mile service area. Buses and light rail run 365 days a year using 76 light rail vehicles, 182 buses (with an additional 30 buses in reserve) powered by compressed natural gas (CNG) and 11 shuttle vans. Buses operate daily from 5 a.m. to 11 p.m. every 12 to 75 minutes, depending on the route. Light rail trains begin operation at 4 a.m. with service every 15 minutes during the day and every 30 minutes in the evening and on weekends. Bus weekday ridership has reached an average of 51,000 passengers per day (SRTD 2015).

RT transit service in the site vicinity is illustrated in Figure 4.10-3. The nearest light rail station to the project site is the City College Station on the Blue Line, which is about 1.0 mile walking distance.





RT Route 62 (Freeport) operates in each direction along Freeport Boulevard past the site. The route extends from the Pocket Transit Center to Downtown Sacramento. The closest bus stops to the project site are located south of Wentworth Avenue/Stacia Way and north of Argail Way (northbound and southbound). Connections to light rail are made at the 4th Avenue/Wayne Hultgren Station, the Broadway Station, and several Downtown stations. Weekday service is provided at 30-minute headways from about 6:00 a.m. to 9:00 p.m. Saturday service is operated at 60-minute headways from about 7:30 a.m. to 9:00 p.m. There is no service on Sundays and holidays.

Truck Routes

City designated truck routes in the project vicinity include Sutterville Road between Freeport Boulevard and Franklin Boulevard, and Freeport Boulevard between Fourth Avenue and the south City limits (per City Council Resolution No. 83-010).

Study Area

For traffic analysis purposes, a set of intersections, neighborhood street segments, and freeway facilities were selected based upon the anticipated volume of project traffic, the distributional patterns of project traffic, and known locations of operational difficulty. The following locations, illustrated in Figure 4.10-4, were identified:

- Intersections
 - 1. Freeport Boulevard and Sutterville Road (North) (signalized)
 - 2. Freeport Boulevard and Sutterville Road (South) (signalized)
 - 3. Freeport Boulevard and Meer Way (unsignalized)
 - 4. Freeport Boulevard and Wentworth Avenue/Stacia Way (signalized)
 - 5. Freeport Boulevard and Fruitridge Road (signalized)
 - 6. Land Park Drive and Sutterville Road (signalized)
 - 7. Land Park Drive and Fruitridge Road (signalized)
 - 8. Bank of America/Raley's (East) Driveways and Wentworth Avenue (unsignalized)
 - 9. Raley's (West) Driveway and Wentworth Avenue (unsignalized)
 - 10. Freeport Boulevard and Bank of America Driveway (unsignalized)
 - 11. Freeport Boulevard and Project "Driveway 1" (unsignalized) (future)
 - 12. Project "Driveway 2" and Wentworth Avenue (unsignalized) (future)

- Neighborhood Street Segments
 - 13. Wentworth Avenue East of Mead Avenue
 - 14. Mead Avenue North of Wentworth Avenue
- Freeway Mainline
 - 15. I-5 North of Sutterville Road Interchange
- I-5 South of Seamas Avenue InterchangeFreeway Ramp Junctions/Ramp Termini
 - 16. I-5 Northbound Entrance from Sutterville Road
 - 17. I-5 Northbound Exit to Seamas Avenue
 - 18. I-5 Southbound Exit to Sutterville Road
 - 19. I-5 Southbound Entrance from Seamas Avenue

Existing Intersection Geometry

Existing intersection geometry (number of approach lanes and traffic control) is illustrated in Figure 4.10-5. Additional geometric data is included in Appendix H.

Existing Traffic Volumes

For the ten existing study area intersections, peak period intersection turning movement counts were conducted for the a.m. weekday peak period (7:00 to 9:00 a.m.) and the p.m. weekday peak period (4:00 to 6:00 p.m.) on Tuesday, November 10, 2015. In addition, 24-hour counts were also recorded on the same day for the neighborhood street segments.

Freeway ramps and ramp termini intersection counts were conducted for the a.m. weekday peak period (7:00 to 9:00 a.m.) and the p.m. weekday peak period (4:00 to 6:00 p.m.) on Thursday, January 7, 2016. Freeway mainline volume data was taken from the Caltrans Performance Measurement System (PeMS) for the Tuesdays, Wednesdays, and Thursdays during the month of October 2015.

Existing weekday peak hour intersection turning movement volumes are illustrated on Figure 4.10-5. Traffic count data is included in Appendix H.

4.10.3 Regulatory Setting

Federal

No pertinent federal regulations affect the proposed project.





State

The I-5 freeway system is under the jurisdiction of the California Department of Transportation (Caltrans). In the Caltrans' *State Route 99 & Interstate 5 Corridor System Management Plan*, the 20-year concept level of service is "F", because improvements necessary to improve the LOS to E are not feasible due to environmental, right-of-way, financial, and other constraints.

The freeway system and the intersections at the freeway interchanges were assigned to Caltrans jurisdiction for analysis purposes.

Regional

SACOG is responsible for the preparation of, and updates to, the Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS) 2036 (SACOG 2016) and the corresponding Metropolitan Transportation Improvement Program (MTIP) for the six-county Sacramento region. The MTP/SCS provides a 20-year transportation vision and corresponding list of projects. The MTIP identifies short-term projects (7-year horizon) in more detail. The updated MTP/SCS 2036 was adopted by the SACOG board in February 2016.

Local

The study area roadways system is under the jurisdiction of the City of Sacramento.

The Mobility Element of the *Sacramento 2035 General Plan* outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The following goals and policies are relevant to this study.

Goal M 1.1 Comprehensive Transportation System. Provide a multimodal transportation system that supports the social, economic and environmental vision, goals, and objectives of the City, and is effectively planned, funded, managed, operated, and maintained.

Goal M 1.2 Multimodal System. Increase multimodal accessibility (i.e., the ability to complete desired personal or economic transactions via a range of transportation modes and routes) throughout the city and region with an emphasis on walking, bicycling, and riding transit.

Policy M 1.2.2 Level of Service (LOS) Standard. The City shall implement a flexible context sensitive Level of Service (LOS) standard, and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure Vehicle LOS based on the methodology contained in the latest version of the Highway Capacity Manual (HCM) published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the

City has established variable LOS thresholds appropriate for the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday conditions, including AM and PM peak hour with the following exceptions described below and mapped on Figure M-1:

- A. Core Area (Central City Community Plan Area) LOS F allowed
- B. Priority Investment Areas LOS F allowed
- C. LOS E Roadways LOS E is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.
 - 65th Street: Elvas Avenue to 14th Avenue
 - Arden Way: Royal Oaks Drive to I-80 Business
 - Broadway: Stockton Boulevard to 65th Street
 - College Town Drive: Hornet Drive to La Rivera Drive
 - El Camino Avenue: I-80 Business to Howe Avenue
 - Elder Creek Road: Stockton Boulevard to Florin Perkins Road
 - Elder Creek Road: South Watt Avenue to Hedge Avenue
 - Fruitridge Road: Franklin Boulevard to SR 99
 - Fruitridge Road: SR 99 to 44th Street
 - Howe Avenue: El Camino Avenue to Auburn Boulevard
 - Sutterville Road: Riverside Boulevard to Freeport Boulevard

LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of light rail stations.

- D. Other LOS F Roadways LOS F is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.
 - 47th Avenue: State Route 99 to Stockton Boulevard
 - Arcade Boulevard: Marysville Boulevard to Roseville Road
 - Carlson Drive: Moddison Avenue to H Street
 - El Camino Avenue: Grove Avenue to Del Paso Boulevard
 - Elvas Avenue: J Street to Folsom Boulevard
 - Elvas Avenue/56th Street: 52nd Street to H Street
 - Florin Road: Havenside Drive to Interstate 5

- Florin Road: Freeport Boulevard to Franklin Boulevard
- Florin Road: Interstate 5 to Freeport Boulevard
- Folsom Boulevard: 47th Street to 65th Street
- Folsom Boulevard: Howe Avenue to Jackson Highway
- Folsom Boulevard: US 50 to Howe Avenue
- Freeport Boulevard: Sutterville Road (North) to Sutterville Road (South)
- Freeport Boulevard: 21st Street to Sutterville Road (North)
- Freeport Boulevard: Broadway to 21st Street
- Garden Highway: Truxel Road to Northgate Boulevard
- H Street: Alhambra Boulevard to 45th Street
- H Street 45th: Street to Carlson Drive
- Hornet Drive: US 50 Westbound On-ramp to Folsom Boulevard
- Howe Avenue: US 50 to Fair Oaks Boulevard
- Howe Avenue: US 50 to 14th Avenue
- Raley Boulevard: Bell Avenue to Interstate 80
- South Watt Avenue: US 50 to Kiefer Boulevard
- West El Camino Avenue: Northgate Boulevard to Grove Avenue
- E. If maintaining the above LOS standards would, in the City's judgment be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation, and/or implement vehicle trip reduction measures as part of a development project or a city-initiated project. Additionally, the City shall not expand the physical capacity of the planned roadway network to accommodate a project beyond that identified in Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

Policy M 1.2.2 (acceptable level of service) applies to the study area intersections as follows:

- 1. Freeport Boulevard and Sutterville Road (North) (signalized) LOS F
- 2. Freeport Boulevard and Sutterville Road (South) (signalized) LOS F
- 3. Freeport Boulevard and Meer Way (unsignalized) LOS D
- 4. Freeport Boulevard and Wentworth Avenue/Stacia Way (signalized) LOS D

- 5. Freeport Boulevard and Fruitridge Road (signalized) LOS D
- 6. Land Park Drive and Sutterville Road (signalized) LOS E
- 7. Land Park Drive and Fruitridge Road (signalized) LOS D
- 8. Bank of America/Raley's (East) Driveways and Wentworth Avenue (unsignalized) LOS D
- 9. Raley's (West) Driveway and Wentworth Avenue (unsignalized) LOS D
- 10. Freeport Boulevard and Bank of America Driveway (unsignalized) LOS D
- 11. Freeport Boulevard and Project "Driveway 1" (unsignalized) (future) LOS D
- 12. Project "Driveway 2" and Wentworth Avenue (unsignalized) (future) LOS D

Policy M 1.2.3 Transportation Evaluation. The City shall evaluate discretionary projects for potential impacts to traffic operations, traffic safety, transit service, bicycle facilities, and pedestrian facilities, consistent with the City's Traffic Study Guidelines.

Policy M 1.2.4 Multimodal Access. The City shall facilitate the provision of multimodal access to activity centers such as commercial centers and corridors, employment centers, transit stops/stations, airports, schools, parks, recreation areas, medical centers, and tourist attractions.

Goal M 1.4 Transportation Demand Management. Reduce reliance on the private automobile.

Policy M 1.4.3 Transportation Management Associations. The City shall encourage commercial, retail, and residential developments to participate in or create Transportation Management Associations to reduce single-occupant vehicle trips.

Policy M 1.4.4 Off-Peak Deliveries. The City shall encourage business owners to schedule deliveries at off-peak traffic periods.

Goal M 2.1 Integrated Pedestrian System. Design, construct, and maintain a universally accessible, safe, convenient, integrated and well-connected pedestrian system that promotes walking.

Policy M 2.1.2 Sidewalk Design. The City shall require that sidewalks wherever possible be developed at sufficient width to accommodate all users including persons with disabilities and complement the form and function of both the current and planned land use context of each street segment (i.e. necessary buffers, amenities, outdoor seating space).

Policy M 2.1.7 Safe Pedestrian Crossings. The City shall improve pedestrian safety at appropriate intersections and mid-block locations by providing safe pedestrian crossings.

Policy M 2.1.9 Safe Sidewalks. The City shall require pedestrian facilities to be constructed in compliance with adopted design standards.

Goal M 3.1 Safe, Comprehensive, and Integrated Transit System. Create and maintain a safe, comprehensive, and integrated transit system as an essential component of a multimodal transportation system.

Policy M 3.1.18 Developer Contributions. Consistent with the City's established transportation impact analysis and mitigation guidelines, the City shall require developer contributions for bus facilities and services and related improvements.

Goal M 4.2 Complete Streets. The City shall plan, design, operate and maintain all streets and roadways to accommodate and promote safe and convenient travel for all users – pedestrians, bicyclists, transit riders, and persons of all abilities, as well as freight and motor vehicle drivers.

Policy M 4.2.1 Accommodate All Users. The City shall ensure that all new roadway projects and any reconstruction projects designate sufficient travel space for all users including bicyclists, pedestrians, transit riders, and motorists except where pedestrians and bicyclists are prohibited by law from using a given facility.

Policy M 4.2.2 Pedestrian and Bicycle-Friendly Streets. In areas with high levels of pedestrian activity (e.g., employment centers, residential areas, mixed-use areas, schools), the City shall ensure that all street projects support pedestrian and bicycle travel. Improvements may include narrow lanes, target speeds less than 35 miles per hour, sidewalk widths consistent with the Pedestrian Master Plan, street trees, high-visibility pedestrian crossings, and bikeways (e.g., Class II and Class III bike lanes, bicycle boulevards, separated bicycle lanes and/or parallel multi-use pathways).

Policy M 4.2.3 Adequate Street Tree Canopy. The City shall ensure that all new roadway projects and major reconstruction projects provide for the development of an adequate street tree canopy.

Goal M 4.3 Neighborhood Traffic. Enhance the quality of life within existing neighborhoods through the use of neighborhood traffic management and traffic calming techniques, while recognizing the City's desire to provide a grid system that creates a high level of connectivity.

Policy M 4.3.1 Neighborhood Traffic Management. The City shall continue wherever possible to design streets and approve development applications in a manner as to reduce high traffic flows and parking problems within residential neighborhoods.

Policy M 4.3.2 Traffic Calming Measures. Consistent with the Roadway Network and Street Typology policies in this General Plan and Goal M 4.3, the City shall use traffic calming measures to reduce vehicle speeds and volumes while also encouraging walking and bicycling.

Goal M 5.1 Integrated Bicycle System. Create and maintain a safe, comprehensive, and integrated bicycle system and set of support facilities throughout the city that encourage bicycling that is accessible to all. Provide bicycle facilities, programs and services and implement other transportation and land use policies as necessary to achieve the City's bicycle mode share goal as documented in the Bicycle Master Plan.

Policy M 5.1.4 Conformance to Applicable Standards. The City shall require all bikeways to conform to applicable Federal, State, and City standards while considering a full range of innovative bikeway design best practices.

Policy M 5.1.5 Motorists, Bicyclists, and Pedestrian Conflicts. The City shall develop safe and convenient bikeways, streets, roadways, and intersections that reduce conflicts between bicyclists and motor vehicles on streets, between bicyclists and pedestrians on multi-use trails and sidewalks, and between all users at intersections.

Policy M 5.1.6 Connections between New Development and Bicycle Facilities. The City shall require that new development provides connections to and does not interfere with existing and proposed bicycle facilities.

Policy M 5.1.11 Bike Facilities in New Developments. The City shall require that major new development projects (e.g., employment centers, educational institutions, recreational and retail destinations, and commercial centers) provide bicycle parking (i.e., short-term bicycle parking for visitors and long-term bicycle parking for residents or employees), personal lockers, showers, and other bicycle-support facilities.

Policy M 5.1.14 Encourage Bicycle Use. The City shall encourage bicycle use in all neighborhoods, especially where short trips are most common.

Goal M 9.1 Transportation Funding. Provide sufficient funding to construct, maintain, and operate transportation facilities and services needed to achieve the City's mobility goals.

Policy M 9.1.1 New Development. The City shall require new development to contribute towards the construction of off-site facilities and provision of services to achieve the City's mobility goals.

Policy M 9.1.5 Fair Share for Transportation Infrastructure Improvements. The City shall require all new development to dedicate right-of-way, construct facilities, or pay its fair share for needed transportation infrastructure improvements that support all travel modes, including pedestrian, bicycle, and transit facilities, roadway improvements, and transportation demand management (TDM) programs and services.

Pedestrian Master Plan

The City's Pedestrian Master Plan (2006) provides a comprehensive vision for improving pedestrian conditions. The purpose is to make Sacramento a model pedestrian-friendly city—the "Walking Capital." The goals of the plan fall into the following three categories:

- Create a walkable pedestrian environment throughout the city;
- Improve awareness of the pedestrian mode through education; and
- Increase pedestrian safety.

Sacramento City/County Bikeway Master Plan

The 2010 Sacramento City/County Bicycle Master Plan is a joint document between Sacramento County and the City of Sacramento (County and City of Sacramento 2011). It identifies existing and proposed bicycle facilities and improvements, as well as goals and policies related to bicycling. The overarching purpose of the improvements, policies and programs identified in the document is to enhance the safety, comfort, convenience and experience of bicycling for the full range of potential bicyclists. The goals and supporting policies are organized into the following categories:

- Increase bicycle use;
- Reduce bicycle collisions and injuries;
- Increase the total number of bicycle facilities; and
- Ensure proportionate funding for bicycle facilities and improvements.

Sacramento City Code Sections 12.20.020 and 12.020.030

Section 12.20.020 of the Sacramento City Code requires preparation and approval of a traffic control plan if any nonemergency work would obstruct vehicular or pedestrian traffic. The

requirements for the plan's contents are detailed in Section 12.20.030 and include a diagram of the work area, the locations of public right-of-way obstructions, the time periods of traffic controls, and a statement of compliance with the City's noise ordinance.

Neighborhood Traffic Management Program

The City of Sacramento has a Neighborhood Traffic Management Program (NTMP) where neighborhoods can petition the City to install traffic calming devices to address residents' concerns about traffic. There are two phases of an NTMP. Phase I involves less restrictive modifications such as the installation of high visibility speed limit signs, striping of bike lanes, and the installation of speed humps. Phase II involves more restrictive measures including half-and full-street closures, diverters, and one-way/two-way street conversions. Phase II modifications are implemented if the Phase I modifications do not adequately address neighborhood concerns.

Level of Service Analysis and Methodology

Field reconnaissance was undertaken to ascertain the traffic control characteristics of each of the study area intersections and roadway segments. Determination of roadway operating conditions is based upon comparison of known or projected traffic volumes during peak hours to roadway capacity. In an urban setting, roadway capacity is generally governed by intersection characteristics, and intersection delay is used to determine "levels of service." Levels of service (LOS) describe roadway operating conditions. LOS is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, delay, and operating costs. LOS are designated A through F from best to worst, which cover the entire range of traffic operations that might occur. LOS A through E generally represent traffic volumes at less than roadway capacity, while LOS F represents over capacity and/or forced flow conditions.

Intersection Analysis

For intersections in Caltrans or City jurisdiction, intersection analyses were conducted using a methodology outlined in the Transportation Research Board's Special Report 209, Highway Capacity Manual2010 (HCM 2010) (TRB 2010). The methodology utilized is known as "operational analysis." This procedure calculates an average control delay per vehicle at an intersection, and assigns a level of service designation based upon the delay. Table 4.10-1 presents the level of service criteria for signalized intersections on the HCM 2010 methodology. At some signalized intersections, traffic signal characteristics cannot be adequately analyzed by the HCM 2010 methodology. In these cases, the prior methodology, HCM 2000, was utilized (TRB 2000).

Neighborhood Street Segments

Daily traffic volumes on selected neighborhood street segments are presented in this study for informational purposes. Daily traffic volumes, both without and with the project, are compared with City of Sacramento level of service thresholds, as shown in Table 4.10-2.

Freeway Analysis

Freeway mainline segments, ramp junctions, and weaving segments were analyzed utilizing methodologies outlined in the HCM 2010. Table 4.10-3 presents the level of service criteria for the freeway mainline, freeway ramp junctions, and freeway weaving segments.

	Total Delay Per Vehicle (seconds)				
Level of Service (LOS)	Signalized	Unsignalized			
А	< 10	< 10			
В	> 10 and < 20	> 10 and < 15			
С	> 20 and < 35	> 15 and < 25			
D	> 35 and < 55	> 25 and < 35			
E	> 55 and < 80	> 35 and < 50			
F	> 80	> 50			

Table 4.10-1 **Intersection Level of Service Criteria**

Source: TRB 2010.

Table 4.10-2

Level of Service Thresholds for Two Lane Local Streets

Level of Service (LOS)	Average Daily Traffic Level of Service Capacity Threshold			
A	3,000			
В	3,500			
С	4,000			
D	4,500			
E	5,000			

Source: Table 4.12-1, Sacramento 2035 General Plan (City of Sacramento 2015).

Results of Existing Condition Analysis

Study area intersections and freeway facilities were evaluated for weekday AM and PM peak hours. Neighborhood street segments were evaluated based upon daily traffic volumes.

	Maximum Density (Passenger Cars Per Mile Per Lane)				
Level of Service (LOS)	Mainline	Ramp Junctions and Weaving Segments			
А	<u>< 11</u>	<u><</u> 10			
В	> 11 and <u><</u> 18	> 10 and <u><</u> 20			
С	> 18 and <u><</u> 26	> 20 and <u><</u> 28			
D	> 26 and <u><</u> 35	> 28 and <u><</u> 35			
E	> 35 and <u><</u> 45	> 35			
F	> 45	Demand Exceeds Capacity			

Table 4.10-3Level of Service Thresholds For Freeway Operations

Source: TRB 2010.

Intersection Operations

Table 4.10-4 summarizes the existing a.m. and p.m. peak hour operating conditions at the study area intersections. At unsignalized intersections, the average intersection level of service is utilized to determine conformity with the City's goal. Individual movements may operate at worse levels of service.

Table 4.10-4Existing Intersection Operating Conditions

			AM Peak Hour		PM Peak Hour	
Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	S07	Delay (Seconds)
Freeport Blvd. and Sutterville Rd. (North)	F	Signalized	С	32.5	С	24.6
Freeport Blvd. and Sutterville Rd. (South)	F	Signalized	С	21.5	С	27.8
Freeport Blvd. and Meer Way	D	Unsignalized	А	1.4	А	1.4
Northbound Left/U-Turn			А	9.0	С	19.6
Southbound Left/U-Turn			С	20.7	В	11.1
Eastbound			В	10.3	С	15.3
Westbound			С	15.9	В	11.2
Freeport Blvd. and Wentworth Ave./Stacia Way	D	Signalized	С	27.5	С	29.9
Freeport Blvd. and Fruitridge Rd.	D	Signalized	D	38.7	D	51.9
Land Park Drive and Sutterville Rd.	E	Signalized	D	51.8	Е	60.8
Land Park Drive and Fruitridge Rd.	D	Signalized	D	35.3	С	33.9
			AM Peak Hour		PM Peak Hour	
--	-----------------	--------------------	------------------	--------------------	-----------------	--------------------
Intersection	LOS Criteria	Traffic Control	SOT	Delay (Seconds)	SOT	Delay (Seconds)
Bank of America/Raley's (East) Driveways and Wentworth Ave.	D	Unsignalized	А	2.4	A	3.8
Northbound			Α	8.9	А	9.7
Southbound			Α	9.5	В	11.7
Eastbound Left Turn			Α	7.3	Α	7.5
Westbound Left Turn			Α	7.4	А	7.5
Raley's (West) Driveway and Wentworth Ave.	D	Unsignalized	A	4.2	A	4.7
Northbound			А	8.9	А	9.3
Westbound Left Turn			А	7.4	А	7.5
Freeport Blvd. and Bank of America Driveway	D	Unsignalized	No Control Delay			

Table 4.10-4Existing Intersection Operating Conditions

Source: See Appendix H.

All of the study area intersections achieve the City's LOS goals.

Neighborhood Street Segments

Table 4.10-5 summarizes the existing daily volumes and level of service on the neighborhood street segments. Both segments currently operate at LOS A.

Table 4.10-5

Existing Neighborhood Street Segment Conditions

Roadway	Segment	Daily Volume	LOS
Wentworth Avenue	East of Mead Avenue	1,631	А
Mead Avenue	North of Wentworth Avenue	677	А

Source: See Appendix H.

Freeway Operations

Table 4.10-6 summarizes the existing peak hour freeway mainline levels of service. I-5 northbound south of the Seamas Avenue exit currently operates at LOS F during the AM peak hour.

Table 4.10-7 summarizes the existing peak hour freeway ramp junction levels of service. The northbound weave between 43rd Avenue and Seamas Avenue operates at LOS F during the AM peak hour due to mainline congestion.

Table 4.10-8 summarizes the exiting peak hour intersection operating conditions at the freeway ramp termini. All of the intersections operate at LOS C or better.

Table 4.10-9 summarizes the existing peak hour freeway ramp queuing. None of the existing 95th percentile queues exceed the available storage space.

Direction	Location	Through Lanes	Aux. Lanes	Volume	Density ¹	LOS
		AM Peak Ho	ur			
North-	North of Sutterville Road	4	0	8,464	41.6	Ш
bound I-5	South of Seamas Avenue	4	1	7,863	48.6	F
South-	North of Sutterville Road	4	0	3,169	12.5	В
bound I-5	South of Seamas Avenue	4	1	3,601	11.8	В
		PM Peak Ho	ur			
North-	North of Sutterville Road	4	0	4,978	19.8	С
bound I-5	South of Seamas Avenue	4	1	5,088	17.2	В
South-	North of Sutterville Road	4	0	6,877	28.7	D
bound I-5	South of Seamas Avenue	4	1	7,971	28.7	D

Table 4.10-6Existing Peak Hour freeway Mainline Level of Service

Note:

1 Density (passenger car equivalents per lane-mile) from PeMS data or calculation (if higher). Peak hour density may occur at a later time than peak hour volume.

Source: See Appendix H.

Table 4.10-7

Existing Peak Hour freeway Ramp Junction/Weave Level of Service

			AM Peak Hour		PM Peak Hour	
Direction	Location	Junction Type	Ramp Volume	LOS	Ramp Volume	LOS
North-	Sutterville Road Entrance	Merge	539	D	326	В
bound I-5	Seamas Avenue Exit	Weave	176	F^1	314	В
South- bound I-5	Sutterville Road Exit	Diverge	307	В	411	D
	Seamas Avenue Entrance	Weave	311	В	600	D

Note:

¹ Constrained by mainline congestion. **Source:** See Appendix H.

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			AM Peak Hour		PM Peak Hour	
Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	S07	Delay (Seconds)
I-5 Northbound Ramps and Sutterville Rd.	F	Two-Way	А	1.7	А	2.4
Northbound Through/Left Turn		Stop Control	В	12.7	С	17.7
Northbound Right Turn			В	10.3	В	11.7
Eastbound Left Turn			А	7.7	А	8.3
I-5 Northbound Ramps and Seamas Ave.	F	Signalized	С	34.7	С	27.3
I-5 Southbound Ramps and Sutterville Rd.	F	All-Way	В	10.3	С	15.7
Southbound		Stop Control	В	10.2	В	12.7
Eastbound			Α	7.9	А	8.6
Westbound			В	10.4	С	18.5
I-5 Southbound Ramps and Seamas Ave.	F	Signalized	В	12.8	В	15.6

Table 4.10-8Existing Intersection Operating Conditions At Freeway Ramp Termini

Source: See Appendix H.

Table 4.10-9

Existing Peak Hour Freeway Ramp Termini Queuing

			Maximur Length (1	n Queue ieet/lane)
Direction	Location	Available Storage Length (feet/lane)	AM Peak Hour	PM Peak Hour
North- bound I-5	Sutterville Road Exit – Through and Left Turn	575	<1	3
	Sutterville Road Exit – Right Turn	575	23	38
	Seamas Avenue Exit	640	24	40
South-	Sutterville Road Exit	735	23	43
bound I-5	Seamas Avenue Exit – Left Turn	835	79	110
	Seamas Avenue Exit – Through and Right Turn	835	15	24

Source: See Appendix H.

4.10.4 Impacts and Mitigation Measures

Methods of Analysis

This section describes the analysis techniques, assumptions, and results used to identify potential impacts of the proposed project on the City's transportation and circulation system.

This section first describes the anticipated travel characteristics of the proposed project, then presents the change in the transportation system with the addition of the proposed project.

Project Schemes

Two development/circulation schemes are presently proposed; the proposed project, or Scheme A and Scheme B. The traffic analysis evaluated an earlier version of the proposed project and Scheme B. During preparation of the traffic analysis the site plans were updated which resulted in a slight reduction in the amount of retail uses under both the proposed project and Scheme B. This reduction is not anticipated to change the findings of the analysis. The schemes are identical, other than minor building size differences and a connection to an adjacent Bank of America facility:

- Scheme A 55,000 square foot grocery store, 53,980 square feet of retail space, without direct connection to Bank of America
- Scheme B 55,000 square foot grocery store, 53,165 square feet of retail space, with direct connection to Bank of America

The amount of development shown above is exclusive of the existing Bank of America facility. Figures 4.10-6 and 4.10-7 illustrate the Scheme A and B site plans, respectively.

As the two schemes are very similar, the transportation analysis primarily concentrates on Scheme A, which has the greatest amount of development. Differences associated with Scheme B are limited to local circulation in the immediate vicinity of the existing Bank of America facility, and are addressed in the intersection analysis. All other transportation effects/impacts would be similar with the development of either scheme.



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Trip Generation

Trip generation studies were undertaken at the existing Raley's grocery store (Raley's site) on Tuesday, November 10, 2015. Counts were undertaken from 7:00 to 9:00 a.m. and from 4:00 to 6:00 p.m. (in 15-minute intervals), to correspond to the typical peak periods of commuter travel. The following data was collected:

- Motorized vehicle counts movements at each driveway by entry/exit and by turning movement. These counts also categorized heavy vehicles (any vehicle with 6 or more wheels).
- Bicycle counts entering and exiting bicycles
- Pedestrian counts entering and exiting pedestrians
- Transit access counts two Regional Transit bus stops are located along Freeport Boulevard (one on each side) adjacent to the existing Raley's site. Pedestrian trips entering and exiting the Raley's site from the bus stops were recorded.
- Average vehicle occupancy At two of the driveways, vehicle occupancy (number of persons per vehicle) was recorded to provide a representative sample.
- Table 4.10-10 summarizes the counts for the two-hour a.m. and p.m. peak commuter periods. Table 4.10-11 presents the percentage of person trips by travel mode. During the a.m. peak period, about 84% of the person trips are made by motorized vehicle. During the p.m. peak period, about 92% of the person trips are made by motorized vehicle.

	AM Peak (7:00 to 9:00 a.m.)			PM Peak (4:00 to 6:00 p.m.)			
Mode	Entering	Exiting	Total	Entering	Exiting	Total	
Motorized Vehicle Trips (vehicles)	268	236	504	652	691	1,343	
Heavy Vehicle Trips (vehicles, included above)	9	9	18	0	1	1	
Percent Heavy Vehicle Trips	3.4%	3.8%	3.6%	0.0%	0.1%	0.1%	
Average Auto Occupancy (persons per vehicle)	1.19	1.09	1.14	1.28	1.28	1.28	
Person trips by motorized vehicles	319	258	577	837	888	1,724	
Pedestrian Trips	46	50	96	65	73	138	
Transit Trips	1	0	1	3	5	8	
Bicycle Trips	6	5	11	8	3	11	
Total Person Trips	372	313	685	913	969	1,881	

Table 4.10-10Recorded Peak Period Data Existing Raley's Supermarket

Source: See Appendix H.

For motorized vehicle trips, the peak hour of trip generation occurred from 8:00 to 9:00 a.m. during the morning peak, and from 5:00 to 6:00 p.m. during the afternoon/evening peak. Table 4.10-12 presents the vehicular peak hour trip generation. Table 4.10-12 also presents the vehicular trip generation estimates from the Institute of Transportation Engineers' (ITE) Trip Generation, Ninth Edition, for both a supermarket and a shopping center. The existing Raley's grocery store is 60,989 square feet. The trip generation of the existing facility is higher than the estimates based upon the ITE data.

Table 4.10-11Percentage of Person Trips by Mode Existing Raley's Grocery Store

	AM Peak (7:	PM Peak (4:00 to 6:00 p.m.)				
Mode	Entering	Exiting	Total	Entering	Exiting	Total
Person Trips by Motorized Vehicle	85.8%	82.4%	84.2%	91.7%	91.6%	91.7%
Pedestrian Trips	12.4%	16.0%	14.0%	7.1%	7.5%	7.3%
Transit Trips	0.3%	0.0%	0.1%	0.3%	0.5%	0.4%
Bicycle Trips	1.6%	1.6%	1.6%	0.9%	0.3%	0.6%

Source: See Appendix H.

Vehicular trip generation of the proposed retail development is based upon the following factors:

- Vehicular trip generation collected at the existing Raley's grocery store
- Person trip generation/mode choice information collected at the existing Raley's Supermarket
- ITE Trip Generation, Ninth Edition (ITE 2012)
- ITE *Trip Generation Handbook,* Third Edition (ITE 2014).

The following methodology was used:

- 1. Because the trip generation at the existing Raley's grocery store is higher than the ITE estimates, the local data was used for the first 55,000 square feet of development. Although the proposed grocery store is somewhat smaller than the existing store (55,000 square feet versus 60,989 square feet), no reduction for the reduced size was taken.
- 2. For the daily trip generation of the supermarket, the ratio of daily trips to peak hour trips from the ITE data was applied to the existing counts. The number of daily trips is 7.94 times the sum of the a.m. and p.m. peak commuter hour trips.
- 3. For the remaining retail development, the estimation began with ITE estimates. Because the rate of trips per square foot decreases as a shopping center increases in size, shopping center trip generation was calculated for 55,000 square feet and full

development (108,980 square feet [Scheme A] or 108,165 square feet [Scheme B]). The difference is the ITE estimate for the remaining retail development (53,980 [Scheme A] or 53,165 [Scheme B] square feet).

- 4. The vehicular trip generation for the non-supermarket retail development was adjusted to reflect higher non-motorized vehicular mode share at the existing Raley's store than reflected in typical ITE data. It was assumed that the ITE data typically reflects about 95% person trips by motorized-vehicle mode.
- 5. The number of pass-by trips have also been estimated. Pass-by trips are defined as those trips already on the roadway network (passing by the site) which access the project site. These trips are an intermediate destination on a linked trip. For example, a pass-by trip could be home to grocery store to work, or work to retail use to home. While pass-by trips are new to the project site, and are included in the number of external trips, they are not new to the adjacent roadway network. ITE *Trip Generation Handbook, Third Edition,* provides pass-by trip data for various uses. For land use 820 (shopping center), the average pass-by trip percentage is 34% for the PM peak hour. For land use 850 (supermarket), the average pass-by trip percentage is 36% for the PM peak hour. These values were applied to the corresponding project components for all time periods.
- 6. The resulting trip generation estimates are summarized in Tables 4.10-13 and 4.10-14 for Schemes A and B, respectively. The project is estimated to generate over 6,500 daily vehicle trips, over 200 AM peak hour vehicle trips, and almost 600 PM peak hour vehicle trips.

			Vel	nicle Tri	ps		
	AM Peak Hour (8:00 to 9:00 a.m.)			ır m.)	РМ (5:00	ır m.)	
Source	Daily	Entering	Exiting	Total	Entering	Total	
Counts		149	132	281	338	363	701
ITE Trip Generation, Land Use Code 820 (Shopping Center), 60,989 square feet	2,619	37	22	59	108	118	226
ITE Trip Generation, Land Use Code 850 (Supermarket), 60,989 square feet	6,236	128	79	207	295	283	578

Table 4.10-12Vehicular Trip Generation Existing Raley's Grocery Store

Sources: See Appendix H and ITE Trip Generation, Ninth Edition 2012

			Vehicle Trips						
			AM	Peak Ho	ur	PM	ur)		
			(8:00	to 9:00 a.	.m.)	(5:00	to 6:00 p.	<i>m.)</i>	
	Source	Daily	Entering	Exiting	Total	Entering	Exiting	Total	
1.	Existing Raley's Grocery store	7,801	149	132	281	338	363	701	
2.	ITE Trip Generation, Land Use Code 820 (Shopping Center), 55,000 square feet	4,604	67	41	108	193	209	401	
3.	ITE Trip Generation, Land Use Code 820 (Shopping Center), 108,980 square feet	7,181	102	62	164	305	330	635	
4.	Difference (Retail) (Line 3 minus 2)	2,577	35	21	56	112	121	233	
5.	Adjustment for Non- Motorized Vehicle Modes (Retail only)	-191	-4	-2	-6	-4	-4	-8	
6.	Net Retail Development (53,980 square feet) (Lines 4 plus 5)	2,386	31	19	50	108	117	225	
7.	Pass-By Trips (Supermarket)	-2,808	-54	-48	-101	-122	-131	-252	
8.	Pass-By Trips (Retail)	-811	-10	-6	-17	-37	-40	-77	
9.	Total Pass-By Trips (Lines 7 plus 8)	-3,619	-64	-54	-118	-159	-171	-329	
10	. Total (Lines 1 plus 6 plus 9)	6,568	116	97	213	287	309	597	

Table 4.10-13 Vehicular Trip Generation Proposed Project – Scheme A

Sources: See Appendix H; ITE Trip Generation, Ninth Edition 2012; and ITE Trip generation Handbook, Third Edition, 2014.

				Veh	nicle Trip	os		
			AM	Peak Hou	ur	PM	Peak Hol	ır
			(8:00	to 9:00 a.	<i>m.)</i>	(5:00 1	to 6:00 p.	m.)
	Source	Daily	Entering	Exiting	Total	Entering	Exiting	Total
1.	Existing Raley's Grocery store	7,801	149	132	281	338	363	701
2.	ITE Trip Generation, Land Use Code 820 (Shopping Center), 55,000 square feet	4,604	67	41	108	193	209	401
3.	ITE Trip Generation, Land Use Code 820 (Shopping Center), 108,165 square feet	7,146	101	62	164	303	328	631
4.	Difference (Retail) (Line 3 minus 2)	2,542	34	21	55	110	120	230
5.	Adjustment for Non- Motorized Vehicle Modes (Retail only)	-189	-4	-2	-6	-4	-4	-8
6.	Net Retail Development (53,980 square feet) (Lines 4 plus 5)	2,353	30	19	49	107	115	222
7.	Pass-By Trips (Supermarket)	-2,808	-54	-48	-101	-122	-131	-252
8.	Pass-By Trips (Retail)	-800	-10	-6	-17	-36	-39	-75
9.	Total Pass-By Trips (Lines 7 plus 8)	-3,608	-64	-54	-118	-159	-170	-327
10	. Total (Lines 1 plus 6 plus 9)	6,546	115	97	212	287	308	596

Table 4.10-14Vehicular Trip Generation Scheme B

Sources: See Appendix H; ITE Trip Generation, Ninth Edition 2012; and ITE Trip Generation Handbook, Third Edition, 2014.

Trip Distribution

Peak hour vehicular trip distribution is based on the counts recorded at the existing Raley's store, local characteristics of the City street system, and data from SACOG's regional travel models. Distribution is illustrated in Figures 4.10-8 and 4.10-9.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgement, a significant impact would occur if the proposed project would:

Intersections

- The traffic generated by the project degrades LOS from an acceptable LOS (without the project) to an unacceptable LOS (with the project),
- The LOS (without project) is unacceptable and project generated traffic increases the average vehicle delay by 5 seconds or more.

Note: General Plan Mobility Element Policy M 1.2.2 sets forth definitions for what is considered an acceptable LOS. As previously discussed, Policy M 1.2.2 applies to the study area roadway facilities as follows:

- Study intersections 1 and 2 are located on a LOS F Roadway corridor. LOS F is allowed because expansion of the roadways would cause undesirable impacts or conflict with other community values. LOS F is acceptable during peak hours, provided that the project provides improvements to other parts of the citywide transportation system within the project site vicinity (or within the area affected by the project's vehicular traffic impacts) to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. Road widening or other improvements to road segments are not required.
- Study intersection 6 is located on a LOS E Roadway corridor. LOS E is allowed because expansion of the roadways would cause undesirable impacts or conflict with other community values. LOS F is acceptable during peak hours, provided that the project provides improvements to other parts of the citywide transportation system within the project site vicinity (or within the area affected by the project's vehicular traffic impacts) to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the General Plan goals. Road widening or other improvements to road segments are not required
- For the remainder of the study intersections, LOS A-D is to be maintained at all times; provided, LOS E or F may be acceptable if improvements are made to the overall transportation system and/or non-vehicular transportation and transit are promoted as part of the project or a City-initiated project.



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Transit

- Adversely affect public transit operations,
- Fail to adequately provide access to transit.

Bicycle Facilities

- Adversely affect existing or planned bicycle facilities,
- Fail to adequately provide for access by bicycle.

Pedestrian Circulation

- Adversely affect existing or planned pedestrian facilities,
- Fail to adequately provide for access by pedestrians.

Construction-Related Traffic Impacts

- Degrade an intersection or roadway to an unacceptable level,
- Cause inconveniences to motorists due to prolonged road closures, or
- Result in increased frequency of potential conflicts between vehicles, pedestrians, and bicyclists.

Freeway Facilities

Caltrans considers the following to be significant impacts:

- Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway.
- Project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service.
- Project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility.
- The expected ramp queue is greater than the storage capacity.

Existing Plus Project Traffic Conditions

For analysis purposes, the parcel with the existing Raley's store was assumed to continue to generate the same amount of traffic as it does today. That is, it was assumed that a future use

on the site would generate the same amount of traffic as the existing grocery store does. This is a conservative assumption because a grocery store generates a high number of trips.

Intersections

Figure 4.10-10 illustrates AM peak hour and PM peak hour traffic volumes associated with the existing plus project scenario. The figure also illustrates the intersection geometry of the Existing Plus Project scenario. No changes to off-site intersections have been assumed. The assumed geometry of the stop-sign controlled project driveways is shown in the figure.

Table 4.10-15 summarizes the results of the peak hour intersection analysis. Table 4.10-16 compares intersection operations associated with Scheme A and Scheme B at affected local intersections. Differences in level of service are minimal.

Table 4.10-15Existing Plus Project Intersection Operating Conditions

				AM Peak Hour			r	PM Peak Hour			,
					atina	Existi	ing Plus		inting	Existi	ng Plus
				EXI	sting	Pr	oject	EX	isting	Pr	oject
	Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	S07	Delay (Seconds)	S07	Delay (Seconds)	S07	Delay (Seconds)
1.	Freeport Blvd. and Sutterville Rd. (North)	F	Signalized	С	32.5	С	32.2	С	24.6	С	25.9
2.	Freeport Blvd. and Sutterville Rd. (South)	F	Signalized	С	21.5	С	23.3	С	27.8	С	34.7
3.	Freeport Blvd. and Meer Way	D	Unsignalized	А	1.4	А	1.5	Α	1.4	А	1.4
	Northbound Left/U-Turn			А	9.0	А	9.1	С	19.6	С	21.9
	Southbound Left/U-Turn			С	20.7	С	21.6	В	11.1	В	11.8
	Eastbound			В	10.3	В	10.4	С	15.3	С	16.2
	Westbound			С	15.9	С	16.3	В	11.2	В	11.6
4.	Freeport Blvd. and Wentworth Ave./Stacia Way	D	Signalized	С	27.5	С	31.5	С	29.9	С	27.9
5.	Freeport Blvd. and Fruitridge Rd.	D	Signalized	D	38.7	D	39.1	D	51.9	D	48.1
6.	Land Park Drive and Sutterville Rd.	E	Signalized	D	51.8	Е	62.8	E	60.8	Е	59.2
7.	Land Park Drive and Fruitridge Rd.	D	Signalized	D	35.3	D	35.5	С	33.9	D	36.0
8.	Bank of America/Raley's (East) Driveways and Wentworth Ave.	D	Unsignalized	A	2.4	A	1.6	A	3.8	A	2.9
	Northbound			А	8.9	А	9.2	Α	9.7	В	11.1
	Southbound			А	9.5	В	10.1	В	11.7	В	14.5
	Eastbound Left Turn			А	7.3	Α	7.3	Α	7.5	Α	7.6
	Westbound Left Turn			Α	7.4	Α	7.5	Α	7.5	Α	7.9

Table 4.10-15Existing Plus Project Intersection Operating Conditions

			AM Peak Hour			PM Pea	ak Hour			
			Exi	Existing		ing Plus oject	Existing		Existing Plus Project	
Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	SO 7	Delay (Seconds)	S07	Delay (Seconds)	SO 7	Delay (Seconds)
 Raley's (West) Driveway and Wentworth Ave. 	D	Unsignalized	A	4.2	A	3.0	A	4.7	A	3.2
Northbound			А	8.9	Α	9.5	А	9.3	В	11.2
Westbound Left Turn			А	7.4	Α	7.5	А	7.5	Α	7.9
10. Freeport Blvd. and Bank of America Driveway	D	Unsignalized				No Contr	ol Dela	У		
11. Freeport Blvd. and "Driveway 1"	D	Unsignalized	I	-	A	0.7	-	-	А	4.8
Northbound Left Turn			-	-	A	9.3	-	-	С	19.6
Eastbound Right Turn			I	-	В	11.0	-	-	E	44.8
12. "Driveway 2" and Wentworth Ave.	D	Unsignalized	-	-	A	4.2	-	-	Α	6.2
Southbound			-	-	A	9.7	-	-	В	12.4
Eastbound Left Turn			-	-	A	7.4	-	-	Α	7.6

Source: See Appendix H.

Table 4.10-16 Existing Plus Project Intersection Operating Conditions – Schemes A And B

			AM Peak Hour		PM Peak Hour			r		
			Sci	heme A	Sch	neme B	Scl	heme A	Sch	eme B
Intersection	LOS Criteria	Traffic Control	SOT	Delay (Seconds)	S07	Delay (Seconds)	SOT	Delay (Seconds)	SOT	Delay (Seconds)
 Freeport Blvd. and Sutterville Rd. (North) 	F	Signalized	С	32.2	С	32.2	С	25.9	С	25.9
 Freeport Blvd. and Sutterville Rd. (South) 	F	Signalized	С	21.5	С	28.2	С	34.7	С	26.6
3. Freeport Blvd. and Meer Way	D	Unsignalized	А	1.5	Α	1.5	Α	1.4	Α	1.4
Northbound Left/U-Turn			Α	9.1	Α	9.1	С	21.9	С	21.9
Southbound Left/U-Turn			С	21.6	С	21.6	В	11.8	В	11.8
Eastbound			В	10.4	В	10.4	С	16.2	С	16.2
Westbound			С	16.3	С	16.3	В	11.6	В	11.6
 Freeport Blvd. and Wentworth Ave./Stacia Way 	D	Signalized	С	31.5	С	31.2	С	27.9	С	28.6
5. Freeport Blvd. and Fruitridge Rd.	D	Signalized	D	39.1	D	39.1	D	48.1	D	48.1
6. Land Park Drive and Sutterville Rd.	E	Signalized	Е	62.8	Е	62.8	Е	59.2	E	59.2
7. Land Park Drive and Fruitridge Rd.	D	Signalized	D	35.5	D	35.5	D	36.0	D	36.0
 Bank of America/Raley's (East) Driveways and Wentworth Ave. 	D	Unsignalized	A	1.6	A	1.6	A	2.9	A	2.8
Northbound			А	9.2	А	9.2	В	11.1	В	11.1
Southbound			В	10.1	В	10.1	В	14.5	В	14.5
Eastbound Left Turn			А	7.3	А	7.4	Α	7.6	А	7.6
Westbound Left Turn			Α	7.5	Α	7.5	Α	7.9	Α	7.9

Table 4.10-16
Existing Plus Project Intersection Operating Conditions – Schemes A And B

			AM Peak Hour			PM Peak Hour			r	
			Sch	heme A	Scheme B		Scl	heme A	Scheme B	
Intersection	LOS Criteria	Traffic Control	SOT	Delay (Seconds)	S07	Delay (Seconds)	S07	Delay (Seconds)	S07	Delay (Seconds)
 Raley's (West) Driveway and Wentworth Ave. 	D	Unsignalized	A	3.0	A	3.0	А	3.2	A	3.2
Northbound			Α	9.5	А	9.5	В	11.2	В	11.2
Westbound Left Turn			Α	7.5	Α	7.5	Α	7.9	Α	7.9
10. Freeport Blvd. and Bank of America Driveway	D	Unsignalized				No Con	trol De	lay		
11. Freeport Blvd. and "Driveway 1"	D	Unsignalized	А	0.7	A	0.7	А	4.8	A	4.7
Northbound Left Turn			Α	9.3	А	9.3	С	19.6	С	19.1
Eastbound Right Turn			В	11.0	В	11.0	Е	44.8	Е	44.8
12. "Driveway 2" and Wentworth Ave.	D	Unsignalized	Α	4.2	Α	4.2	Α	6.2	Α	6.2
Southbound			А	9.7	Α	9.7	В	12.4	В	12.4
Eastbound Left Turn			Α	7.4	А	7.4	А	7.6	А	7.6

Source: See Appendix H.



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Freeway Operations

Table 4.10-17 summarizes the existing plus project peak hour freeway mainline levels of service.

Table 4.10-17	
Existing Plus Project Peak Hour freeway Mainline Level of Service	/ice

				Ex	kisting		Existing Pl Project		
Direction	Location	Through Lanes	Aux. Lanes	Volume	Density	S07	Volume	Density	S07
			AM Peak Ho	our					
North- bound I-5	North of Sutterville Road	4	0	8,464	41.6	Ш	8,479	36.1	E
	South of Seamas Avenue	4	1	7,863	48.6	ш	7,865	48.6	F
South- bound I-5	North of Sutterville Road	4	0	3,169	12.5	В	3,178	12.5	В
	South of Seamas Avenue	4	1	3,601	11.8	В	3,605	11.8	В
			PM Peak Ho	our					
North- bound I-5	North of Sutterville Road	4	0	4,978	19.8	С	5,018	19.9	С
	South of Seamas Avenue	4	1	5,088	17.2	В	5,102	17.2	В
South- bound I-5	North of Sutterville Road	4	0	6,877	28.7	D	6,911	28.9	D
	South of Seamas Avenue	4	1	7,971	28.7	D	7,993	28.8	D

Source: DKS Associates 2016.

Table 4.10-18 summarizes the existing plus project peak hour freeway ramp junction levels of service.

			Exist	ing	Existing Proje	g Plus ect
Direction	Lesstien	Junction	Ramp	100	Ramp	
Direction	Location		volume	L03	volume	L03
	AIVI Pea	ак поиг				
North-	Sutterville Road Entrance	Merge	539	D	554	D
bound I-5	Seamas Avenue Exit	Weave	176	F^1	178	F ¹
South-	Sutterville Road Exit	Diverge	307	В	316	В
bound I-5	Seamas Avenue Entrance	Weave	311	В	315	В
	PM Pea	ak Hour				
North-	Sutterville Road Entrance	Merge	326	В	366	В
bound I-5	Seamas Avenue Exit	Weave	314	В	328	В
South-	Sutterville Road Exit	Diverge	411	D	445	D
bound I-5	Seamas Avenue Entrance	Weave	600	D	622	D

Table 4.10-18Existing Peak Hour Freeway Ramp Junction Level of Service

Note:

Constrained by mainline congestion.

Source: See Appendix H.

Table 4.10-19 summarizes the existing plus project peak hour intersection operating conditions at the freeway ramp termini.

Table 4.10-20 summarizes the existing plus project peak hour freeway ramp queuing.

Table 4.10-19

Existing Plus Project Intersection Operating Conditions at Freeway Ramp Termini

			Exi	sting	Exis Plus F	ting Project
Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	S07	Delay (Seconds)
	AM Peak F	lour				
 I-5 Northbound Ramps and Sutterville Rd. 	F	Unsignalized	A	1.7	A	1.7
Northbound Through/Left Turn			В	12.7	В	12.8
Northbound Right Turn			В	10.3	В	10.4
Eastbound Left Turn			А	7.7	А	7.7

				Exi	sting	Exis Plus F	sting Project
	Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	S07	Delay (Seconds)
2.	I-5 Northbound Ramps and Seamas Ave.	F	Signalized	С	34.7	С	34.7
3.	I-5 Southbound Ramps and Sutterville Rd.	F	Unsignalized	В	10.3	В	10.3
	Southbound			В	10.2	В	10.3
	Eastbound			Α	7.9	А	7.9
	Westbound			В	10.4	В	10.4
4.	I-5 Southbound Ramps and Seamas Ave.	F	Signalized	В	12.8	В	12.9
		PM Peak H	Hour				
1.	I-5 Northbound Ramps and Sutterville Rd.	F	Unsignalized	А	2.4	A	2.3
	Northbound Through/Left Turn			С	17.7	С	18.3
	Northbound Right Turn			В	11.7	В	11.9
	Eastbound Left Turn			Α	8.3	А	8.3
2.	I-5 Northbound Ramps and Seamas Ave.	F	Signalized	С	27.3	С	29.1
3.	I-5 Southbound Ramps and Sutterville Rd.	F	Unsignalized	С	15.7	С	16.1
	Southbound			В	12.7	В	13.2
	Westbound			А	8.6	Α	8.7
	Westbound			С	18.5	С	19.1
4.	I-5 Southbound Ramps and Seamas Ave.	F	Signalized	В	15.6	В	16.2

Table 4.10-19Existing Plus Project Intersection Operating Conditions at Freeway Ramp Termini

Source: See Appendix H.

		Available Storage	Maximu Length	im Queue (feet/lane)
		Length		Existing
Direction	Location	(feet/lane)	Existing	Plus Project
North-	Sutterville Road Exit – Through and	575	<1	<1
bound I-5	Left Turn			
	Sutterville Road Exit – Right Turn	575	23	23
	Seamas Avenue Exit	640	24	24
South-	Sutterville Road Exit	735	23	25
bound I-5	Seamas Avenue Exit – Left Turn	835	79	79
	Seamas Avenue Exit – Through and Right Turn	835	15	15
	PM Peak H	lour		
North- bound I-5	Sutterville Road Exit – Through and Left Turn	575	3	3
	Sutterville Road Exit – Right Turn	575	38	38
	Seamas Avenue Exit	640	40	41
South-	Sutterville Road Exit	735	43	48
bound I-5	Seamas Avenue Exit – Left Turn	835	110	110
	Seamas Avenue Exit – Through and Right Turn	835	24	24

Table 4.10-20Existing Peak Hour Freeway Ramp Termini Queuing

Source: See Appendix H.

Project Specific Impacts and Mitigation Measures

4.10-1: The proposed project could cause potentially significant impacts to study area intersections. Based on the analysis below the impact is *less than significant*.

As summarized in Table 4.10-15, the addition of project traffic would generally increase average delay at study area intersections. However, all of the intersections would continue to operate at a permissible level of service and the impact is **less than significant**.

Mitigation Measure

None required.

4.10-2: The proposed project could cause potentially significant impacts to transit. Based on the analysis below the impact is *less than significant*.

The proposed project would not adversely affect public transit operations. Project employees and patrons would be provided adequate access to transit, including bus routes along Freeport Boulevard. The nearest light rail station to the project site is the City College Station on the Blue Line, which is about a mile walking distance. Bus Route 62 operates in each direction along Freeport Boulevard past the site and has stops located south of Wentworth Avenue/Stacia Way and north of Argail Way (northbound and southbound). Transit service within the study area currently has adequate capacity, and per RT's Transit Master Plan (i.e., Transit Action Plan), ridership is periodically monitored to determine the need for additional service. Therefore, project impacts to transit are considered **less than significant**.

Mitigation Measure

None required.

4.10-3: The proposed project could cause potentially significant impacts to pedestrian facilities. Based on the analysis below the impact is *less than significant*.

The proposed project includes the construction of new pedestrian facilities in the City's right-ofway along Freeport Boulevard and Wentworth Avenue, per City standards. The proposed project includes a 6-foot wide internal sidewalk connecting the project site to Wentworth Avenue and Freeport Boulevard. Sidewalks and pedestrian plazas would provide pedestrian access throughout the site. The project is not anticipated to adversely affect existing or planned pedestrian facilities. The impact would be **less than significant**.

Mitigation Measure

None required.

4.10-4: The proposed project could cause potentially significant impacts to bicycle facilities. Based on the analysis below the impact is *less than significant*.

Implementation of the proposed project would not remove any existing bicycle facilities or interfere with any bicycle facility that is planned by the City. The City is currently planning on narrowing Freeport Boulevard between 4th Avenue and Sutterville Road and adding Class II bike lanes along both sides of Freeport Boulevard. There is an existing Class II bike lane along Freeport Boulevard from Sutterville Road south. Bicycle access would be provided along all internal driveways within the project site. The impact would be **less than significant**.

Mitigation Measure

None required.

4.10-5: The proposed project could cause potentially significant impacts due to construction-related activities. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

Construction may include disruptions to the transportation network near the project site, including the possibility of temporary lane closures, street closures, sidewalk closures, and bikeway closures. Pedestrian, bicycle, and transit access may be disrupted. Heavy vehicles, equipment and trucks would access the site and may need to be staged for construction. These activities could result in degraded roadway operating conditions. Therefore, the impacts are considered **significant**.

Mitigation Measure

Implementation of this mitigation measure would reduce this impact to **less than significant** by requiring preparation of a construction traffic and parking plan that would ensure acceptable operating conditions on all local roadways and freeway facilities are maintained.

- **4.10-5** Prior to the beginning of construction, the applicant shall prepare a construction traffic and parking management plan to the satisfaction of the City's Traffic Engineer and subject to review by all affected agencies. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained. At a minimum, the plan shall include:
 - Description of trucks including: number and size of trucks per day, expected arrival/departure times, truck circulation patterns.
 - Description of staging area including: location, maximum number of trucks simultaneously permitted in staging area, use of traffic control personnel, specific signage.
 - Description of street closures and/or bicycle and pedestrian facility closures including: duration, advance warning and posted signage, safe and efficient access routes for emergency vehicles, and use of manual traffic control.
 - Description of driveway access plan including: provisions for safe vehicular, pedestrian, and bicycle travel, minimum distance from any open trench, special signage, and private vehicle accesses.
 - Provisions for parking for construction workers.

4.10-6: The proposed project could cause potentially significant impacts to study area freeway system. Based on the analysis below the impact is *less than significant*.

As summarized in Tables 4.10-17 and 4.10-18, the proposed project would add traffic to a freeway segment (I-5) and ramp junction that is already operating at LOS F. However, as this increase is only two vehicles in the AM peak hour, the impact is considered **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

For the cumulative scenarios, traffic associated with full development of the project has been added to future year traffic on the roadway system. The future year forecasts were developed through use of SACOG's regional SACSIM travel model for the year 2035. The regional travel model encompasses the entire Sacramento region, and forecasts peak hour and daily traffic volumes based upon projections of future land use and transportation networks throughout the region.

Cumulative impacts to pedestrian, bicycles and transit are not included, as they are considered to be the same as the project impacts.

Cumulative (Without Project) Traffic Conditions

Intersections

Figure 4.10-11 illustrates AM peak hour and PM peak hour traffic volumes associated with the cumulative scenario. The figure also illustrates the intersection geometry of the cumulative scenario. No changes to off-site intersections have been assumed. Table 4.10-21 summarizes the results of the peak hour intersection analysis.

Table 4.10-21Cumulative Plus Project Intersection Operating Conditions

			AM Peak Hour				PM Peak Hour			
			Cumulative		nulative			Cumulative		
			Cumulative		Plus Project		Cumulative		Plus Project	
Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	SOT	Delay (Seconds)	S07	Delay (Seconds)	S07	Delay (Seconds)
1. Freeport Blvd. and Sutterville Rd. (North)	F	Signalized	D	38.0	D	38.2	С	25.1	С	25.6
 Freeport Blvd. and Sutterville Rd. (South) 	F	Signalized	С	31.1	С	31.0	С	25.7	С	29.4
3. Freeport Blvd. and Meer Way	D	Unsignalized	А	1.6	А	1.6	А	1.5	Α	1.5
Northbound Left/U-Turn			А	9.0	А	9.1	С	24.9	D	28.5
Southbound Left/U-Turn			D	25.6	D	26.9	В	11.1	В	11.8
Eastbound			В	10.3	В	10.4	С	17.3	С	18.4
Westbound			С	17.7	С	18.2	В	11.2	В	11.7
 Freeport Blvd. and Wentworth Ave./Stacia Way 	D	Signalized	С	28.5	С	26.7	С	29.9	С	31.6
5. Freeport Blvd. and Fruitridge Rd.	D	Signalized	D	42.9	D	46.2	D	49.2	D	46.2
6. Land Park Drive and Sutterville Rd.	Е	Signalized	Е	56.2	Е	65.1	Е	67.8	Е	68.1
7. Land Park Drive and Fruitridge Rd.	D	Signalized	D	39.5	D	37.0	D	45.3	D	50.3
 Bank of America/Raley's (East) Driveways and Wentworth Ave. 	D	Unsignalized	A	2.4	А	1.7	А	3.8	A	2.9
Northbound			А	8.9	А	9.2	А	9.7	В	11.1
Southbound			А	9.5	В	10.1	В	11.7	В	14.4
Eastbound Left Turn			А	7.3	А	7.3	А	7.5	Α	7.5
Westbound Left Turn			А	7.4	А	7.5	А	7.5	Α	7.9

Table 4.10-21Cumulative Plus Project Intersection Operating Conditions

			AM Peak Hour				PM Peak Hour			
			Cumulative		<i>Cumulative</i>		Quantation		Cumulative	
					Plus Project		Cumulative		Plus Project	
Intersection	LOS Criteria	Traffic Control	S07	Delay (Seconds)	S07	Delay (Seconds)	SOT	Delay (Seconds)	SOT	Delay (Seconds)
9. Raley's (West) Driveway and Wentworth	D	Unsignalized	А	4.2	А	3.0	А	4.7	А	3.2
Northbound			Α	8.9	Α	9.5	Α	9.3	В	11.2
Westbound Left Turn			А	7.4	Α	7.5	Α	7.5	Α	7.9
10. Freeport Blvd. and Bank of America Driveway	D	Unsignalized	No Control Delay							
11. Freeport Blvd. and "Driveway 1"	D	Unsignalized	-	-	Α	0.7	-	-	Α	4.9
Northbound Left Turn			-	-	Α	9.3	-	-	С	19.5
Eastbound Right Turn			-	-	В	11.1	-	-	Е	45.9
12. "Driveway 2" and Wentworth Ave.	D	Unsignalized	-	-	А	4.3	-	-	Α	6.2
Southbound			-	-	Α	9.7	-	-	В	12.3
Eastbound Left Turn			-	-	A	7.4	-	-	Α	7.6

Source: See Appendix H.

Freeway Operations

Table 4.10-22 summarizes the cumulative plus project peak hour freeway mainline levels of service.

Table 4.10-23 summarizes the cumulative plus project peak hour freeway ramp junction levels of service.

Table 4.10-24 summarizes the cumulative plus project peak hour intersection operating conditions at the freeway ramp termini.

Table 4.10-25 summarizes the cumulative plus project peak hour freeway ramp queuing.

Cumulative Plus Project Traffic Conditions

Figures 4.10-12 and 4.10-13 illustrate the anticipated future distribution of site traffic during the peak hours.

Intersections

Figure 4.10-14 illustrates AM peak hour and PM peak hour traffic volumes associated with the cumulative plus project scenario. The figure also illustrates the intersection geometry of the Cumulative Plus Project scenario. No changes to off-site intersections have been assumed. The assumed geometry of the stop-sign controlled project driveways is shown in the figure.

Table 4.10-21 summarizes the results of the peak hour intersection analysis. Table 4.10-26 compares intersection operations associated with Scheme A (proposed project) and Scheme B at affected local intersections. Differences in level of service are minimal.

Freeway Operations

Table 4.10-22 summarizes the cumulative plus project peak hour freeway mainline levels of service.

Table 4.10-23 summarizes the cumulative plus project peak hour freeway ramp junction levels of service.

Table 4.10-24 summarizes the cumulative plus project peak hour intersection operating conditions at the freeway ramp termini.

Table 4.10-25 summarizes the cumulative plus project peak hour freeway ramp queuing.

4.10-7: The proposed project could cause potentially significant impacts to study area intersections under cumulative plus project conditions. Based on the analysis below the impact is *less than significant.*

As summarized in Table 4.10-21, the addition of project traffic would generally increase average delay at study area intersections. However, all of the intersections would continue to operate at
an acceptable level of service under cumulative plus project conditions. Under cumulative conditions without the addition of project traffic the impact would be **less than significant**. Therefore, the project would not be contributing to an existing significant cumulative impact.

Mitigation Measure

None required.

				Cur	nulative	Cumi	ulative P Project	lus	
Direction	Location	Through Lanes	Aux. Lanes	Volume ¹	Density	S07	Volume ¹	Density	S07
			AM	Peak Hour					
North- bound I-5	North of Sutterville Road	4	0	8,997	47.7	F	9,006	47.8	F
	South of Seamas Avenue	4	1	8,914	53.9	F	8,916	53.9	F
South- bound I-5	North of Sutterville Road	4	0	3,772	14.9	В	3,783	14.9	В
	South of Seamas Avenue	4	1	4,121	13.4	В	4,124	13.4	В
			PM	Peak Hour					
North- bound I-5	North of Sutterville Road	4	0	5,381	21.5	С	5,424	21.7	С
	South of Seamas Avenue	4	1	5,489	18.5	С	5,492	18.5	С
South- bound I-5	North of Sutterville Road	4	0	7,516	32.8	D	7,560	33.2	D
	South of Seamas Avenue	4	1	8,523	31.2	D	8,526	31.2	D

Table 4.10-22Cumulative Plus Project Peak Hour Freeway Mainline Level of Service

Note:

¹ Mixed-flow lanes only, does not include planned HOV lanes. **Source:** See Appendix H.

4.10 – Transportation and Circulation

			Cumulative		Cumulat Plus Pro	tive ject
Direction	Location	Junction Type	Ramp Volume	SOT	Ramp Volume	SOT
North-bound I-5	Sutterville Road Entrance	Merge	592	F ¹	601	F ¹
	Seamas Avenue Exit	Weave	252	F ¹	255	F ¹
South-bound I-5	Sutterville Road Exit	Diverge	462	С	474	С
Seamas Avenue Entrance		Weave	292	В	295	В
North-bound I-5	Sutterville Road Entrance	Merge	505	С	548	С
	Seamas Avenue Exit	Weave	341	С	344	С
South-bound I-5	Sutterville Road Exit	Diverge	606	Е	649	Е
Seamas Avenue Entrance		Weave	663	D	666	D

Table 4.10-23Cumulative Peak Hour freeway Ramp Junction Level of Service

Note:

¹ Constrained by mainline congestion.

Source: DKS Associates 2016.

4.10-8: The proposed project could cause potentially significant impacts to study area freeway system under cumulative plus project conditions. Based on the analysis below the impact is *less than significant.*

As summarized in Tables 4.10-24 and 4.10-25, the proposed project would add traffic to freeway segments and ramp junctions that would be already operating at LOS F without the project. However, the proposed project would result in an increase of 9 vehicles or fewer in the AM peak hour. The project's incremental contribution to this existing significant cumulative impact would not be considerable; therefore, the impact is considered **less than significant**.

Mitigation Measure

None required.

				Cu	mulativ e	Cumu Plus F	ulative Project
	Intersection	LOS Criteria	Traffic Control	SOT	Delay (Seconds)	SO 7	Delay (Seconds)
		AM Peak H	lour				
1.	I-5 Northbound Ramps and Sutterville Rd.	F	Unsignalized	A	5.7	A	5.7
	Northbound Through/Left Turn			С	15.3	С	15.5
	Northbound Right Turn			С	19.2	С	19.6
	Eastbound Left Turn			Α	7.8	Α	7.8
2.	I-5 Northbound Ramps and Seamas Ave.	F	Signalized	D	35.5	D	35.4
3.	I-5 Southbound Ramps and Sutterville Rd.	F	Unsignalized	В	12.0	В	12.2
	Southbound			В	12.0	В	12.2
	Eastbound			Α	8.4	Α	8.4
	Westbound			В	12.1	В	12.2
4.	I-5 Southbound Ramps and Seamas Ave.	F	Signalized	В	12.0	В	12.1
		PM Peak H	lour	•			
1.	I-5 Northbound Ramps and Sutterville Rd.	F	Unsignalized	A	3.7	A	3.7
	Northbound Through/Left Turn			D	27.5	D	29.0
	Northbound Right Turn			С	17.7	С	18.7
	Eastbound Left Turn			Α	8.9	Α	8.9
2.	I-5 Northbound Ramps and Seamas Ave.	F	Signalized	С	34.7	D	39.6
3.	I-5 Southbound Ramps and Sutterville Rd.	F	Unsignalized	E	39.7	E	39.8
	Southbound			С	18.9	С	20.2
	Westbound			Α	9.4	А	9.5
	Westbound			F	59.7	F	60.0
4.	I-5 Southbound Ramps and Seamas Ave.	F	Signalized	В	16.8	В	17.0

Table 4.10-24

Cumulative Plus Project Intersection Operating Conditions at Freeway Ramp Termini

Source: See Appendix H.

		Available Storage	Maximum Q (feet/	ueue Length /lane)
Direct ion	Location	Length (feet/lane)	Cumulative	Cumulative Plus Project
	AM Pea	ak Hour		
North- bound	Sutterville Road Exit – Through and Left Turn	575	3	3
I-5	Sutterville Road Exit – Right Turn	575	140	145
	Seamas Avenue Exit	640	28	28
South-	Sutterville Road Exit	735	43	45
bound	bound Seamas Avenue Exit – Left Turn		17	17
I-5 Seamas Avenue Exit – Through and Right Turn		835	79	79
	PM Pea	ak Hour		
North- bound	Sutterville Road Exit – Through and Left Turn	575	3	3
I-5	Sutterville Road Exit – Right Turn	575	103	110
	Seamas Avenue Exit	640	39	39
South-	Sutterville Road Exit	735	95	105
bound	Seamas Avenue Exit – Left Turn	835	36	36
1-5	Seamas Avenue Exit – Through and Right Turn	835	149	149

Table 4.10-25 Cumulative Peak Hour Freeway Ramp Termini Queuing

Source: See Appendix H

Table 4.10-26
Cumulative Plus Project Intersection Operating Conditions – Schemes A And B

				AM Peak Hour		PM Peak Hour			ır	
			Sch	neme A	Sch	eme B	Sch	eme A	Sch	eme B
Intersection	LOS Criteria	Traffic Control	SOT	Delay (Seconds)	SOT	Delay (Seconds)	SOT	Delay (Seconds)	S07	Delay (Seconds)
1. Freeport Blvd. and Sutterville Rd. (North)	F	Signalized	D	38.2	D	38.2	С	25.6	С	25.6
2. Freeport Blvd. and Sutterville Rd. (South)	F	Signalized	С	31.0	С	31.0	С	29.4	С	29.4
3. Freeport Blvd. and Meer Way	D	Unsignalized	А	1.6	А	1.6	Α	1.5	А	1.5
Northbound Left/U-Turn			А	9.1	А	9.1	D	28.5	D	28.5
Southbound Left/U-Turn			D	26.9	D	26.9	В	11.8	В	11.8
Eastbound			В	10.4	В	10.4	С	18.4	С	18.4
Westbound			С	18.2	С	18.2	В	11.7	В	11.7
 Freeport Blvd. and Wentworth Ave./Stacia Way 	D	Signalized	С	26.7	С	26.6	С	31.6	С	32.4
5. Freeport Blvd. and Fruitridge Rd.	D	Signalized	D	46.2	D	46.2	D	46.2	D	46.2
6. Land Park Drive and Sutterville Rd.	E	Signalized	Е	65.1	Е	65.1	Е	68.1	Е	68.1
7. Land Park Drive and Fruitridge Rd.	D	Signalized	D	37.0	D	37.0	D	50.3	D	50.3
8. Bank of America/Raley's (East) Driveways and Wentworth Ave.	D	Unsignalized	A	1.7	A	1.6	A	2.9	A	2.9
Northbound			А	9.2	Α	9.2	В	11.1	В	11.1
Southbound			В	10.1	В	10.1	В	14.4	В	14.5
Eastbound Left Turn			Α	7.3	А	7.4	Α	7.5	Α	7.6
Westbound Left Turn			Α	7.5	Α	7.5	Α	7.9	Α	7.9

Table 4.10-26
Cumulative Plus Project Intersection Operating Conditions – Schemes A And B

				AM Pe	ak Ho	our		PM Pea	ak Hou	ır
			Sch	neme A	Sch	eme B	Sch	eme A	Sche	eme B
Intersection	LOS Criteria	Traffic Control	SOT	Delay (Seconds)	SOT	Delay (Seconds)	SOT	Delay (Seconds)	S07	Delay (Seconds)
 Raley's (West) Driveway and Wentworth Ave. 	D	Unsignalized	A	3.0	А	3.0	A	3.2	А	3.2
Northbound			Α	9.5	А	9.5	В	11.2	В	11.2
Westbound Left Turn			Α	7.5	А	7.5	Α	7.9	А	7.9
10. Freeport Blvd. and Bank of America Driveway	D	Unsignalized	No Control Delay							
11. Freeport Blvd. and "Driveway 1"	D	Unsignalized	Α	0.7	А	0.7	Α	4.9	А	4.8
Northbound Left Turn			Α	9.3	А	9.3	С	19.5	С	19.1
Eastbound Right Turn			В	11.1	В	11.1	Е	45.9	Е	45.9
12. "Driveway 2" and Wentworth Ave.	D	Unsignalized	А	4.3	А	4.3	Α	6.2	А	6.3
Southbound			Α	9.7	А	9.7	В	12.3	В	12.4
Eastbound Left Turn			Α	7.4	А	7.4	Α	7.6	А	7.6

Source: See Appendix H.









4.10.5 Non-CEQA Effects

In recognition of the City's relevant General Plan Mobility Element goals and policies (listed above) and as requested by City staff, additional information and recommendations are presented below. This information and analysis is not required under CEQA, but is provided at the request of the lead agency.

Vehicle Miles Traveled

As noted in Table 4.10-13, the proposed project is estimated to generate 6,568 daily vehicle trips. SACOG's SACMET model was utilized to estimate vehicular trip length for retail trips to the project site. A daily average trip length of 4.51 miles was calculated. This yields 29,629 daily vehicle-miles of travel (VMT) associated with the project.

This number cannot be directly compared to typical regional (or local) VMT averages, as such averages are based on all trip purposes on a per capita (or per household) basis. For a reasonable comparison, the project VMT has been compared to the average regional VMT for a retail project that generates an equal number of person trips.

For the project, trip-making characteristics determined from peak period counts at the existing Raley's site were applied to the proposed retail development. SACOG's SACMET model was utilized to determine the trip-making characteristics associated with all shopping trips throughout the region. Table 4.10-27 summarizes the information. Based on the calculations, the project's VMT is about 7% lower than an average retail development in the region with the same person trip generation. As shown in Table 4.10-27, shorter average trip lengths and a greater percentage of trips by non-automotive modes contributes to this additional reduction.

Table 4.10-27Mode Choice and Trip Length Comparison

Characteristic	Proposed Project	Regional Average
Average Daily Vehicle Trip Length (miles)	4.51	4.73
Percent Person Trips by Auto	89.7%	92.5%

Source: See Appendix H.

Neighborhood Street Volumes

Table 4.10-28 presents neighborhood street volumes with and without the proposed project for selected street segments. With the addition of project traffic, the daily traffic volumes remain below the threshold for LOS A operations (3,000 vehicles per day).

		Without Project		With Project	
		Daily		Daily	
Roadway	Segment	Volume	LOS	Volume	LOS
Wentworth Avenue	East of Mead Avenue	1,631	А	2,551	А
Mead Avenue	North of Wentworth Avenue	677	A	890	A

Table 4.10-28Neighborhood Street Segment Conditions

Source: See Appendix H.

Pedestrian and Bicycle Access

In consideration of the City's 2035 General Plan goals related to safe bicycle and pedestrian access, and also in consideration of the impacts of automobile traffic, improvements to pedestrian and bicycle access are recommended. The recommendations include the project applicant working with the City to develop a list of improvements to increase both mode share and safety for pedestrians and bicyclists accessing the project site. The following improvements are recommended. They are not required as mitigation for the project, but will be included in the conditions of approval for the project (see Chapter 2 for a summary):

Pedestrian Access

- 1. The site plan should be modified to improve pedestrian circulation on-site:
 - a. Clear pedestrian paths, with minimal vehicular conflicts, should be provided between buildings on-site.
 - b. Logical, direct connections from the Grocery/Shops complex to:
 - i. Freeport Boulevard in the northeast corner of the site.
 - ii. Freeport Boulevard in the vicinity of the existing Bank of America
 - iii. Wentworth Avenue, west of "Driveway 2".
- 2. The intersection of Freeport Boulevard and Meer Way has been noted in the NOP comments (and previously to the City) as a difficult location for pedestrians to cross due to the traffic volume on Freeport Boulevard (as noted in NOP comments and in previous comment to City staff). The proposed project would increase pedestrian crossings at this location. The City recommends that this intersection should be modified with the installation of a traffic signal, with all turning movements permitted at the intersection. The traffic signal would provide safe crossing control for pedestrians. Appendix H includes projected traffic volumes at this intersection as well as traffic signal warrants.
- 3. A marked pedestrian crossing of Wentworth Avenue on the west side of the intersection with "Driveway 2" should be provided. This crossing would provide access to the future

uses on the existing Raley's store site, as well as to the sidewalk on the south side of Wentworth Avenue providing neighborhood access. There are no marked crossings within 300 feet of this location. Installation of this crossing would necessitate elimination of the existing speed lumps near this location. Therefore, the crossing should be designed to both safely accommodate pedestrian crossings and to control speed to reasonable residential levels. Some potential speed control measures include textured crossing pavement, curb bump-outs, a raised crosswalk, and/or a median refuge.

4. Traffic signal phasing at the intersection of Freeport Boulevard with Wentworth Avenue/Stacia Way should be modified to improve pedestrian crossing of Freeport Boulevard. Currently, the eastbound and westbound approaches proceed concurrently with permissive phasing for left turns. The east–west phasing should be modified to split phasing, in which each approach proceeds separately. This would eliminate eastbound and westbound left turn conflicts with pedestrians. The eastbound approach should be restriped to provide a left turn lane and a shared left – through – right turn lane. The intersection would operate at LOS D during the peak hours, which meets the City's LOS goal for this intersection. (Details are included in Appendix H.)

Bicycle Access

- 1. The site plan should be modified to provide clear bike paths/lanes from Freeport Boulevard and Wentworth Avenue to (at a minimum) the Grocery/Shops complex.
- 2. Bicycle parking should be distributed throughout the project site to serve individual merchants, and shall be prominently located to increase bicycling visibility.

Vehicular Site Access Operations and Queuing

The peak period intersection analysis was reviewed to determine design (95th percentile) queue lengths for critical turn lanes accessing the project site. Figure 4.10-15 illustrates the peak hour traffic volumes at the driveways associated with the Existing Plus Project scenario.

Freeport Boulevard and "Driveway 1"

As noted in the intersection operations summaries (Tables 4.10-15, 4.10-16, 4.10-21, and 4.10-22), this intersection is anticipated to operate at an acceptable level of service. The 95th percentile queue for eastbound vehicles exiting the site is 153 feet, which appears to be accommodated by the proposed driveway throat length.

The 95th percentile queue for the proposed northbound turn lane into the site during the peak commute hours is 50 feet, which can be accommodated within the existing median.

"Driveway 2" and Wentworth Avenue

The southbound roadway exiting the site is expected to operate at an acceptable level of service. A throat length of at least 50 feet should be provided, which appears to be greater than the distance provided on the project site plan.

Freeport Boulevard and Wentworth Avenue/Stacia Way

This discussion of queue lengths assumes implementation of the split traffic signal phasing discussed previously in this section.

The eastbound design queue length (95th percentile) for the left turn is about 303 feet during the PM peak hour. To accommodate a portion of this distance (about 230 feet), and also eliminate potential congestion on Wentworth Avenue westbound due to left turning vehicles, it is recommended that a median be constructed on Wentworth Avenue from Freeport Boulevard to Intersection 9 (Raley's West Driveway). This median would eliminate left turns at Intersection 8 (Bank of America Driveway/Raley's East Driveway). Note that the queue would occasionally extend past Intersection 9.

At the site of the existing Raley's store, traffic can easily re-route in the parking lot from Intersection 8 to Intersection 9 to accomplish the left turn movements. From the Bank of America parking lot, vehicles parked in the northern portions of the lot can divert from Intersection 8 to "Driveway 2" under Scheme B. Otherwise, exiting traffic would be forced to turn right at Wentworth Avenue. Scheme B is preferred from a traffic circulation standpoint.

The southbound Freeport Avenue design queue length of the left turn at Wentworth Avenue/Stacia Way is 186 feet. It is recommended that the existing southbound left turn be lengthened to 200 feet, with the remaining median distance converted to a northbound left turn lane to "Driveway 1".



4.10.6 References Cited

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CHAPTER 5 PROJECT ALTERNATIVES

5.0 INTRODUCTION

The purpose of the alternatives evaluation in an Environmental Impact Report (EIR), as stated in Section 15126.6(c) of the California Environmental Quality Act (CEQA) Guidelines, is to ensure that "[t]he range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects" identified under the proposed project. Pursuant to CEQA Guidelines, Section 15126.6, alternatives to the project are presented in this Draft EIR to provide the public and decision makers with a range of possible alternatives to the proposed project to consider. The CEQA Guidelines state that an EIR shall describe a reasonable range of alternatives that would avoid or substantially lessen any significant effects of the project, but need not consider every conceivable alternative. The CEQA Guidelines further state that "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" (CEQA Guidelines, Section 15126.6(b)). Therefore, an EIR must describe a range of reasonable alternatives to the proposed project (or to its location) that could feasibly attain most of the basic objectives of the project. The feasibility of an alternative may be determined based on a variety of factors, including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (CEQA Guidelines, Section 15126.6(f)(1)).

Alternatives in an EIR must be potentially feasible (CEQA Guidelines, Section 15126.6(a)). Agency decision makers ultimately decide what is "actually feasible." (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal. App. 4th 957, 981 (*CNPS*).) Under CEQA, "feasible" is defined as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines, Section 15364). The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1506-1509; *CNPS*, *supra*, 177 Cal. App. 4th at p. 1001; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165, 1166.) Moreover, "feasibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.)

An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project. The alternatives discussion is intended to focus on alternatives to the project or its location that 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 as listed in Chapter 2, Project Description, and in this chapter of this Draft EIR.

The lead agency's decision making body, in this case the Sacramento City Council, has the discretion to select a project alternative in lieu of the project. If this were to occur, the City Council would need to ensure that the level of detail included in the alternatives analysis is adequate and that there would not be any new or significant impacts as a result of selecting the alternative. The required Findings of Fact and Mitigation Monitoring Plan (MMP) would need to be prepared that identifies the alternative as the project selected for approval. Because there are no significant and unavoidable environmental impacts identified, a Statement of Overriding Considerations is not required to be prepared. It is anticipated that if one of the project alternatives is selected, the mitigation measures identified for the project would not change and would still be required and, depending on the alternative selected, may require additional mitigation measures where impacts are more severe than the proposed project.

This chapter identifies the proposed project objectives, describes the project alternatives, and evaluates the comparative effects of the alternatives relative to the proposed project. As required under Section 15126.6(e) of the CEQA Guidelines, the environmentally superior alternative is identified and included at the end of this chapter.

Project Objectives

Pursuant to CEQA Guidelines, Section 15124(b), a clear statement of project objectives is required. The proposed project includes the following project objectives.

- Develop a Flagship grocery store and pharmacy along with a commercial center that includes a mix of small retail and restaurant uses that will support the Land Park, South Land Park, Hollywood Park, Curtis Park and other surrounding neighborhoods.
- Provide a mix of retail services and uses along the block of Freeport Boulevard south of Sutterville Road and north of Wentworth Boulevard that complements the existing businesses and are proximate to residential neighborhoods.
- Provide for a welcoming neighborhood outdoor dining and gathering place for local residents that complements the existing urban fabric in the area.

- Design aesthetically pleasing buildings that maximize natural light to the extent possible and provide a mix of landscaping that adds interest and color to this portion of Freeport Boulevard.
- Maximize potential infill development opportunities consistent with the Sacramento 2035 General Plan and Metropolitan Transportation Plan and Sustainable Communities Strategy.
- Create a pedestrian-friendly development that promotes pedestrian and bicycle use from the surrounding neighborhoods and provides bicycle and pedestrian access to other surrounding uses to reduce regional vehicle miles traveled and greenhouse gas emissions.
- Locate buildings and parking areas to minimize potential noise disturbance to the • majority of adjacent residences.

Alternatives Considered but Dismissed from Further Consideration

As noted previously, the purpose of an alternatives analysis is to develop alternatives to the proposed project that substantially lessen at least one of the significant environmental effects identified as a result of the project, while still meeting most, if not all, of the basic project objectives. Here, the project does not result in any significant and unavoidable impacts, but does result in impacts that, in the absence of mitigation, would be significant. Constructionrelated impacts identified that require mitigation include potential disturbance to nesting birds; soil disturbance and the potential to unearth any unknown archeological or historic resources, or evidence of soil contamination; noise from construction equipment; and an increase in construction vehicles and construction employees accessing the project site. The only impact associated with project operation was noise associated with back up warning devices on delivery trucks. Project alternatives that would reduce the size of development on the site or change the mix of uses that would lessen the severity of some of the impacts identified under the project are addressed later in this chapter.

The proposed project site is located in close proximity to the existing Raley's grocery store, approximately 400 feet to the south, and is considered an infill project. Replacing the existing Raley's grocery store is dependent, in part, on location, meeting the needs of an existing customer base, providing a mix of uses along Freeport Boulevard that complements the existing businesses, and is close to residential neighborhoods. Based on a review of potential sites it was determined there are no sites within the Land Park neighborhood slated for infill development that would be large enough to accommodate the project components and would meet the project objectives. The closest site is located further south at the corner of Freeport Boulevard and Florin Road. However, this site is not located near other existing retail uses or a residential neighborhood and lacks infrastructure. Other possible locations would be in the northern part of the City in the North Natomas neighborhood; however, this area would not be suitable because it would not be located along Freeport Boulevard and would not serve the neighborhoods in the vicinity of Land Park. Therefore, it would not meet the project objectives.

Given that there are no project sites that would fulfill most of the project objectives or be suitable or feasible to accommodate the proposed project, an off-site location alternative has been dismissed from further consideration.

The project applicant team also met with the Land Park Community Association (LPCA) starting in 2013 and explored a variety of site plans including adding a mixed-use component. Based on input from the LPCA the option of increasing the project density to include a housing component was determined to not be suitable for this site. Therefore, this was dismissed from further consideration.

A few different site configurations were also evaluated including locating the Raley's store adjacent to Freeport Boulevard and the northern boundary of the project site (perpendicular to Freeport Boulevard) and locating the Raley's store parallel to Freeport Boulevard with shops located in the western portion of the site. The alternative site plan to locate the Raley's store adjacent to the northern boundary of the site was determined not suitable because it would greater a longer route for delivery trucks which would create more noise for adjacent residences to the west; would not allow for more smaller freestanding shops to be included; and would eliminate the ability to create a left turn from Freeport Boulevard. This design would also not fully meet the City's desire to have buildings that engage the street (Policy LU 2.7.7) and was determined to not be economically feasible,

Another alternative considered was re-use of the existing Raley's store. However, this was dismissed as an infeasible option due to the extensive remodeling that would be required. Essentially, the existing building would need to be demolished and re-built in order to meet current building codes and space requirements for more modern grocery stores. This would require Raley's to close for a minimum of 12 months in order to construct the new building. Raley's has determined this would not be feasible and would be disruptive to their loyal customers. In addition, the existing site is not large enough to accommodate additional retail stores to provide more neighborhood retail opportunities (per the project objectives). Therefore, the re-use of the existing space was considered and determined to be infeasible.

5.1 ALTERNATIVES CONSIDERED IN THIS EIR

This section provides a description of the alternatives to the proposed project analyzed in this Draft EIR and evaluates how specific impacts differ in severity from those associated with the project. For purposes of this analysis, the potentially significant impacts identified under the alternatives analysis are assumed to be fully mitigated through compliance with mitigation measures identified in Sections 4.1 through 4.10 included in Chapter 4, which contains the environmental analysis of the proposed project.

The project alternatives identified herein address the significant construction-related impacts (before mitigation) identified for the project including an increase in construction noise and

construction-related traffic as well as concerns raised in response to the NOP regarding the height of the building and the density of the project. Thus, the alternatives developed for the project contemplate a smaller project to address these impacts as well as an alternative that includes a lower roof line and more public gathering space. In many instances, the impacts are virtually identical to the proposed project and are described as such.

This Draft EIR has incorporated a reasonable range of project alternatives that, collectively, attain a majority of the project objectives in a reasonable manner while reducing the severity of the significant impacts (before mitigation) identified under the proposed project. As discussed above, the proposed project does not result in any significant impacts after mitigation.

The alternatives to the proposed project analyzed in this Draft EIR are:

- Alternative 1: No Project/No Development
- Alternative 2: No Project/Existing Zoning
- Alternative 3: Alternate Site Plan
- Alternative 4: Reduced Intensity

Alternative 1: No Project/No Development Alternative

Description

The No Project/No Development Alternative considers the effects of forgoing the project entirely, and leaving the project site in its current condition with vacant buildings on the site of the former Capital Nursery, along with a parking lot and two vacant residences along Wentworth Avenue. The No Project/No Development Alternative allows decision-makers to compare the impacts of the proposed project to retaining the existing condition of the site. The No Project/No Development Alternative describes the environmental conditions that exist at the time that the environmental analysis commenced (CEQA Guidelines, Section 15126.6 (e)(2)).

Comparative Analysis of Environmental Effects

The No Project/No Development Alternative would produce no changes on the project site, because the site would remain in its current condition. The existing vacant buildings would not change resulting in the potential for the site to be characterized as blight. There would be no air emissions associated with project construction and operation and there would be no change in the visual environment, or increase in the number of vehicles or delivery trucks accessing the site and on area roadways and intersections. There would be no changes in ambient noise levels.

Relationship to Proposed Project Objectives

The No Project/No Development Alternative would not achieve any of the project objectives.

Alternative 2: No Project/Existing Zoning Alternative

Description

The project site is currently zoned for residential and commercial uses. There are 4.2 acres zoned residential R-1/R-1A along the western portion of the site, which allows 8 dwelling units/acre for up to 32 units. There is another 0.5 of an acre zoned R-2A in the southern portion of the site, which allows up to 17 units/ac. For the purposes of this alternative it is assumed up to 8 units could be developed on this half-acre parcel. Therefore, a total of 40 residential units could be developed on the 4.7 acres designated and zoned residential. In the eastern portion of the site, the 5.3 acres along Freeport Boulevard are zoned C-2 (Urban Corridor Low), which permits a FAR of 3 with no lot coverage requirement. According to the City a building as large as 692,604 square feet (sf) could be built under a FAR of 3. However, that would be a very large, multi-story building for this site and probably not a realistic or appropriate level of development for this area of the City. Therefore, a FAR of 1 is assumed that would allow a 250,000 sf building. This alternative considers the site could be developed with 40 multi-family units and a 250,000 sf building under the existing zoning. It is assumed this would be a multistory building to accommodate on-site parking in a parking garage in addition to surface parking. It is assumed retail would occupy the first level with office space on the upper levels. For the purposes of the analysis a total of 125,000 sf in retail uses and 125,000 sf in office uses is assumed. A 55,000 sf grocery store could be accommodated within the retail space leaving an additional 70,000 sf for other retail uses. Access to the site would be from Freeport Boulevard for the commercial uses with access from Wentworth Avenue for the residential uses. It is anticipated a through driveway would allow vehicles to access the entire site from either access point. In addition, it is assumed a 10-12-foot high masonry wall would be included along the northern boundary of the site the same as the project. However, a 6-foot high wood fence, similar to what currently exists would be adjacent to the existing residences along the western boundary of the site.

Comparative Analysis of Environmental Effects

The amount of retail space would be more than the proposed project (approximately 16,800 sf more) but would add 125,000 sf of office use and 40 residential units, which differs from the proposed project. Due to the larger project it is anticipated the increase in air pollutants associated with project construction would be slightly greater than the proposed project. However, under this alternative the entire project site would be cleared and would require removal of the buildings, and essentially creation of the same amount of impervious surface

area as the proposed project. Therefore, construction-related impacts associated with biological and cultural resources, hazardous materials, and drainage would essentially be the same as the proposed project, less than significant with mitigation. It is anticipated the same mitigation measures for impacts to nesting birds (biological) and the potential to unearth any previously unknown historic or archeological resource (cultural), and potential exposure of construction workers to hazardous materials and conditions (hazards) would be still be required. The potential impacts are compared below.

Impacts Identified as Being the Same or Similar to the Proposed Project

Biological and cultural impacts would be similar to the proposed project. The entire site would still require clearing, which could affect any nesting birds and would remove buildings. Mitigation would be still required for nesting birds (Mitigation Measure 4.3-1) and for potential impacts to unknown cultural resources (Mitigation Measures 4.4-1), the same as the proposed project.

Site clearing and building demolition would be the same as the proposed project and the potential to expose construction workers to contaminated soil and groundwater could still occur, the same as the proposed project. Mitigation would still be required (Mitigation Measure 4.6-1) to ensure potential impacts would be less than significant. In addition, the increase in impervious surface area and runoff would be similar to the proposed project and impacts would remain less than significant, the same as the proposed project. Impacts associated with project construction activities would also be reduced to less than significant with Mitigation Measure 4.10-5, the same as the project,

Noise from parking lot activity would likely be similar to the proposed project. This assumes the proposed commercial structure would be located along the west side of the commercial zone boundary, with surface parking provided along Freeport Boulevard. In this configuration, the surface parking lot would likely be located with the same setback to the northern property boundary as the proposed project (leading to similar parking lot noise levels at the northern property boundary). The building itself would shield future on-site residences and existing residences (on the western portion of the site) from the parking lot activity noise.

Construction noise mitigation measures specified for the proposed project would continue to be required (Mitigation Measure 4.8-1) and impacts associated with construction noise could be mitigated to less than significant, the same as the project. Impacts Identified as Being Less Severe than the Proposed Project

No impacts were identified as being less severe than the proposed project.

Impacts Identified as Being More Severe than the Proposed Project

Under Alternative 2, construction-related (short-term) air emissions of NO_x would exceed the SMAQMD significance threshold of 85 pounds per day, which would result in a potentially significant impact to air quality (see Table 5-1). Emissions quantification was based on the same construction schedule as the proposed project, but with equipment usage hours during building construction scaled up proportionally per the ratio of building square footage of Alternative 2 versus the project. Mitigation would be required, such as increased equipment engine tiers or purchasing off-site NO_x offset fees, which would reduce the impact to less than significant. However, it is possible that the construction schedule for Alternative 2 would be extended, which could result in reduced emissions and negate the need for mitigation. Operationally, the amount of emissions, including greenhouse gas (GHG), would be greater than the project (see Tables 5-2 and 5-3) based on the increase in building size and associated energy, as well as greater daily vehicle trips. However, for operations, criteria air pollutant emissions would remain less than significant and the land uses to be developed under Alternative 2 could be planned to comply with the City's CAP, the same as the proposed project.

The change in visual character would be similar to the proposed project because the existing development would be removed and replaced, but would result in taller buildings than the project. Overall, development of residential and retail/office uses would be more dense than the project, but would still occupy a formerly developed site surrounded by development. The change in visual character, while potentially still less than significant would be slightly more intense than the proposed project due to the increase in density and height of the proposed retail/commercial building.

Construction of the site to develop up to 40 residential units and up to a 250,000 sf commercial structure would involve earthwork encompassing the same total site area; however, noise associated with structural development (particularly a multi-story commercial structure) could involve peak construction noise levels greater than the proposed project. Construction activities would require a longer timeframe, but construction projects are exempt from complying with the City's noise standards providing construction occurs within the allowable times.

Construction vibration impacts could also be marginally greater than the proposed project, assuming compaction levels might need to be greater for a multi-story commercial structure compared to the single level construction proposed for the project.

Operational noise associated with roof-mounted mechanical equipment could be greater for this alternative, as compared to the proposed project. A substantially larger commercial building (250,000 total sf as compared to the 108,160 sf of commercial space for the proposed project) would involve a greater number of roof-mounted HVAC units. Noise levels from HVAC operation for the immediately adjacent new residences under this alternative would be greater than for the residences on adjacent properties under the proposed project.

It is assumed the loading dock area would be located in approximately the same location as the proposed project and there could be noise from back up warning devices on delivery trucks. It is anticipated noise from the loading dock would be a concern for the on-site residences. However, the residential uses along the western and southern portions of the site would help attenuate the noise for existing residences located to the west. It is anticipated mitigation would be required for on-site residences to address project operation.

Off-site traffic noise and operational noise impacts associated with up to 40 residential units and up to a 250,000 sf commercial structure would be greater than the proposed project. Project trips on roadways adjacent to noise-sensitive land uses would increase and could potentially result in noise level increases, which are significant (i.e., greater than 3 dBA CNEL).

The increase in demand for public services and utilities would be greater under this alternative because a new residential and office population would be introduced resulting in increased demand for basic services (police, fire, schools, parks) and utilities (water, sewer, solid waste disposal, energy), as shown in Tables 5-4, 5-5, and 5-6. The increase in demand for water, wastewater and solid waste disposal is considerably higher than the proposed project, as shown below.

Demand for police and fire protection is based on population. Under this alternative the permanent population would increase to approximately 104 new residents.¹ The number of employees (for the purposes of this analysis) is assumed would increase to 564. The overall demand for fire protection would be similar to the proposed project. Due to the residential component this alternative would generate a small number of students and would require payment of school fees as well as Quimby Act fees for parks.

The main driveway and access point for the retail component would be from Freeport Boulevard with secondary access for the residences from Wentworth Avenue. On-site circulation and adequate access for delivery trucks and turn radii may be compromised under this alternative and may result in a potentially significant impact. As shown in Table 5-7, the number of vehicle trips would increase to 7,552 daily trips, an increase of approximately 985 trips compared to the proposed project. The number of AM and PM peak hour trips is also more than under the proposed project by approximately 100 trips. This would result in the potential for impacts to offsite intersections and roadway segments. In addition there would be an increase in vehicles accessing I-5. However, it is anticipated the same recommendations required for the project would also be required for this alternative. It is anticipated any impacts would be reduced to less than significant with the City's conditions of approval, or with mitigation measures. It is anticipated bicycle and pedestrian circulation would be similar under this alternative, and not anticipated to result in any significant impacts.

¹ Based on the City's latest census data for persons per household from 2009 – 2013 of 2.61 pph.

Alternative	NO _x Emissions (Ibs/day)	PM₁₀ Emissions (Ibs/day)	PM _{2.5} Emissions (Ibs/day)
Proposed Project	80.43	14.40	7.04
Alternative 2	91.74	11.02	7.04
Alternative 3	80.43	14.40	7.04
Alternative 4	80.43	14.40	7.04

Table 5-1Maximum Daily Construction Emission Comparison – Project Alternatives

Source: See Appendix B for detailed results.

Notes: These estimates reflect implementation of SMAQMD Basic Construction Emission Control Practices. SMAQMD has adopted construction thresholds for NOx, PM10, and PM2.5. The Grading/Utilities phase was assumed to be the same for each alternative, which would result in the maximum daily emissions for the Project, Alterative 3, and Alternative 4. The Building Construction phase would result in the greatest emissions for Alternative 2.

lbs/day = pounds per day; NOx = oxides of nitrogen; PM10 = coarse particulate matter; PM2.5 = fine particulate matter

Relationship to Proposed Project Objectives

If the proposed project was not approved and development was to occur consistent with the underlying zoning, the proposed project under the No Project/Existing Zoning Alternative would meet some of the project objectives. Under this alternative, a full service grocery store and pharmacy could be included within the retail component to support the surrounding neighborhoods. The remaining 70,000 sf of retail could include a mix of retail services, but the size and scale of the building would be much larger than any of the existing neighborhood-serving commercial uses in the neighborhood. On site circulation for delivery trucks, vehicles, bicycles and pedestrians would more than likely be compromised under this alternative. In addition, the ability to provide outdoor dining and gathering places would also be difficult to provide under this alternative. In addition, it would add 125,000 sf of commercial/office uses and 40 dwelling units that were not identified as being an objective for development of this site.

Table 5-2
Operational Criteria Air Pollutant Emission Comparison – Project Alternatives

Ľ	Proposed Project (Ib/day)				Alterna (lb/d	itive 2 ay)		Alternative 3 (Ib/day)			Alternative 4 (Ib/day)					
Emissio Source	ROG	NO _x	PM_{10}	$PM_{2.5}$	ROG	NOx	PM_{10}	PM _{2.5}	ROG	NOx	PM_{10}	PM _{2.5}	ROG	NOx	PM_{10}	PM _{2.5}
Area	8.67	0.00	0.00	0.00	16.08	0.04	0.02	0.02	8.10	0.00	0.00	0.00	8.08	0.00	0.00	0.00
Energy	0.04	0.39	0.03	0.03	0.07	0.61	0.05	0.05	0.04	0.38	0.03	0.03	0.04	0.38	0.03	0.03
Mobile	19.40	31.72	23.25	6.48	22.30	36.47	26.73	7.45	18.53	30.30	22.21	6.19	18.60	30.42	22.29	6.21
Total	28.11	32.11	23.28	6.51	38.45	37.12	26.79	7.52	26.67	30.68	22.24	6.22	26.72	30.79	22.32	6.24

Source: See Appendix B for detailed results.

Note: SMAQMD has adopted operational thresholds for ROG, NOx, PM10, and PM2.5. The maximum daily value from either summer or winter emissions estimates is presented.

lb/day = pounds per day; ROG = reactive organic gases; NOx = oxides of nitrogen; PM10 = coarse particulate matter; PM2.5 = fine particulate matter

Emission Source	Proposed Project	Alternative 2	Alternative 3	Alternative 4
Total Construction	714.96	1,297.62	674.3	677.80
Area	0.01	0.72	0.01	0.01
Energy	836.73	1,071.33	797.57	800.67
Mobile	4,178.61	4,803.83	3,991.44	4,006.80
Solid Waste	41.72	30.24	40.41	40.52
Water and Wastewater	22.32	81.46	20.38	20.53
Total Operations	5,079.39	5,987.58	4,849.82	4,868.53

Table 5-3 Greenhouse Gas Emission Comparison – Project Alternatives – MT CO2E/Year

Source: See Appendix B for detailed results.

Note: Total construction emissions represents the sum of GHG emissions generated during the whole construction duration. 75% waste diversion is included consistent with AB 341.

MT CO2E/Year = metric tons carbon dioxide equivalents per year

Table 5-4
Water Demand Comparison – Project Alternatives

	Demand Factor	Units/ employees	Demand (AFY)	Units/ Employees	Demand (AFY)	Units/ employees	Demand (AFY)	Units/ employees	Demand (AFY)
Proposed Use	(AFY)	Propose	d Project	Alterna	tive 2	Alterna	ative 3	Alterna	tive 4
Suburban Neighborhood Low Density	0.61/ dwelling unit	0	0	32	19.50	0	0	0	0
Suburban Neighborhood Medium Density	0.39/ dwelling unit	0	0	8	3.12	0	0	0	0
Urban Corridor Low Density ¹	0.04/ employee	120	4.8	564 ²	22.56	98 ³	3.92	99 ⁴	3.96
Existing Raley's Water Usage			8.78		0		8.78		8.78
	Total		13.58		45.18		12.70		12.74

Notes:

² Assumes 1 employee per 443 sf of retail/office space (total 250,000 sf)

³ Assumes 1 employee per 443 sf (total 43,200 sf)

⁴ Assumes 1 employee per 443 sf (total 43,883 sf)

Alternative 1, No Development, would not generate water demand

Alternative 2, No Project/Existing Zoning, does not include the 55,000 square-foot grocery store

AFY = acre-feet per year

¹ Assuming General Plan Amendment to Urban Corridor Low Density

Table 5-5Wastewater Generation – Project Alternatives

	ESD Equivalent	Units/Acres	Average Waste-water (gpd)	Units/Acres	Average Waste-water (gpd)	Units/Acres	Average Waste-water (gpd)	Units/Acres	Average Waste-water (gpd)
Proposed Use	Factor ¹	Propos	ed Project	Altern	ative 2	Alternative 3		Alternative 4	
Multi-Family Residential	0.75 ESD/unit	0	0	40 units	9,300	0	0	0	0
Commercial and Industrial	6.0 ESD/acre ²	1.2 acres	3 2,318	5.7 acres ⁴	10,830	0.99 acres⁵	1,881	1.0 acres ⁶	1,900
Existing Raley's Wastewater usage			7,270		0		7,270		7,270
	l 9,588		20,130		9,151		9,170		

Notes:

ESD = 310 gpd

² 6 ESD/acre = 1,900 gpd

³ Acreage corresponds to building footprints not including the Raley's store (total 53,165 sf)

⁴ Acreage corresponds to building footprint (total 250,000 sf)

⁵ Acreage corresponds to building footprint not including the Raley's store (total 43,200 sf)

⁶ Acreage corresponds to building footprint not including the Raley's store (total 43,883 sf)

Alternative 1, No Development, would not generate wastewater flows.

Alternative 2, No Project/Existing Zoning would not include the 55,000 square-foot grocery store.

ESD = Equivalent Single-Family Dwelling Unit; gpd = gallons per day

Table 5-6
Solid Waste Generation – Project Alternatives

Proposed	Generation	Units/ Employees	Waste (tons/ year)	Units/ Employees	Waste (tons/ year)	Units/ Employees	Waste (tons/ year)	Units/ Employees	Waste (tons/ year)
Úse Rate		Proposed I	Project	Alternative 2		Alternative 3		Alternative 4	
Residential	1.1 tons/ unit/year	0	0	40 units	44.0	0	0	0	0
Commercial Industrial	10.8 lbs/ Employee/day	235 employees	463.2	564 ¹ employees	1,111.6	213 ² employees	419.8	214 ³ employees	421.8
	Total		463.2		1,155.6		419.8		421.8

Notes: 1

Assumes 1 employee per 443 sf of retail space (total 250,000 sf) Assumes 1 employee per 443 sf (total 43,200 sf) plus 115 employees for Raley's Store Assumes 1 employee per 443 sf (total 43,883 sf) plus 115 employees for Raley's Store 2

3

Alternative 1, No Development, would not generate solid waste.
		Trips		
Proposed Use	Description	Daily	AM Peak Hr	PM Peak Hr
Proposed Project (Scheme A)	55,000 sf grocery store with 53,980 sf in retail	6,568	213	597
Scheme B	55,000 sf grocery store with 53,165 sf in retail uses	6,546	212	596
Alternative 1: No Project/No Development	No change to existing site conditions		_	_
Alternative 2: No Project/No Action (Existing Zoning)	40 residential units with 125,000 sf in commercial uses and 125,000 sf in retail uses	7,552	305	820
Alternative 3: Alternative Site Plan	55,000 sf grocery store with 43,200 sf in retail uses	6,275	207	570
Alternative 4: Reduced Intensity	55,000 sf grocery store with 43,883 sf in retail uses	6,299	207	572

Table 5-7Trip Generation Rate Comparison

Source: See Appendix G.

Alternative 3: Alternate Site Plan

Description

Under the Alternate Site Plan, the proposed grocery store would be re-located to the eastern portion of the site, closer to Freeport Boulevard to address the desire expressed by the public to provide a less suburban and more urban style project. A General Plan Amendment and re-zone would still be required for this alternative, the same as the project. The building height would be approximately 25-feet, consistent with this type of a building and would not include any architectural features that would raise the roof line. Parking would be located behind the store with the loading dock remaining on the south side of the proposed Raley's building. A 10-12-foot high masonry wall would be adjacent to the western and northern boundaries of the project site. Access to the site would still be provided from Freeport Boulevard and Wentworth Avenue. The access from Freeport Boulevard would be located within approximately 115 feet of the intersection with Meer Way, which may present some access challenges. The grocery store would remain 55,000 sf with a total of 43,200 sf of additional retail uses along with 590 parking spaces could be developed under this alternative, as shown on Figure 5-1. There would be approximately 10,000 sf less retail under this alternative compared to the proposed project.

Comparative Analysis of Environmental Effects

Impacts under the Alternate Site Plan Alternative would be similar to those of the proposed project, but slightly less intense because it would generate a small reduction in vehicle trips due to less retail. Impacts associated with site disturbance would be the same as the proposed project because the entire site would still require site clearing, building removal, grading and construction of new buildings, parking, and exterior amenities. Construction noise would be essentially the same as the proposed project along with the potential to damage or destroy unidentified subsurface archaeological or historical resources, disturb nesting birds, and expose construction workers to potentially hazardous materials associated with building demolition. In addition, there would be no change to the drainage assessment since the amount of impervious surface area would essentially be the same as the proposed project. The same mitigation measures would still be required to reduce the impacts to less than significant. The change in visual character is also assumed to be similar to the proposed project because although fewer stand-alone buildings would be constructed the entire site would still be developed with new buildings, parking and landscaping. The proposed Raley's grocery store would be oriented closer to the street, which would differ from the existing retail environment along Freeport Boulevard that favors a more suburban design with parking in front of the buildings. Vehicle access to the retail shops would be along the northern side of the grocery store (northern property boundary), which may not be desirable from a vehicle access stand point. However, the re-orientation of the buildings on the site would not change the less than significant finding identified for the project.

Impacts Identified as Being the Same or Similar to the Proposed Project

Under this alternative, construction-related (short-term) air emissions would result in similar emissions to the project, which would be less than the SMAQMD thresholds (see Table 5-1). Emissions would remain less than significant, the same as the proposed project.

The change in visual character would be similar to the proposed project because the existing use would be removed and replaced. Overall, under this alternative development would be very similar to the proposed project and would still occupy a formerly developed site surrounded by development. The building height would be approximately 25-feet and would not include any design features that would increase the height of the roof line. Therefore, the change in visual character would slightly less intense compared to the proposed project because there would not be any portion of the building that would exceed 25 feet. However, the change in visual character and visual impacts would be the same as the proposed project, less than significant.



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Impacts associated with project construction and development would be the same or similar to the proposed project. It is assumed under this alternative that the entire site would still be disturbed associated with project development. Therefore, impacts associated with potential loss of cultural resources and biological resources, exposure to hazardous materials, and construction noise would essentially be the same as the proposed project. Mitigation identified for the project to address potential impacts to nesting birds (Mitigation Measure 4.3-1), cultural resources (Mitigation Measure 4.4-1), exposure to hazardous materials (Mitigation Measure 4.6-1) associated with building demolition would still be required.

Peak construction noise levels (associated with earthmoving and construction of the largest structure) would remain the same as the proposed project, although the total duration of construction and attendant average construction noise levels would be slightly less due to the smaller development. Construction noise mitigation specified for the proposed project would continue to be required (Mitigation Measure 4.8-1). Construction vibration impacts would be the same or similar to the proposed project, and would remain less than significant.

Noise from parking lot activity under Alternative 3 would be similar to the proposed project. The alternative site plan would shift the grocery store component from the western to eastern property boundary, but would maintain a parking area with the same setback distance along the northern site boundary; a parking area would also be provided within the footprint of the original grocery store location, with a western site boundary setback about twice the distance of the northern property boundary setback. Masonry walls would be constructed along the western and northern site boundaries, the same as the project. Given the same or greater setback distance between the parking area and the adjacent property boundary, parking lot activity would result in noise levels along the northern and northwestern property boundary of 51 dBA CNEL or less (the same as the proposed project).

Loading dock operational noise impacts would be the same for Alternative 3 as for the proposed project. The loading dock for the Tenant building is proposed to be the same distance from the western property boundary as the originally proposed grocery store loading dock; this loading dock would therefore generate the same noise levels along the western property boundary as evaluated for the original grocery store location (i.e., 60 dBA CNEL with no wall, 50 dBA CNEL assuming a 10 foot tall wall at the property line). The grocery store loading dock under this alternative would be located closer to the eastern property boundary (adjacent to Freeport Boulevard), approximately 560 feet from the western property boundary. At this distance, the grocery store loading dock would produce an average noise level of 38 dBA at the western property boundary (this noise level added to the noise level from the closer loading dock would not result in any change to the total loading dock noise level at the western property boundary).

Impacts associated with project construction activities would be reduced to less than significant with Mitigation Measure 4.10-5, the same as the project.

Under this alternative, the increase in demand for public services and utilities, increase in stormwater drainage, change in visual character, and increase in air emissions associated with project construction and operation would remain less than significant, the same as the project.

Impacts Identified as Being Less Severe than the Proposed Project

Operationally, the amount of emissions, including greenhouse gas (GHG), would decrease (see Tables 5-2 and 5-3) in comparison to the project based on the reduction in building size and associated energy, as well as fewer daily vehicle trips. Emissions would remain less than significant, the same as the proposed project.

Operational noise associated with roof-mounted mechanical equipment would be slightly less for Alternative 3 and possibly imperceptible, as compared to the proposed project. This is due to the minor decrease in the number of structures, and therefore fewer HVAC units overall. As with the proposed project, mechanical equipment noise would remain less than significant.

Off-site noise impacts associated with project-generated traffic trips would be marginally lower than the proposed project, due to a decrease in the structural floor area compared to the proposed project (and therefore a decrease in project trip generation). As with the proposed project, these off-site noise impacts would remain less than significant.

Overall, the amount of retail space would be approximately 10,000 sf smaller compared to the proposed project; therefore, the number of vehicles accessing the site would be reduced compared to the project. As shown in Table 5-7, this alternative would generate approximately 6,275 daily vehicle trips, compared to 6,568 daily vehicle trips under the proposed project. The AM and PM peak hour trips would also be reduced from 213 trips during the AM peak hours and 597 trips during the PM under the proposed project to 207 AM peak hour trips and 570 PM peak hour trips under this alternative. It is anticipated the same transportation conditions of approval would be required under this alternative, the same as the project.

Under this alternative air emissions associated with project construction and operation would be less than the proposed project, as shown in Table 5-1. But, the same as the proposed project, the impact would be less than significant. The same is true for climate change. The project's contribution to an increase in greenhouse gas emissions would be less than the project, but would remain less than significant the same as the project.

As shown in Tables 5-4 through 5-6, the increase in demand for water, generation of wastewater, and amount of solid waste generated under this alternative would be slightly less than the proposed project. However, impacts would remain less than significant the same as the proposed project.

Under this alternative, pedestrian and bicycle access to the grocery store is improved, as it is not necessary to cross the parking lot coming from FreeportBoulevard.

Impacts Identified as Being More Severe than the Proposed Project

Under this alternative, there would not be fire access behind the Tenant building, which could potentially be in violation of the City's current fire codes. The Tenant building may need to be shifted east, which would eliminate some of the parking. In addition, primary vehicle access to the project site would be limited to the northeastern corner of the site off of Freeport Boulevard. This would create a primary internal driveway immediately adjacent to the northern boundary of the site and the residences along this area. This could result in a small increase in vehicle-related noise to those residences. Under this alternative, there is no ability to implement the southbound right turn lane that the City has requested, as the adjacent property to the north is not controlled by the project applicant. Also, depending upon specific location, the median break in Freeport Boulevard may result in the need to shorten the northbound left turn lane approaching Meer Way. These impacts would be slightly more severe than the proposed project. In addition, this alternative would not meet the City's FAR requirement under the Urban Corridor Low Density designation (Policies LU 1.1.1 and LU 1.1.5) and .

Relationship to Proposed Project Objectives

Under the Alternative Site Plan Alternative, a majority of the project objectives could be met. However, this alternative does not provide significant environmental advantages, and is more constrained in terms of ingress/egress and circulation compared to the proposed project. It does not include outdoor dining or gathering areas and as currently configured would not maximize natural light in the proposed grocery store to reduce dependence on artificial light sources.

Alternative 4: Reduced Intensity

Description

Under this alternative the overall height of the grocery store would be limited to 25-feet, which would reduce the size and number of windows to allow for natural light. A General Plan Amendment and re-zone would still be required for this alternative, the same as the project. The Shops 1 building would not be constructed and the parking area between Shops 1 and Shops 2 would be removed to allow for a plaza area between the grocery store and the 12,000 sf tenant building, as shown in Figure 5-2. An internal roadway connecting to Wentworth Avenue would

go through this area. A 10-12-foot high masonry wall would be adjacent to the western and northern boundaries of the project site, the same as the project. Access would be from both Freeport Boulevard and Wentworth Avenue, essentially the same as the project. A total of 98,883 sf of retail space could be developed, which includes 55,000 sf for the grocery store and additional 43,883 sf of retail uses and 427 parking spaces. There would be approximately 9,000 sf less retail space than under the proposed project.

Comparative Analysis of Environmental Effects

Impacts under the Reduced Intensity Alternative would be similar to those of the proposed project, but slightly less intense because it would generate a small reduction in vehicle trips due to less retail space. In addition, the height of the grocery store would be 25 feet tall, which is in response to comments received on the Notice of Preparation that expressed concerns regarding the height of this building Decreasing the building height facing the front, or east side of the building would not allow the same amount of natural light as the proposed project. Impacts associated with site disturbance would be the same as the proposed project because the entire site would still require site clearing, building removal, grading and construction of new buildings, parking, and exterior amenities. In addition, construction noise would be essentially the same as the proposed project, the potential to damage or destroy unidentified subsurface archaeological or historical resources, disturb nesting birds, and exposure of construction workers to potentially hazardous soil and groundwater would be the same as the project. The same mitigation measures would still be required to reduce the impacts to less than significant. The change in visual character is also assumed to be similar to the proposed project because although fewer stand-alone buildings would be constructed the entire site would still be developed with new buildings, parking and landscaping. The main building (grocery store) would be designed as a single-story building with a building height of 25-feet with no architectural features that would maximize natural light through large windows.

Impacts Identified as Being the Same or Similar to the Proposed Project

Under this alternative, construction-related (short-term) air emissions would result in similar emissions to the project, which would be less than the SMAQMD thresholds (see Table 5-1). Emissions would remain less than significant, the same as the proposed project.



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Similar to Alternative 3 and the proposed project, impacts associated with project construction and development would be the same or similar. It is assumed under this alternative that the entire site would still be disturbed associated with project development. Therefore, impacts associated with potential loss of cultural resources and biological resources, exposure to hazardous materials, drainage, and construction noise would essentially be the same as the proposed project. Mitigation identified for the project to address potential impacts to nesting birds (Mitigation Measure 4.3-1), cultural resources (Mitigation Measure 4.4-1), construction worker exposure to potential contaminated soils or groundwater (Mitigation Measure 4.6-1) associated with building demolition would still be required, as well as construction noise (Mitigation Measure 4.8-1).

Noise from parking lot activity for Alternative 4 is anticipated to be the same or similar as for proposed project. The Shops 1 building would be replaced with an open plaza area which would provide more outdoor gathering spaces. This plaza area would be shielded from the residences to the west by the loading dock. Parking areas would be preserved with the same configuration and setbacks from adjacent property lines as the proposed project; therefore parking lot activity noise level impacts would be the same or similar to the proposed project, and would remain less than significant.

Loading dock operational noise impacts would be the same for Alternative 4 as for the proposed project. The grocery store loading dock location remains the same under this alternative as for the proposed project, and no other loading docks are included. A wall would be included adjacent to the western and northern property boundaries that would shield adjacent existing residences from operational noise. It is assumed loading dock operations would continue to result in less than significant noise impacts.

Traffic impacts would be reduced compared to the proposed project, due to the reduction in retail space; however, the reduction is not substantial – for both the project and the Reduced Intensity Alternative traffic impacts would be less than significant. See Table 5-7 for a comparison of potential vehicle trips. The total number of daily vehicle trips would be reduced to 6,299 trips compared to the project. The AM and PM peak hour trips would also be reduced compared to the project (AM peak hour traffic would be reduced to 207, while PM peak hour traffic would be reduced to 572, as compared to 213 and 597, respectively, under the proposed project). It is anticipated that the impacts would be similar to the proposed project (less than significant) given the presence of intersections that currently operate at an acceptable levels of service in the existing and future condition. The City's conditions of project approval to include specific traffic improvements would still be required under this alternative, the same as the proposed project. In addition, impacts due to project construction would be reduced to less than significant with Mitigation Measure 4.10-5,

Impacts Identified as Being Less Severe than the Proposed Project

Operationally, the amount of emissions, including greenhouse gas (GHG), would decrease (see Tables 5-2 and 5-3) in comparison to the project based on the reduction in building size and associated energy, as well as fewer daily vehicle trips. Emissions would remain less than significant, the same as the proposed project.

Operational noise associated with roof-mounted mechanical equipment would be slightly less for Alternative 4 and probably imperceptible, as compared to the proposed project. This is due to the replacement of the Shops 1 building with an open plaza, and the elimination of the HVAC equipment previously proposed for the Shops 1 building. As with the proposed project, mechanical equipment noise would remain less than significant.

Off-site noise impacts associated with project-generated traffic trips would be marginally lower than the proposed project, due to a decrease in the structural floor area compared to the proposed project (and therefore a decrease in project trip generation). As with the proposed project, these off-site noise impacts would remain less than significant.

Impacts Identified as Being More Severe than the Proposed Project

Under this alternative, there would be no impacts that would be identified as being more severe than the proposed project. However, this alternative would not meet some of the City's General Plan policies. Specifically, this design would not meet the City's FAR requirement under the Urban Corridor Low Density designation (Policies LU 1.1.1 and LU 1.1.5). Nor, would this design meet the City's desire to consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively (Policy LU 2.6.4)

Relationship to Proposed Project Objectives

Under the Reduced Intensity Alternative, a majority of the project objectives could be met. However, this alternative would arguably not maximize the retail infill opportunities at the site consistent with the City's 2035 General Plan and would not maximize natural light to reduce the dependence on artificial light sources. This alternative also does not provide significant environmental advantages.

5.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project/No Development alternative is the environmentally superior alternative. It would avoid all project-related environmental impacts. It has the potential to contribute to urban blight by allowing vacant buildings to remain in the current state. However, this impact may be less than significant, or may be mitigated through maintenance and code enforcement activities. CEQA Guidelines Section 15126.6(e)(3)(A) requires that when the No Project alternative is environmentally superior, another alternative be selected as the environmentally superior alternative. The environmentally superior alternative would be the Reduced Intensity alternative. This alternative would reduce on-site noise and air emissions due to the overall smaller project, and the corresponding reduction in vehicle trips. However, this alternative would not avoid any of the significant impacts associated with project construction and all of the identified mitigation would still be required . In addition, this alternative has the potential to create off-site vehicle travel because it would provide a more limited selection of retail uses that would counteract some of its benefits.

Table 5-8 provides an overview of impacts compared to the proposed project.

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity	
	Aesthe	tics				
4.1-1: The proposed project could change the existing visual character or quality of the site and its surroundings.	LS	NI	LS+	LS	LS	
4.1-2: The proposed project could create a new source of light or glare which could cause an annoyance to adjacent residential uses.	LS	NI	LS	LS	LS	
4.1-3: The proposed project could contribute to cumulative changes in the existing visual character of the area.	LS	NI	LS	LS	LS	
4.1-4: The proposed project could contribute to a cumulative increase in light and glare.	LS	NI	LS	LS	LS	
Air Quality						
4.2-1: The proposed project would not conflict with or obstruct implementation of an applicable air quality plan.	LS	NI	LS	LS	LS	

Table 5-8Evaluation of Alternatives by Impact Area

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity
4.2-2: The proposed project would not result in short-term (construction) emissions of NOx above 85 pounds per day, or PM10 above 80 pounds per day or PM2.5 above 82 pounds per day (with all feasible best available control technology (BACT) or best management practices (BMPs) for particulates implemented).	LS	NI	LS+	LS	LS
4.2-3: The proposed project would not result in long-term (operational) emissions of NOx or ROG above 65 pounds per day, or PM10 above 80 pounds per day or PM2.5 above 82 pounds per day (with all feasible best available control technology (BACT) or best management practices (BMPs) for particulates implemented).	LS	NI	LS+	LS+	LS
4.2-4: The proposed project could result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm).	LS	NI	LS+	LS	LS
4.2-5: The proposed project could result in objectionable odors affecting a substantial number of people.	LS	NI	LS	LS	LS
4.2-6: The proposed project could result in the exposure of sensitive receptors to substantial pollutant concentrations.	LS	NI	LS	LS	LS

Table 5-8Evaluation of Alternatives by Impact Area

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity		
4.2-7: The proposed project could result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non- attainment under an applicable federal or state ambient air quality standard (including the release of emissions that exceed quantitative thresholds for ozone precursors).	LS	NI	LS	LS	LS		
Biological Resources							
4.3-1: The proposed project could result in substantial degradation of the quality of the environment and substantially reduce the habitat of a fish or wildlife species.	LS/M	NI	LS/M	LS/M	LS/M		
4.3-2: The proposed project could interfere with the movement of native resident or migratory wildlife species or with established native resident or migratory wildlife corridors.	LS	NI	LS	LS	LS		
4.3-3: The proposed project could contribute to a cumulative loss of habitat for common and special-status wildlife species.	LS	NI	LS	LS	LS		
C	ultural Re	sources					
4.4-1: Project construction, including off-site utility connections could disturb, damage or destroy unidentified subsurface archaeological or historical resources as defined in CEQA Guidelines Section 15064.5.	LS/M	NI	LS/M	LS/M	LS/M		
4.4-2: Project construction could disturb, damage, or destroy an unidentified historical resource as defined in CEQA Guidelines Section 15064.5.	LS	NI	LS	LS	LS		

Table 5-8 **Evaluation of Alternatives by Impact Area**

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity
4.4-3: Project construction could adversely affect tribal cultural resources or disturb unknown human remains.	LS/M	NI	LS/M	LS/M	LS/M
4.4-4: The proposed project could contribute to cumulative losses of prehistoric resources, historic-period resources, and human remains in the greater Sacramento region.	LS/M	NI	LS/M	LS/M	LS/M
G	reenhous	e Gases			
4.5-1: The proposed project could impede the City or state efforts to meet AB 32 standards for the reduction of greenhouse gas emissions or conflict with the City's Climate Action Plan.	LS	NI	LS	LS	LS
Hazards	and Haza	rdous Mater	rials		
4.6-1: The proposed project could expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil and/or groundwater during construction activities.	LS	NI	LS	LS	LS
4.6-2: The proposed project could expose people (e.g., residents, construction workers) to asbestos- containing materials or other hazardous materials or situations.	LS/M	NI	LS/M	LS/M	LS/M
4.6-3: The proposed project would not substantially increase the risk of exposure of site occupants to inadvertent or accidental release of hazardous substances transported on adjacent roadways near the site.	LS	NI	LS	LS	LS

Table 5-8 **Evaluation of Alternatives by Impact Area**

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity
4.6-4: The proposed project could contribute to cumulative increase in the potential exposure of people to sites where soil and/or groundwater contamination could be present from past or current uses.	LS	NI	LS	LS	LS
Hydrology, E	Drainage,	and Water (Quality		
4.7-1: Construction activities associated with the proposed project could generate increases in sediment and/or other contaminants which could degrade water quality and violate water quality objectives and/or waste discharge requirements set by the State Water Resources Control Board.	LS	NI	LS	LS	LS
4.7-2: The proposed project would increase impervious surface area and commercial activities that could result in substantial long-term effects on water quality.	LS	NI	LS	LS	LS
4.7-3: The proposed project could affect the rate and amount of surface runoff in a manner that could exceed the capacity of the stormwater drainage system and/or exacerbate off- site drainage or flooding issues.	LS	NI	LS	LS	LS
4.7-4: Development of the proposed project could increase the exposure of people and/or property to the risk of loss, injury, damage, or death in the event of a levee breach or dam failure.	LS	NI	LS	LS	LS
4.7-5: The proposed project could substantially deplete groundwater supplies or interfere with groundwater recharge.	LS	NI	LS	LS	LS

Table 5-8 **Evaluation of Alternatives by Impact Area**

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity
4.7-6: The proposed project, in addition to other projects in the watershed, could result in the generation of polluted runoff that could violate water quality standards or waste discharge requirements for receiving waters.	LS	NI	LS	LS	LS
	Nois	е			
4.8-1: Short-term construction noise levels could violate the City of Sacramento Noise Ordinance or cause a substantial temporary increase in ambient noise levels.	LS/M	N	LS/M+	LS/M	LS
4.8-2: Existing residential and commercial areas could be exposed to vibration peak-particle velocities greater than 0.5-inch per second or vibration levels greater than 80 VdB due to project construction.	LS	NI	LS+	LS	LS
4.8-3: Noise from parking lot activities could result in noise levels at adjacent residential properties which exceeds exterior noise exposure limits.	LS	NI	LS	LS	LS
4.8-4: Noise from roof-mounted mechanical equipment could result in noise levels at adjacent residential properties which exceeds exterior noise exposure limits.	LS	NI	LS+	LS-	LS-
4.8-5: Noise from loading dock activities during project operation could result in excessive noise exposure levels for nearby residences.	LS	NI	LS	LS	LS
4.8-6: Long-term project operations could result in vibration impacts upon nearby residences.	LS	NI	LS	LS	LS

Table 5-8 **Evaluation of Alternatives by Impact Area**

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity	
4.8-7: Proposed project vehicle trips could result in off-site roadway noise level increases that impact noise sensitive land uses located along such roadways.	LS	NI	LS+	LS-	LS-	
4.8-8: The proposed project, in addition to cumulative development in the in South Land Park neighborhood, could increase traffic noise that exceeds the City's noise standards.	LS	NI	LS	LS	LS	
Public Services and Utilities						
4.9-1: The proposed project could increase demand for police and fire services requiring the need to construct new facilities, or expand existing facilities.	LS	NI	LS+	LS	LS	
4.9-2: The proposed project could cause or accelerate the physical deterioration of existing parks or recreational facilities or create a need for construction or expansion of recreational facilities beyond what was anticipated in the City's General Plan or Land Park Community Plan.	LS	NI	LS+	LS	LS	
4.9-3: The proposed project could result in an increase in demand for potable water in excess of existing supplies and result in inadequate capacity in the City's water supply facilities to meet demand requiring the construction of new water supply facilities.	LS	NI	LS+	LS	LS	

Table 5-8Evaluation of Alternatives by Impact Area

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity
4.9-4 The proposed project could exceed existing wastewater capacity to serve the project's demand in addition to existing commitments and result in either the construction of new or expansion of existing wastewater treatment facilities.	LS	NI	LS+	LS	LS
4.9-5: The proposed project could require the expansion or construction of new solid waste facilities which could cause significant environmental effects.	LS	NI	LS+	LS	LS
4.9-6: Operation of the proposed project could require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities.	LS	NI	LS+	LS	LS
4.9-7: The proposed project could contribute to a cumulative increase in demand for police and fire protection services that could result in the need for new or physically altered facilities.	LS	NI	LS	LS	LS
4.9-8: The proposed project could contribute to a cumulative increase in demand for parks and recreation facilities.	LS	NI	LS	LS	LS
4.9-9: The proposed project could contribute to a cumulative increase in demand for water supply in excess of existing supplies.	LS	NI	LS	LS	LS
4.9-10: The proposed project could contribute to a cumulative increase in the demand for water and wastewater treatment, which could result in inadequate capacity and require the construction of new or expansion of existing wastewater treatment facilities.	LS	NI	LS	LS	LS

Table 5-8 **Evaluation of Alternatives by Impact Area**

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity		
4.9-11: The proposed project could contribute to a cumulative increase in solid waste, which could result in either the construction of new solid waste facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.	LS	N	LS	LS	LS		
4.9-12: The proposed project could contribute to a cumulative increase in energy demand, which could result in the need for construction of new energy production and/or transmission facilities or expansion of existing facilities.	LS	NI	LS	LS	LS		
Transportation and Circulation							
4.10-1: The proposed project could cause potentially significant impacts to study area intersections.	LS	NI	LS+	LS+	LS-		
4.10-2: The proposed project could cause potentially significant impacts to transit.	LS	NI	LS	LS	LS		
4.10-3: The proposed project could cause potentially significant impacts to pedestrian facilities.	LS	NI	LS	LS	LS		
4.10-4: The proposed project could cause potentially significant impacts to bicycle facilities.	LS	NI	LS	LS-	LS		
4.10-5: The proposed project could cause potentially significant impacts due to construction-related activities.	LS/M	NI	LS/M	LS/M	LS/M		
4.10-6: The proposed project could cause potentially significant impacts to study area freeway system.	LS	NI	LS+	LS-	LS-		

Table 5-8 **Evaluation of Alternatives by Impact Area**

Impact	Proposed Project	Alternative 1: No Project/No Development	Alternative 2: No Project/Existing Zoning	Alternative 3: Alternative Site Plan	Alternative 4: Reduced Intensity
4.10-7: The proposed project could cause potentially significant impacts to study area intersections under cumulative plus project conditions.	LS	NI	LS	LS	LS
4.10-8: The proposed project could cause potentially significant impacts to study area freeway system under cumulative plus project conditions.	LS	NI	LS	LS	LS

Table 5-8Evaluation of Alternatives by Impact Area

Notes:

LS = Impacts less than significant

NI = No impact

LS/M = Impacts less than significant after mitigation

PS = Potentially significant (mitigation not determined)

"+" indicates the impact is more severe than the project impact

"-" indicates that the impact is less severe than the project impact

6.0 INTRODUCTION

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report (EIR) must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, and (5) alternatives to the proposed project (evaluated in Chapter 5, Project Alternatives).

6.1 SIGNIFICANT ENVIRONMENTAL EFFECTS

Chapter ES, Executive Summary, and Sections 4.1 through 4.10 of this Draft EIR provide a comprehensive identification of the proposed project's significant environmental effects, including the level of significance both before and after mitigation.

6.2 SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed project on various aspects of the environment are discussed in detail in the technical sections contained in Chapter 4, Environmental Analysis, of this Draft EIR.

No significant and unavoidable impacts were identified in Chapter 4.

6.3 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL IMPACTS

Section 15126.2 (c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental change that would be caused by the proposed project. Generally, a project would result in significant irreversible changes if:

- The primary and secondary impacts would generally commit future generations to similar uses (such as highway improvement that provides access to a previously inaccessible area);
- The project would involve a large commitment of nonrenewable resources (CEQA Guidelines Section 15126.2(c));

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- The project would involve a large commitment of nonrenewable resources; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Implementation of the proposed project would result in the long-term commitment of resources of the project site to urban land use. The development of the proposed project would likely result in or contribute to the following irreversible environmental changes:

• Irreversible consumption of energy and natural resources associated with the future use of the site.

Resources that would be permanently and continually consumed by project implementation include water, electricity, natural gas, and fossil fuels. Wood products, asphalt, and concrete would be used in construction along with gas and diesel fuel. With respect to operational activities, compliance with all applicable state and local building codes, as well as mitigation measures, planning policies, and standard conservation features, would ensure that resources are conserved to the maximum extent possible. The project would incorporate a number of sustainable practices that reduce the consumption of energy. Nonetheless, construction activities related to the proposed project would result in an irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels, natural gas, and gasoline and diesel for automobiles and construction equipment.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by environmental accidents associated with the project. While the project would result in the use, transport, storage, and disposal of minor amounts of hazardous materials during project construction and operation, as described Section 4.6, Hazards and Hazardous Materials, all such activities would comply with applicable local, state and federal laws related to the use, storage and transport hazardous materials, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage. The project itself does not include any uniquely hazardous uses that would require any special handling or storage. Further, the project does not contain any industrial uses that would use or store acutely hazardous materials.

Implementation of the proposed project would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts include the use of non-

renewable and/or slowly renewable natural and energy resources, such as lumber and other forest products and water resources during construction activities. Operations associated with future uses would also consume natural gas and electricity. These irreversible impacts, which are unavoidable consequences of urban growth, are described in detail in the appropriate sections of this EIR (see Chapter 4).

6.4 GROWTH-INDUCING IMPACTS

As required by Section 15126.2(d) of the CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, the stimulation of economic activity within the region, or the establishment of policies or other precedents that directly or indirectly encourage additional growth. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered a significant impact if it can be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

In general, a project could foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area, or a change in zoning or General Plan amendment approval), or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion). These circumstances are further described below.

- Elimination of Obstacles to Growth: This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.
- Economic Effects: This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the "multiplier effect." A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

Elimination of Obstacles to Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growthinducing effect, though not necessarily a significant one. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

Removal of Infrastructure Limitations or Provisions of Capacity

The elimination of physical obstacles to growth is considered a growth-inducing effect, though not necessarily a significant one. There are no known physical constraints to growth in the vicinity of the project site.

The proposed project site has previously been used for residential and retails uses and includes existing on-site infrastructure to serve development approved under the project. Utility infrastructure is also stubbed to the site so no off-site connections would be required. The existing on-site infrastructure would be replaced to accommodate a larger, more intense use, but it would not remove an obstacle to permit additional growth. The project site is immediately adjacent to Freeport Boulevard to the east, which would preclude development immediately east of the site; and an existing residential neighborhood and retail/commercial development, as well as Wentworth Boulevard borders the project site to the south, north, and west which would preclude inducing growth in these areas. The connection to existing City infrastructure to serve the project site would not induce growth in this area. Due to the location of the project site, the proposed project would not eliminate any constraints that are currently obstacles to growth in this portion of the City that would hasten development of this area.

Economic Effects

The proposed project would affect the local economy through the construction of a new retail center anchored by a grocery store that would be relocating from an adjacent site. This would help encourage people to stay in the City to take advantage of these facilities.

Additional local employment can be generated through the multiplier effect, as discussed previously in this chapter. The multiplier effect tends to be greater in regions with larger, diverse economies due to a decrease in the requirement to import goods and services from outside the region.

Two different types of additional employment are tracked through the multiplier effect. *Indirect* employment includes those additional jobs that are generated through the expenditure patterns

of direct employment associated with the project. Indirect jobs tend to be in relatively close proximity to the places of employment and residence.

The multiplier effect also calculates *induced* employment. Induced employment follows the economic effect beyond the expenditures of the residents within the project area to include jobs created by the stream of goods and services necessary to support residences within the proposed project. When a manufacturer buys or sells products, the employment associated with those inputs or outputs are considered *induced* employment.

For example, when an employee of the project goes out to lunch, the person who serves the employee lunch holds a job that is *indirectly* related to the proposed project. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered *induced* employment.

The multiplier effect also considers the secondary effect of employee expenditures. Thus, it includes the economic effect of the dollars spent by those employees and residents who support the employees of the project.

Increased future employment generated by employee spending ultimately results in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that will determine the type and magnitude of environmental impacts of this additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are too speculative to predict or evaluate, since they can be spread throughout the City, Sacramento County, and beyond.

Impacts of Induced Growth

The growth induced directly and indirectly by the proposed project could contribute to the environmental impacts, discussed in Chapter 4, in the City as well as the greater regional area. Any such environmental effects, however, are too diffuse and speculative to predict or describe with any particularity.

In summary, the proposed project would not induce growth given its location as an infill project in a developed area of the City, on a site that is currently developed. Growth-inducing effects are less than significant.

6.5 CUMULATIVE IMPACTS

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed project. This assessment involves examining project-related

effects on the environment in the context of similar effects that have been caused by past or existing projects, and the anticipated effects of future projects. As indicated in the CEQA Guidelines, the discussion of cumulative impacts need not provide the same level of detail as project-related impacts. The discussion should be guided by "standards of practicality and reasonableness" (CEQA Guidelines, Section 15130(b)). Although project-related impacts can be individually minor and less than significant, the cumulative effects of these impacts, in combination with the impacts of other projects, could be significant under CEQA and must be addressed (14 CCR 15130(a)). Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable probable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself).

To ensure an adequate discussion of cumulative impacts is included in an EIR, CEQA allows the lead agency to use either a list of past, present, and probable future projects (including those projects outside of the control of the lead agency), or projections included in an adopted local, regional, or statewide plan like a general plan (CEQA Guidelines, Section 15130(b)(1)). The general cumulative impact context for evaluating cumulative impacts for the majority of the technical issue areas evaluated in Chapter 4 of this EIR considers development projections identified in the City's 2035 General Plan, or evaluates the potential loss of resources on a much broader, regional scale. The cumulative impact analyses in this EIR thus does not rely on any list of specific pending, reasonably foreseeable development proposals in the general vicinity of the proposed project.

It is important to note that the basis of the cumulative analysis varies by technical area. For example, traffic and traffic-related air emissions and noise analyses assume development that is planned and/or anticipated in the City, as well as the surrounding area, because each contributes to traffic on local and regional roadways that is quantifiable. Operational air quality impacts are evaluated against conditions in the City of Sacramento and surrounding areas within the Sacramento Federal Nonattainment Area for ozone. A description of the cumulative context for each issue area evaluated is included in the cumulative impacts at the end of each technical section of Chapter 4. The cumulative analysis in each of the technical sections evaluates the proposed project's contribution to the cumulative scenario.

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CHAPTER 8 EIR PREPARATION

EIR PREPARATION

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