

*PUBLIC REVIEW DRAFT*  
INITIAL STUDY/  
MITIGATED NEGATIVE DECLARATION

FOR THE

CALAVERAS ESTATES IV  
RESIDENTIAL PROJECT

4204 Alvarado Avenue  
Stockton, CA

IS File No. P17-0356

October 13, 2017

*Prepared for:*

City of Stockton  
Community Development Department  
345 N. El Dorado Street  
Stockton, CA 95202  
209-937-8444

*Prepared by:*

BaseCamp Environmental, Inc.  
115 S. School Street, Suite 14  
Lodi, CA 95240  
209-224-8213



CITY OF STOCKTON  
PUBLIC NOTICE OF INTENT TO ADOPT AN INITIAL STUDY  
MITIGATED NEGATIVE DECLARATION/PUBLIC MEETING  
(Pursuant to Public Resources Code Sections 21092 and 21092.3 and  
Cal. Code of Regulations Title 14, Sections 15072, 15073 and 15087)

The City of Stockton Community Development Department has completed, independently reviewed and analyzed the following Draft Initial Study/Proposed Mitigated Negative Declaration for a 30-day review:

**THE DRAFT INITIAL STUDY/PROPOSED MITIGATED NEGATIVE DECLARATION FOR A  
PROPOSED RESIDENTIAL DEVELOPMENT PROJECT AT 4204 ALVARADO AVENUE (P17-  
0356).**

The proposed residential development consists of Rezoning from RM (Residential, Medium-Density) to RL (Residential, Low-Density) and Vesting Tentative Map to subdivide a 8.2-acre site into 39 residential lots and one non-residential lot at 4204 Alvarado Avenue.

The review period will begin on **October 13, 2017 and end of November 13, 2017**. A copy of the Draft Initial Study/Proposed Mitigated Negative Declaration may be reviewed and/or obtained at the following address or **<http://www.stocktonca.gov/environmental>**.

Attn: Jenny Liaw, Senior Planner  
Community Development Department  
Planning and Engineering Division  
345 North El Dorado Street  
Stockton, CA 95202

A public meeting will be held on **Wednesday, November 1, 2017 at 6:00 p.m. - 8:00 p.m. at Wilson Elementary School, 150 E. Mendocino Avenue, Stockton, CA 95204**. Any written comments on this document must be received at this same address no later than **November 13, 2017 by 4:30 p.m.** Further information may be obtained by contacting the City Planning and Engineering Division at (209) 937-8266.

The Planning Commission will consider the Draft Initial Study/Proposed Mitigated Negative Declaration at their meeting of **December 14, 2017 at 6:00 p.m.** in the Council Chambers, second floor, City Hall, 425 North El Dorado Street. Anyone wishing to be heard on the issue may appear before the City Planning Commission at the time of the public meeting.

All proceedings before the City Planning Commission are conducted in English. The City of Stockton does not furnish interpreters and if one is needed, it shall be the responsibility of the person needing one.

If you challenge the proposed action in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the Planning Commission, at, or prior to, the public meeting.

DAVID KWONG, DIRECTOR  
COMMUNITY DEVELOPMENT DEPARTMENT

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## LIST OF ACRONYMS USED IN THIS DOCUMENT

AB	Assembly Bill
ALUCP	Airport Land Use Compatibility Plan
APN	Assessor's Parcel Number
ARB	California Air Resources Board
BMP	Best Management Practice
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAP	Climate Action Plan (Stockton)
CCAP	Climate Change Action Plan (SJVAPCD)
CDD	City of Stockton Community Development Department
CEQA	California Environmental Quality Act
CISP	Climate Protection Impact Study Process
CNDDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CUPA	Certified Unified Program Agency
dB	decibel
dBA	A-weighted decibel
DRP	Development Review Process
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EPA	U. S. Environmental Protection Agency
EPAP	Existing Plus Approved Projects
FEMA	Federal Emergency Management Agency
GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GHG	greenhouse gas
IS/MND	Initial Study/Mitigated Negative Declaration
ISR	Indirect Source Rule
ITMM	Incidental Take Minimization Measure
L <sub>dn</sub>	Day-Night Average Sound Level
LOS	Level of Service
mgd	million gallons per day
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
NAHC	Native American Heritage Commission
NOI	Notice of Intent
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System

ODS	owners, developers and successors in interest
PM <sub>10</sub>	particulate matter 10 micrometers or less in diameter
PM <sub>2.5</sub>	particulate matter 2.5 micrometers or less in diameter
ROG	reactive organic gases
RWCF	Regional Wastewater Control Facility
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Open Space and Habitat Conservation Plan
SJRTD	San Joaquin Regional Transit District
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
SWQCCP	Storm Water Quality Control Criteria Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
UST	Underground Storage Tank
WDID	Waste Discharger's Identification Number

# 1.0 INTRODUCTION

## 1.1 Project Brief

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The proposed project site includes 8.2 acres of land within the City of Stockton. The project involves requests for City approvals of a Tentative Subdivision Map creating 39 parcels for single-family residential use as well as the rezoning of the site. All proposed lots would be a minimum of 5,000 square feet in size, with a proposed density of approximately 4.37 units/acre.

The proposed project is consistent with the Stockton General Plan (Low-Medium Density Residential); however, it will require rezoning from RM Medium Density Residential to RL Single-Family Residential.

Two access point are proposed at the north end of Alvarado Avenue. Both left-turn and right-turn movements would be allowed at these points. Additionally, four of the proposed houses would front along the east side Alvarado Avenue, where access is currently available.

The project would include utility and right-of way improvements. Curb, gutter, and sidewalk improvements would be made along the projects frontage of Alvarado Avenue. The project would be served by City sewer, water and storm drainage lines to be extended on the project site from existing lines located in Alvarado Avenue.

A 15-foot masonry wall would be constructed along the eastern boundary of the site. A 10-foot masonry wall would be constructed along the eastern portions of the north and south property boundary; the southern wall would gradually reduce to six feet in height. The remainder of the north and south boundaries would be defined by 6-foot wooden fences.

## 1.2 Purpose of Initial Study

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The California Environmental Quality Act (CEQA) requires that public agencies consider and document the potential environmental effects of the agency's actions that meet CEQA's definition of a "project." Briefly summarized, a "project" is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency's direct activities as well as activities that involve public agency approvals or funding. Guidelines for an agency's implementation of CEQA are found in the CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations).

Provided that a project is not exempt from CEQA, the first step in the agency's consideration of its potential environmental effects is the preparation of an Initial Study. The purpose of an Initial Study is to determine whether the project would involve "significant" environmental effects as defined by CEQA and to describe feasible mitigation measures that would avoid significant effects or reduce them to a level that would be less than significant. If the Initial Study does not identify significant effects, or if it identifies mitigation measures that would reduce all of the significant effects of the project to a less-than-significant level, then the agency prepares a Negative Declaration or Mitigated Negative Declaration. If the project would involve significant effects that cannot be readily mitigated, then the agency must prepare an Environmental Impact



Report (EIR). The agency may also decide to proceed directly with the preparation of an EIR without preparation of an Initial Study.

The proposed project is a “project” as defined by CEQA and is not exempt from CEQA consideration. The City has determined that the project involves the potential for significant environmental effects and requires preparation of this Initial Study. The Initial Study describes the proposed project and its environmental setting, it discusses the potentially significant environmental effects of the project, and it identifies feasible mitigation measures that would avoid the potentially significant environmental effects of the project or reduce them to a level that would be less than significant. The Initial Study considers the project’s potential for significant environmental effects in the following subject areas:

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

The Initial Study concludes that the project would have significant environmental effects, but recommended mitigation measures would reduce all of these effects to a level that would be less than significant. As a result, the City has prepared a Mitigated Negative Declaration and notified the public of the City’s intent to adopt the Initial Study/Mitigated Negative Declaration. As of the distribution of the IS/MND for public review, the applicant has accepted all of the recommended mitigation measures. The time available for comment on the IS/MND is shown in the Notice of Intent.

### 1.3 Project Background

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The project site is located within the City of Stockton. It was originally annexed into the City in 2005 as a part of a 52-acre project. The project site was included in the Alvarado Avenue Residential Annexation, Rezone and Tentative Subdivision Map dated July 15, 2005. A CEQA analysis was prepared and adopted at that time (Annexation A-04-7, Rezoning Z-12-04, Tentative Subdivision Map TM 36-04, Initial Study IS 29-04). This previous analysis considered the potential impacts of development of a then-proposed tentative subdivision map as well as other lands within the annexation area, including the Calaveras Estates 4 site at the maximum residential densities allowed under the Stockton General Plan. A 2013 addendum to the 2005

Initial Study was prepared in order to modify conditions of approval related to required traffic improvements. The addendum affirmed the applicability of the 2005 analysis at that time.

## 1.4 Environmental Evaluation Checklist Terminology

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The Initial Study repeatedly uses a few terms and acronyms that are defined here for the reader's convenience. A complete list of acronyms used in the Initial Study is shown following the Table of Contents.

CDD	The Stockton Community Development Department. The CDD is responsible for processing of the project's permit applications and for independent review and acceptance of the IS/MND.
IS/MND	This Initial Study/Mitigated Negative Declaration.
ODS	The owners, developers and successors-in-interest, meaning the project applicant, property owners, future project owners and other parties with interest or responsibility for the project, now and in the future.

The project's potential environmental effects are evaluated in the Environmental Evaluation Checklist shown in Chapter 3. The checklist includes a list of environmental considerations against which the project is evaluated. For each question, the City determines whether the project would involve: 1) a Potentially Significant Impact, 2) a Less Than Significant Impact With Mitigation Incorporated, 3) a Less Than Significant Impact, or 4) No Impact.

A Potentially Significant Impact occurs when there is substantial evidence that the project would involve a substantial adverse change to the physical environment, i.e., that the environmental effect may be significant, and mitigation measures have not been defined that would reduce the impact to a less than significant level. If there are one or more Potentially Significant Impact entries in the Initial Study, an EIR is required.

An environmental effect that is Less Than Significant With Mitigation Incorporated is a Potentially Significant Impact that can be avoided or reduced to a less than significant level with the application of mitigation measures.

A Less Than Significant Impact occurs when the project would involve effects on a particular resource, but the project would not involve a substantial adverse change to the physical environment, and no mitigation measures are required.

A determination of No Impact is self-explanatory.

This IS/MND prescribes mitigation measures for the potentially significant environmental effects of the project. The City and other agencies have established regulatory requirements that are routinely implemented in conjunction with new development. These requirements also function as measures to mitigate environmental impacts. The IS/MND additionally describes mitigation measures that are not yet established in law, but would address the project's environmental impacts.

## 1.5 Summary of Environmental Effects and Mitigation Measures

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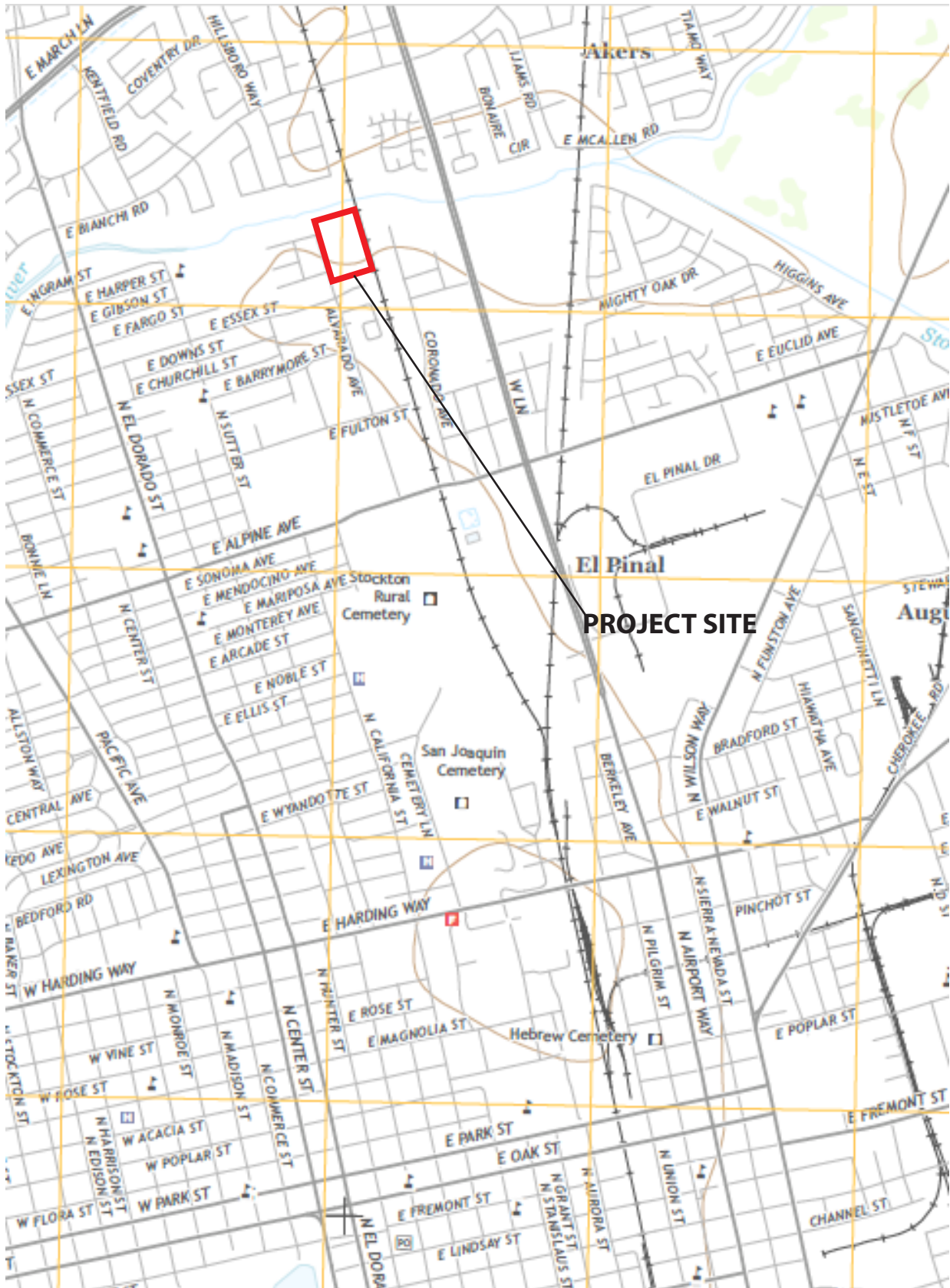
The following pages contain project location graphics followed by Table 1-1, Summary of Impacts and Mitigation Measures. The table summarizes the results of the Environmental Checklist Form and associated narrative discussion shown in Chapter 3.0.

The potential environmental impacts of the proposed project are summarized in the left-most column of the table. The level of significance of each impact is indicated in the second column. Mitigation measures proposed to minimize the impacts are shown in the third column, and the significance of the impact, after mitigation measures are applied, is shown in the fourth column.

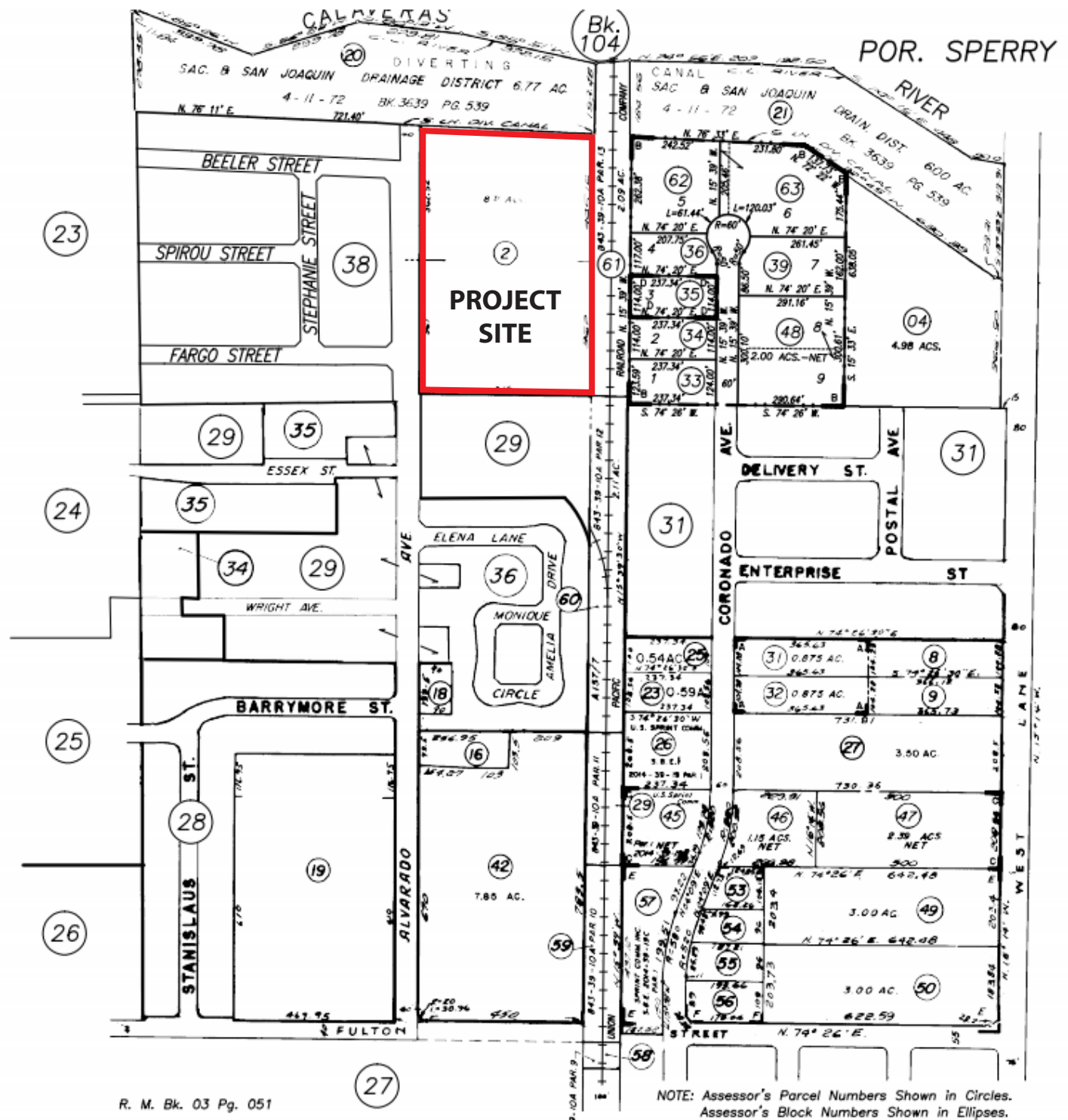








SOURCE: Department of the Interior, U.S.  
Geological Survey, Stockton West, CA  
2015



SOURCE: San Joaquin County  
Assessor Office



Figure 1-4  
ASSESSOR PARCEL MAP





SOURCE: Google Maps



TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Significance After Mitigation Measures
<b>3.1 AESTHETICS</b>		
a) Scenic Vistas	NI	None required
b) Scenic Resources	NI	None required
c) Visual Character and Quality	LS	None required
d) Light and Glare	LS	None required
<b>3.2 AGRICULTURE AND FORESTRY RESOURCES</b>		
a) Agricultural Land Conversion	NI	None required
b) Agricultural Zoning and Williamson Act	NI	None required
c, d) Forest Land Conversion and Zoning	NI	None required
e) Indirect Conversion of Farmland of Forest Land	NI	None required
<b>3.3 AIR QUALITY</b>		
a) Air Quality Plan Consistency	LS	None required
b) Violation of Air Quality Standards	LS	None required
c) Cumulative Emissions	LS	None required
d) Exposure of Sensitive Receptors to Pollutants	LS	None required
e) Odors	LS	None required

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
<b>3.4 BIOLOGICAL RESOURCES</b>			
a) Special-Status Species	PS	BIO-1: The ODS shall mitigate for the proportionate loss of potential wildlife habitat from the project site by applying for coverage, paying required fees and implementing Incidental Take Minimization Measures (ITMMs) as required by the adopted San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).	LS
b) Riparian and Other Sensitive Habitats	NI	None required	
c) Wetlands	NI	None required	
d) Fish and Wildlife Movement	NI	None required	
e) Local Biological Requirements	NI	None required	
f) Conflict with Habitat Conservation Plans	PS	Mitigation Measure BIO-1.	LS
<b>3.5 CULTURAL RESOURCES</b>			
a, b) Historical and Archaeological Resources	PS	CULT-1: If any subsurface cultural or paleontological resources are encountered during project construction, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist or paleontologist, as appropriate, can examine these materials and make a determination of their significance. If the resource is determined to be significant, recommendations shall be made on further mitigation measures to reduce potential effects on the resource to a level that would be less than significant. Such measures could include 1) preservation in place or 2) excavation, recovery and curation by qualified professionals. The Stockton CDD shall be notified	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		of any find, and the ODS shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the CDD, consistent with the requirements of the CEQA Guidelines and Section 116.36.050 of the Stockton Municipal Code.	
c) Paleontological Resources and Unique Geological Features	PS	Mitigation Measure CULT-1.	LS
d) Human Burials	LS	None required	
<b>3.6 GEOLOGY AND SOILS</b>			
a-1) Fault Rupture Hazards	NI	None required	
a-2, 3) Seismic Hazards	LS	None required	
a-4) Landslides	NI	None required	
b) Soil Erosion	PS	GEO-1: The ODS shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project and file a Notice of Intent (NOI) with the State Water Resources Control Board prior to commencement of construction activity, in compliance with the Construction General Permit and City of Stockton storm water requirements, including the Stockton Municipal Code. The SWPPP shall be available on the construction site at all times. The ODS shall incorporate an Erosion Control Plan consistent with all applicable provisions of the SWPPP within the site development plans. The ODS shall submit the SWRCB Waste Discharger's Identification Number (WDID) to the City prior to approval of	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		development or grading plans.	
c) Geologic Instability	NI	None required	
d) Expansive Soils	PS	GEO-2: A site-specific, design-level geotechnical study shall be completed for the project site before a grading permit is issued. The study shall identify potential geotechnical issues related to project development, including the presence of expansive soils in the construction area, and recommend design and construction features to reduce the potential impact of these issues on project facilities. Geotechnical design recommendations included in the study shall be incorporated in the project design and implemented during project construction.	LS
e) Adequacy of Soils for Wastewater Disposal	NI	None required	
<b>3.7 GREENHOUSE GAS EMISSIONS</b>			
a, b) Project GHG Emissions and Consistency with GHG Reduction Plans	LS	None required	
<b>3.8 HAZARDS AND HAZARDOUS MATERIALS</b>			
a, b) Hazardous Material Transport, Use, and Potential Release	LS	None required	
c) Hazardous Materials Releases near Schools	NI	None required	
d) Hazardous Materials Sites	NI	None required	

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
e) Public Airport Operations	NI	None required	
f) Private Airstrip Operations	NI	None required	
g) Emergency Response and Evacuations	LS	None required	
h) Wildland Fire Hazards	LS	None required	
<b>3.9 HYDROLOGY AND WATER QUALITY</b>			
a, f) Surface Waters and Water Quality	PS	<p>HYDRO-1: The ODS shall submit a Storm Water Quality Control Criteria Plan that shall include post-construction Best Management Practices as required by Title 13 of the Stockton/San Joaquin SWQCCP. The project SWQCCP will be reviewed and approved by the Stockton Municipal Utilities Department prior to the Certificate of Occupancy.</p> <p>HYDRO-2: The ODS shall must create a zone within the Stockton Consolidated Storm Drainage Maintenance Assessment District No. 2005-1, prior to the recordation of a Final Map, to provide funding for the operation, maintenance and replacement costs of the storm water best management practices. In addition, the ODS shall be responsible for the costs of forming the Assessment District, including, but not limited to, the City-selected Assessment District Council, Engineer's Report, Proposition 218 vote, and noticing requirements.</p> <p>HYDRO-3: The ODS shall comply with any and all requirements of, and pay all associated fees as required by, the City's Storm Water Pollution Prevention Program as set forth in its NPDES Storm Water Permit.</p>	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
b) Groundwater Supplies and Recharge	LS	None required	
c, d, e) Drainage Patterns and Runoff	LS	None required	
g) Residences in 100-Year Floodplain	NI	None required	
h) Other Structures in 100-Year Floodplain	NI	None required	
i) Dam and Levee Failure Hazards	NI	None required	
j) Seiche, Tsunami, and Mudflow Hazards	LS	None required	
<b>3.10 LAND USE AND PLANNING</b>			
a) Division of Established Community	NI	None required	
b) Conflicts with Plans, Policies and Regulations Mitigating Environmental Effects	LS	None required	
c) Conflict with Habitat Conservation Plans	NI	None required	
<b>3.11 MINERAL RESOURCES</b>			
a, b) Availability of Mineral Resources	NI	None required	
<b>3.12 NOISE</b>			
a) Exposure to Noise Exceeding Local Standards	PS	<p>NOISE-1: Air conditioning or mechanical ventilation systems should be installed so that windows and doors may remain closed.</p> <p>NOISE-2: Exterior doors shall be solid core with perimeter weather-stripping and threshold seals.</p> <p>NOISE-3: For second floor facades of the perimeter lots</p>	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		that do not receive shielding from barriers, and second floors of interior lots that do not have shielding from barriers, the following building design and materials shall be used. Exterior walls shall consist of 3-1/2" insulation; 5/8-inch exterior sheet rock mounted to a minimum 2x4 studs; 2" DRYVIT insulation board; DRYVIT or Stucco finish. Interior walls shall be 5/8" sheet rock. Windows and sliding glass doors shall have a minimum STC rating of 35. This requirement only applies to the facades on the side of the house facing the railroad track.	
		NOISE-4: Glass in both windows and doors shall not exceed 20% of the floor area in a room.	
		NOISE-5: Roof or attic vents facing the noise source shall be boxed so that there is not a direct path of sound into the attic spaces.	
		NOISE-6: Temporary noise impacts resulting from project construction shall be minimized by restricting hours of operation by noise-generating equipment to 7:00 a.m. to 10:00 p.m. Monday through Friday, and to 7:00 a.m. to 6:00 p.m. on Saturday and Sunday when such equipment is to be used near noise-sensitive land uses, and by requiring residential type mufflers where applicable.	
		NOISE-7: Operation by noise-generating equipment to 7:00 a.m. to 10:00 p.m. Monday through Friday, and to 7:00 a.m. to 6:00 p.m. on Saturday and Sunday when such equipment is to be used near noise-sensitive land uses, and by requiring residential type mufflers where applicable.	

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		NOISE-8: The ODS shall construct the noise barrier wall as shown in Figure 9 and described in the Bollard and Brennan report (Alvarado Avenue Residential Project, September 2004).	
		NOISE-9: An updated acoustical report may be prepared that defines equivalent alternative mitigation measures that may supersede mitigations NOISE-1 through NOISE-8, subject to the approval of the Community Development Director.	
		NOISE-9:	
b) Groundborne Vibrations	NI	None required	
c) Permanent Increase in Ambient Noise	LS	None required	
d) Temporary or Periodic Increase in Ambient Noise	LS	None required	
e) Public Airport Operations Noise	NI	None required	
f) Private Airstrip Operations Noise	NI	None required	
<b>3.13 POPULATION AND HOUSING</b>			
a) Population Growth Inducement	LS	None required	
b, c) Displacement of Housing or People	NI	None required	
<b>3.14 PUBLIC SERVICES</b>			
a) Fire Protection	PS	SERV-1: The ODS shall pay required Public Facility Fees toward the design, construction, maintenance, and expansion of public facilities.	LS



TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
b) Police Protection	PS	<p>SERV-2: The proposed noise wall along the north line of the site may be shortened to provide increased visibility to law enforcement, provided that the noise mitigation requirements for the future residence on Lot 18 are increased so as to offset the reduction in noise mitigation effect resulting from shortening the wall, as determined by a qualified acoustical consultant.</p> <p>SERV-3: The ODS shall coordinate with the Stockton Police Department as required to establish adequate security and visibility of the construction site.</p>	LS
c) Schools	PS	SERV-3: The ODS shall pay adopted developer fees toward construction of new schools prior to issuance of construction permits in accordance with the rate schedule established by SUSL.	LS
d, e) Parks and Other Public Facilities	PS	SERV-4: The ODS shall pay required Public Facility Fees toward the design, construction, maintenance, and expansion of public facilities..	LS
<b>3.15 RECREATION</b>			
a, b) Recreational Facilities	PS	<p>Mitigation Measure SERV-4.</p> <p>REC-1: The Prior to recordation of any Final Map, the ODS shall form a new zone of the Stockton Consolidated Landscape Maintenance District 96-2, and approve an assessment providing for the subdivision's proportionate share of the costs to maintain any public parks within the service area for this subdivision or serving this</p>	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		<p>subdivision. ODS may request to annex to an existing zone of the Stockton Consolidated Landscape Maintenance District 96-2 provided the subdivision is within the service area of a park for which a zone of the Stockton Consolidated Landscape Maintenance District 96-2 has already been formed.</p> <p>Formation of a new zone shall result in an assessment being established that includes, but not limited to, costs for: 1) annual maintenance of the park and 2) administrative costs. The assessment levied shall contain a provision that will allow the maximum annual assessment to be increased in an amount equal to the greater of: 1) three percent (3%) or 2) the percentage increase of the Consumer Price Index (CPI) for the San Francisco – Oakland – San Jose County Area for All Urban Consumers, as developed by the U.S. Bureau of Labor Statistics, for a similar period.</p> <p>REC-2: Prior to recordation of any Final Map, the ODS shall establish a maintenance entity acceptable to the Community Development Director, the Parks and Recreation Director and the Public Works Director to provide funding for the maintenance for, and if necessary replacement at the end of the useful life of, improvements including but not limited to common area landscaping, landscaping in the right-of-way, sound walls and/or back-up walls (all “Improvements”) serving or for the special benefit of this subdivision.</p> <p>If the ODS elects to provide maintenance for the Improvements through a maintenance assessment district, the ODS shall form a new zone of the Stockton</p>	

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		<p>Consolidated Landscape Maintenance District 96-2 that includes the entire subdivision. The entire subdivision may be considered for annexation to an existing zone of the Stockton Consolidated Landscape Maintenance District 96-2, provided the type, intensity and amount of the Improvements to be maintained are similar to Improvements in the zone to which annexation is proposed. Formation/annexation shall result in an assessment being approved that shall be levied on all property owners to pay their proportionate share of the costs of maintaining, in perpetuity, the improvements serving or for the special benefit of this subdivision</p> <p>The assessment shall be established including, but not limited to, costs for: 1) annual maintenance of Improvements; 2) replacement of the wall(s) at the end of its useful life; and 3) administrative costs. The assessment levied shall contain a provision that will allow the maximum annual assessment to be increased in an amount equal to the greater of; 1) three percent (3%) or 2) the percentage increase of the Consumer Price Index (CPI) for the San Francisco-Oakland-San Jose County Area for All Urban Consumers, as developed by the U.S. Bureau of Labor Statistics, for a similar period. The owners, developers and/or successors in interest shall be responsible for maintenance of the Improvements until the District has generated sufficient revenue to fund the maintenance</p>	
<b>3.16 TRANSPORTATION/TRAFFIC</b>			
a) Conflict with Transportation Plans, Ordinances and Policies	PS	TRANS-1: The ODS shall make a fair-share contribution to funding the cost of signalizing the El Dorado Street / Fargo Street intersection.	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
b) Conflict With Congestion Management Program	PS	Mitigation Measure TRANS-1.	LS
c) Air Traffic Patterns	NI	None required	
d) Traffic Hazards	LS	None required	
e) Emergency Access	NI	None required	
f) Conflict with Non-vehicular Transportation Plans	LS	None required	
<b>3.17 TRIBAL CULTURAL RESOURCES</b>			
a, b) CRHR listing or eligibility, significant resources per PRC 5024.1	PS	<p>TCR-1: The ODS shall retain a qualified professional archaeologist and a local Native American Tribal Representative (NATR) to monitor all ground disturbing activities that occur within the project site.</p> <p>TCR-2: In the event that construction encounters evidence of human burial or scattered human remains, construction in the vicinity of the encounter shall be immediately halted. The ODS shall immediately notify the County Coroner, the Stockton Community Development Department, and the NATR. Construction activity in the vicinity of the encounter shall not proceed until the qualified archaeologist/NATR can evaluate the nature and significance of the find. Appropriate federal and State agencies also shall be notified, in accordance with the provisions in the Archaeological Resources Protection Act (16 USC 469), Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-</p>	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		<p>30013), California Health and Safety Code section 7050.5, and California Public Resources Code section 5097.9 <i>et al.</i></p> <p>The ODS will be responsible for compliance with the requirements of CEQA as to human remains as defined in CEQA Guidelines Section 15064.5, with California Health and Safety Code Section 7050.5, and as directed by the County Coroner. If the human remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission, also identifying the NATR that has been working on the project. The NAHC will notify and appoint a Most Likely Descendant. The Most Likely Descendant will work with the archaeologist and the NATR to decide the proper treatment of the human remains and any associated funerary objects.</p> <p>TCR-3: In the event that any other tribal cultural resources are encountered during project construction, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist/NATR can examine the materials and make a determination of their significance pursuant to the criteria identified in the CEQA checklist above. If the resource is determined to be significant, the archaeologist shall make recommendations, in consultation with the NATR, as to mitigation measures needed to reduce potential effects on the resource to a level that would be less than significant. The ODS will be responsible for retaining the archaeologist and the NATR and implementing their</p>	

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		<p>recommendations of the archaeologist, including submittal of a written report to the the Stockton Community Development Department and the NATR documenting the find and its treatment.</p> <p>TCR-4: Construction foremen and key members of trenching crews shall be instructed to be wary of the possibility of destruction of buried cultural resource materials. They shall be instructed to recognize signs of historic and prehistoric use and their responsibility to report any such finds, or suspected finds, immediately to the archaeologist and the NATR so damage to such resources may be prevented.</p>	
<b>3.18 UTILITIES AND SERVICE SYSTEMS</b>			
a, e) Wastewater Systems	LS	None required	
b, d) Water Systems and Supply	LS	None required	
c) Stormwater Systems	LS	None required	
f, g) Solid Waste Services	LS	None required	
<b>3.19 MANDATORY FINDINGS OF SIGNIFICANCE</b>			
a) Findings on Biological and Cultural Resources	PS	Mitigation measures in Sections 3.4 and 3.5 above.	LS
b) Findings on Individually Limited but Cumulatively Considerable Impacts	PS	<p>CUMUL-1: The ODS shall make a fair-share contribution to funding the signalization of the El Dorado Street/ Fargo Street intersection and the Alpine Avenue/Alvarado Avenue intersection. The Stockton Public Works Department shall determine the fair-share contribution of the ODS to these improvements, based on</p>	LS

TABLE 1-1  
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		the proportionate share of project traffic to the total traffic under cumulative (Year 2035) conditions.	
c) Findings on Adverse Effects on Human Beings	PS	Mitigation measures in Sections 3.6, 3.9, and 3.16 above.	LS

## 2.0 PROJECT DESCRIPTION

This chapter of the Initial Study provides a brief summary description of the project followed by information on the project setting and background and detailed descriptions of the location and physical elements of the project.

### 2.1 Project Brief

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The proposed project site includes 8.2 acres of land within the City of Stockton. The project involves requests for City approvals of a Vesting Tentative Subdivision Map creating 39 parcels for single-family residential use as well as the rezoning of the site. All proposed lots would be a minimum of 5,000 square feet in size, with a proposed density of approximately 4.37 units/acre.

The proposed project is consistent with the Stockton General Plan (Low-Medium Density Residential); however, it will require rezoning from RM Residential, Medium-Density to RL Residential, Low-Density.

Two access point are proposed at the north end of Alvarado Avenue. Both left-turn and right-turn movements would be allowed at these points. Additionally, four of the proposed houses would front along the east side Alvarado Avenue, where access is currently available.

The project would include utility and right-of way improvements. Curb, gutter, and sidewalk improvements would be made along the projects frontage of Alvarado Avenue. The project would be served by City sewer, water and storm drainage lines to be extended on the project site from existing utilities located in Alvarado Avenue.

A 15-foot masonry wall would be constructed along the eastern boundary of the site. A 10-foot masonry wall would be constructed along the eastern portions of the north and south property boundary; the southern wall would gradually reduce to six feet in height. The remainder of the north and south boundaries would be defined by 6-foot wooden fences.

### 2.2 Project Location

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The project site is located north of Essex Street, south of the Calaveras River Diverting Canal, west of Coronado Avenue, and immediately east of Alvarado Avenue. The approximate latitude and longitude of the project site is 37° 59' 29.42" North and 121° 17' 29.75" West. It is located within Section 17 of the C.M. Weber Grant "El Campo De Los Franceses" land grant area, a portion of Township 2 North, Range 6 East, MDBM on the Stockton West California 7.5' USGS quadrangle map. The assessor's parcel number is 115-300-02.



## 2.3 Project Objectives

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The objective of the proposed project is the development of a single-family residential neighborhood on 8.2 acres of land within the City of Stockton, which would allow for 39 new homes. The project also seeks the rezoning of the project site from RM Residential, Medium-Density to RL Residential, Low-Density as well as the approval of a new Vesting Tentative Subdivision Map.

## 2.4 Project Details

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The proposed project site includes 8.2 acres of land within the City of Stockton. The project involves requests for City approvals of a Vesting Tentative Subdivision Map creating 39 parcels for single-family residential use as well as the rezoning of the site. All proposed lots would be a minimum of 5,000 square feet in size, with a proposed density of approximately 4.37 units/acre.

The proposed project site is vacant, however it is bounded by single-family development to the west and south, the Calaveras River is located to the north and the Union Pacific Railroad to the east. Lands north of the River are also single-family homes and lands east of the railroad are developed for industrial use. The proposed project is consistent with the Stockton General Plan (Low-Medium Density Residential), however, it will require rezoning from RM Medium Density Residential to RL Single-Family Residential.

The proposed Tentative Map would create a total of 39 lots for single-family residential development. Most of the lots range from 5,000 to 6,000 square feet in size; a few larger lots are available at approximately 9,000 square feet. Florsheim Homes will offer the buyers a variety of home styles.

Access to the proposed subdivision would be located at the north end of Alvarado Avenue. The circulation within the subdivision would be a circle, creating one new road approximately 54 feet wide and built to City of Stockton Standards. This new road would provide two entry/exits point along Alvarado Avenue. Both left-turn and right-turn movements would be allowed at these point. Additionally, four of the proposed houses would front along the east side Alvarado Avenue, where access is currently available.

The project would include utility and right-of way improvements. Curb, gutter, and sidewalk improvements would be made along the projects frontage of Alvarado Avenue. The project would be served by City sewer, water and storm drainage lines to be extended on the project site from existing utilities located in Alvarado Avenue.

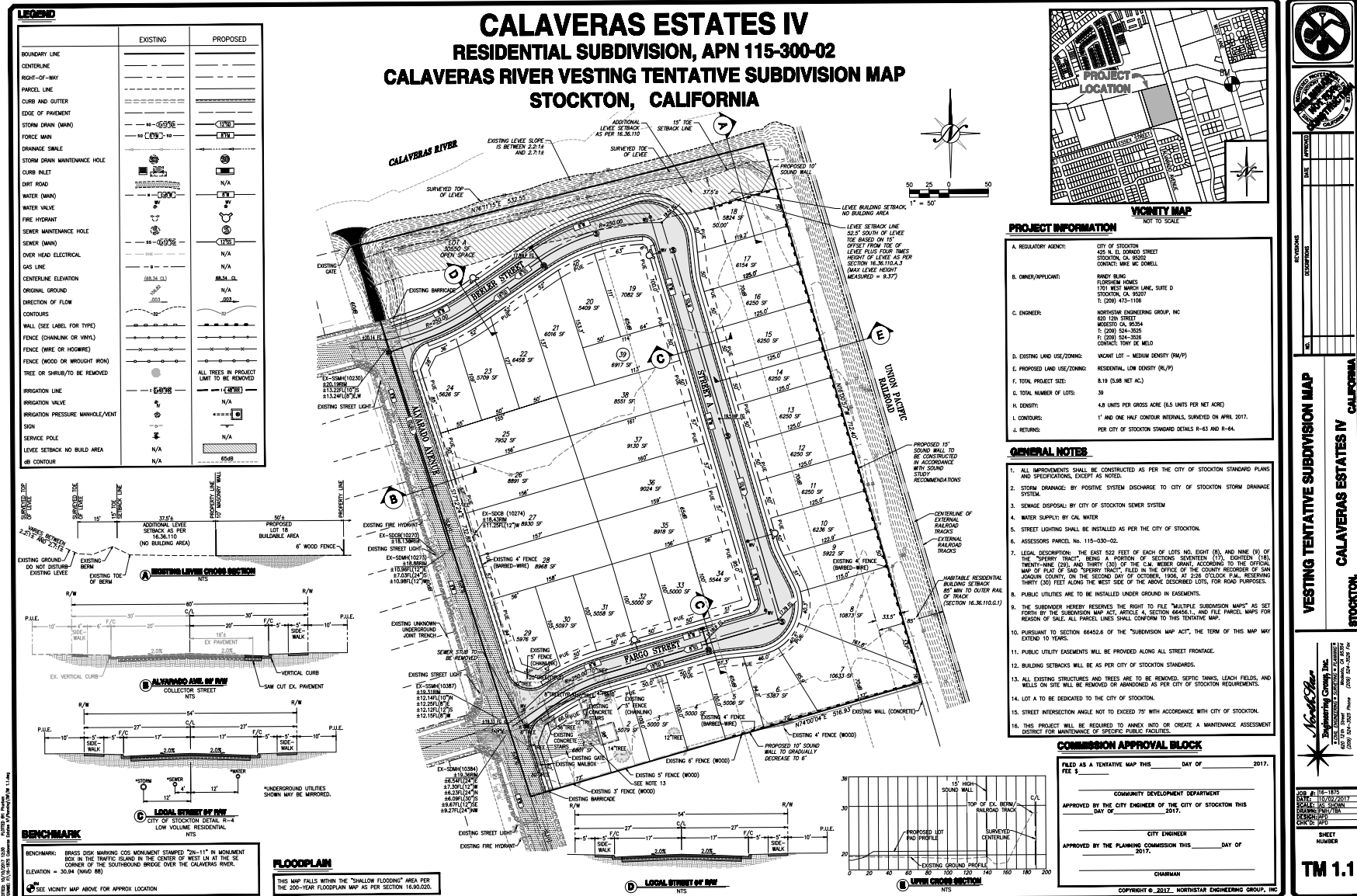
A 15-foot masonry wall would be constructed along the eastern boundary of the site. A 10-foot masonry wall would be constructed along the eastern portions of the north and south property boundary; the southern wall would gradually reduce to six feet in height. The remainder of the north and south boundaries would be defined by 6-foot wooden fences.

## 2.5 Permits and Approvals

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The existing Stockton zoning is not consistent with the land uses proposed by the project. The project proposes a rezoning from RM Residential, Medium-Density to RL Residential, Low-Density. Rezoning is approved by the Stockton City Council, with a recommendation for

action by the Stockton Planning Commission. Building permits must be approved by the Stockton Community Development Department.



## 3.0 ENVIRONMENTAL CHECKLIST FORM

### 3.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				√
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				√
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			√	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			√	

### NARRATIVE DISCUSSION

#### Environmental Setting

The project site is a vacant parcel vegetated with non-native grasses, forbs, shrubs, and a few ornamental trees. Trash and debris were observed on the project site. Visibility to the north is limited by the adjacent Calaveras River levee that extends along the entirety of the site's northern boundary. Beyond the levee, views include the tops of PG&E electrical transmission lines, which extend along the north boundary of the levee, and the roofs of multi-family housing located north of the river. To the west is a single-family residential neighborhood currently under construction. Along the eastern border of the project site runs a 10-foot berm containing Union Pacific Railroad tracks. Views to the east include a portion of the Union Pacific Railroad and various light-industrial structures, including several two-story warehouse type buildings, a cell phone tower and a 432-foot telecommunications tower. Southern views from the project site are predominantly residential and include trees, streetlights and PG&E electrical transmission lines.

The project site and surrounding streets do not offer scenic vistas, and there are no existing designated scenic roads or highways in the project vicinity (Caltrans 2015). Lighting consists mainly of street lighting along the western side of Alvarado Avenue.

#### Environmental Impacts and Mitigation Measures

##### a) Scenic Vistas.

Scenic vistas typically mean distant views of scenic resources. The area surrounding the project site is substantially developed, and no distant views of scenic resources are available. The project would not alter this condition; therefore, the project would have no impact on scenic vistas.

b) Scenic Resources.

There are no scenic resources on the project site, which is a vacant parcel mostly covered with grasses and weeds and containing trash and debris. There are no scenic resources in the vicinity of the site. The project would have no impact on scenic resources.

c) Visual Character and Quality.

The project would be consistent with the substantially urban landscape in the vicinity. As noted in b) above, the project site is a vacant parcel mostly covered with grasses and weeds, with some trash and debris. Construction of new structures associated the project as well as landscaping along the street frontages of the site would improve the aesthetics of the site. Proposed structures and site design would be subject to Design Review and adopted City design standards. As a result, project impacts on visual character and quality are considered less than significant.

d) Light and Glare.

The proposed project would involve the installation of streetlights along the proposed street alignments, spaced according to City standards. Although new lighting would be established by the project, the lighting would be located in an area planned for residential use, installed per City standards and oriented internally, within the proposed subdivision. The project would therefore have less than significant light or glare impacts.

## 3.2 AGRICULTURE AND FORESTRY RESOURCES

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

conversion of forest land to non-forest use?

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## NARRATIVE DISCUSSION

### Environmental Setting

The project site is a vacant parcel that was once used for row crops and orchards. Agricultural use of the project site ceased before 2005. The parcel has been annexed by the City and is surrounded by urban development.

The Important Farmland Maps, prepared by the California Department of Conservation as part of its Farmland Mapping and Monitoring Program, designate the viability of lands for farmland use, based on the physical and chemical properties of the soils. The maps categorize farmland, in decreasing order of soil quality, as "Prime Farmland," "Farmland of Statewide Importance," "Unique Farmland," and "Farmland of Local Importance." Collectively, these categories are referred to as "Important Farmland." There are also designations for grazing land and for urban/built-up areas, among others. According to the 2014 Important Farmland Map of San Joaquin County, the project site is designated as Urban and Built-Up Land.

The entire project area is located in an area of urbanization, is surrounded by urban development, and is considered urban infill. Lands to the north have been developed for multi-family residential use, land to the east is commercially used, and lands to the south and west have been developed for single-family residential use.

The Williamson Act is State legislation that seeks to preserve farmland by offering property tax breaks to farmers who sign a contract pledging to keep their land in agricultural use. The project site is not under a Williamson Act contract.

There are no forest lands on the project site or in San Joaquin County. Because of this, forestry resources will not be discussed further in this document.

### Environmental Impacts and Mitigation Measures

#### a) Agricultural Land Conversion.

As noted above, the project site is not in agricultural use and is designated as Urban and Built-Up Land by the Farmland Mapping and Monitoring Program. The project would not convert Important Farmland as defined by CEQA to non-agricultural land. The project would have no impact on agricultural land conversion.

#### b) Agricultural Zoning and Williamson Act.

The project site is not zoned for agricultural use, and it is not under a Williamson Act contract. The project would have no impact related to these issues.

#### c, d) Forest Land Conversion and Zoning.

As noted above, there are no forest lands on the project site or in the vicinity. The project would have no impact on forest lands.

e) Indirect Conversion of Farmland and Forest Land.

The project is in an area designated for urban development and largely developed; urban infrastructure has been extended to the site and vicinity. In addition, there are no agricultural operations on the project site or on adjacent parcels. The project would not involve any activity that would indirectly convert farmland to non-agricultural uses. As previously noted, there are no forest lands in the vicinity. The project would have no impact on indirect conversion of farmland or forest land.

### 3.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?			√	
b) Violate any air quality standard or contribute to an existing or projected air quality violation?			√	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			√	
d) Expose sensitive receptors to substantial pollutant concentrations?			√	
e) Create objectionable odors affecting a substantial number of people?			√	

## NARRATIVE DISCUSSION

### Environmental Setting

#### Air Quality Conditions

The project site is located within the San Joaquin Valley Air Basin. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over most air quality matters in the Air Basin. The SJVAPCD is tasked with implementing programs and regulations required by the federal and California Clean Air Acts.

Under their respective Clean Air Acts, both the federal government and the State of California have established ambient air quality standards for six criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. California has four additional pollutants for which it has established standards. Table 3-1 shows the status of the San

Joaquin Valley Air Basin in attaining these ambient air quality standards. As shown in Table 3-1, the Air Basin is considered a non-attainment area for ozone and particulate matter under both State and federal standards, except for the federal standard for particulate matter less than 10 micrometers in diameter (PM<sub>10</sub>). The Air Basin is in attainment of, or unclassified for, all other federal and state criteria pollutant standards.

TABLE 3-1  
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

Criteria Pollutant	Designation/Classification	
	Federal Primary Standards	State Standards
Ozone - One hour	No Federal Standard	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme	Nonattainment
PM <sub>10</sub>	Attainment	Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide (NO <sub>x</sub> )	Attainment/Unclassified	Attainment
Sulfur Dioxide (SO <sub>x</sub> )	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

*Source: SJVAPCD 2015a.*

#### Air Pollutants of Concern

The San Joaquin Valley Air Basin is designated a non-attainment area for ozone. Ozone is not emitted directly into the air, but is formed when reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>) react in the atmosphere in the presence of sunlight. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. The SJVAPCD currently has a 2007 Ozone Plan and a 2013 Plan for the Revoked 1-Hour Ozone Standard for the Air Basin to attain federal ambient air quality standards for ozone.

The Air Basin is also designated a non-attainment area for respirable particulate matter, a mixture of solid and liquid particles suspended in air, including dust, pollen, soot, smoke, and liquid droplets. In San Joaquin County, particulate matter is generated by a mix of rural and urban sources, including agricultural activities, industrial emissions, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere. Health concerns associated with suspended particulate matter focus on those particles small enough to reach the lungs when inhaled; consequently, both the federal and state air quality standards for particulate matter apply to particulates 10 micrometers or less in diameter (PM<sub>10</sub>) as well as to particulates less than 2.5 micrometers in diameter (PM<sub>2.5</sub>), which are carried deeper into the lungs. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, coughing, bronchitis, and respiratory illnesses in children. The SJVAPCD currently has a 2007 PM<sub>10</sub> Maintenance Plan to maintain the Air Basin's attainment status for federal PM<sub>10</sub> ambient air quality standards, and a 2008 PM<sub>2.5</sub> Plan for the Air Basin to attain federal PM<sub>2.5</sub> ambient air quality standards.



Carbon monoxide (CO) is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air, unlike ozone. The main source of CO in the San Joaquin Valley is on-road motor vehicles (SJVAPCD 2015b). The San Joaquin Valley Air Basin is in attainment/unclassified status for CO; as such, the SJVAPCD has no CO attainment plans. A State Implementation Plan for carbon monoxide has been adopted by the California Air Resources Board (ARB) for the entire state. High CO concentrations may occur in areas of limited geographic size, sometimes referred to as “hot spots,” which are ordinarily associated with areas of highly congested traffic.

In addition to the criteria pollutants, the California Air Resources Board (ARB) has identified a class of air pollutants known as toxic air contaminants (TACs) - pollutants that even at low levels may cause acute serious, long-term health effects, such as cancer. Diesel particulate matter is the most common TAC, generated mainly as a product of combustion in diesel engines. Other TACs are less common and are typically associated with industrial activities.

### Air Quality Rules and Regulations

As previously noted, the SJVAPCD has jurisdiction over most air quality matters in the Air Basin. It implements the federal and California Clean Air Acts, and the applicable attainment and maintenance plans, through local regulations. The SJVAPCD has developed plans to attain State and federal standards for ozone and particulate matter, which include emissions inventories to measure the sources of air pollutants and the use of computer modeling to estimate future levels of pollution and make sure that the Valley will meet air quality goals (SJVAPCD 2015b). The SJVAPCD regulations that would be applicable to the project are summarized below.

#### *Regulation VIII (Fugitive Dust PM<sub>10</sub> Prohibitions)*

Rules 8011-8081 are designed to reduce PM<sub>10</sub> emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc.

#### *Rule 4101 (Visible Emissions)*

This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

#### *Rule 4601 (Architectural Coatings)*

Rule 4601 limits emissions of volatile organic compounds from architectural coatings by specifying storage, clean up and labeling requirements.

#### *Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations)*

Rule 4641 applies to the manufacture and application of the specified asphalt types for paving and maintenance operations.

#### *Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters)*

Rule 4901 limits the type and number of residential wood-burning appliances that may be installed. Wood-burning fireplaces are prohibited in new residential areas with a density greater than two (2) dwelling units per acre. Only EPA Phase II Certified wood burning heaters may be installed, and only two such appliances may be installed in areas with a density equal to or greater than three (3) dwelling units per acre.

*Rule 4902 (Residential Water Heaters)*

Rule 4902 establishes a maximum NO<sub>x</sub> emission rate of 40 nanograms per Joule of heat output for natural-gas-fired water heaters with a rated heat input less than or equal to 75,000 Btu/hr.

Development projects potentially may be subject to SJVAPCD Rule 9510, also known as the Indirect Source Rule (ISR). The ISR is intended to reduce or mitigate emissions of NO<sub>x</sub> and PM<sub>10</sub> from new development, from both construction activities and project operations. This rule requires specific percentage reductions emissions and/or payment of off-site mitigation fees for required reductions that cannot be met on the project site. Construction emissions of NO<sub>x</sub> and PM<sub>10</sub> exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO<sub>x</sub> and PM<sub>10</sub> must be reduced by 33.3% and 50%, respectively. The ISR applies to residential projects with at least 50 residential units, so the proposed project would not be subject to this rule.

## Environmental Impacts and Mitigation Measures

In 2015, the SJVAPCD adopted a revised Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). The GAMAQI defines methodology and thresholds of significance for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction, along with mitigation measures for identified impacts. Table 3-2 shows the CEQA thresholds for significance for pollutant emissions within the SJVAPCD.

Construction of the project would involve the use of heavy equipment powered by diesel or other internal combustion engines. Emissions from project operations would primarily be from vehicle trips to and from the project site. The California Emissions Estimator Model (CalEEMod) was used to estimate total project construction emissions from the commercial development and the assumed residential development. Detailed CalEEMod results are shown in Appendix A of this document, while a summary of the results for project construction and operational emissions is presented in Tables 3-2 and 3-3 below.

TABLE 3-2  
ESTIMATED PROJECT CONSTRUCTION AIR POLLUTANT EMISSIONS

Pollutant	SJVAPCD Significance Threshold <sup>1</sup>	Unmitigated Emissions		Mitigated Emissions	
		Maximum Annual <sup>1</sup>	Total <sup>2</sup>	Maximum Annual <sup>1</sup>	Total <sup>2</sup>
ROG	10	0.36	0.59	0.36	0.59
NO <sub>x</sub>	10	2.10	3.36	2.10	3.36
CO	100	1.46	2.53	1.46	2.53
SO <sub>x</sub>	27	<0.01	<0.01	<0.01	<0.01
PM <sub>10</sub>	15	0.29	0.38	0.21	0.29
PM <sub>2.5</sub>	15	0.20	0.28	0.16	0.23

<sup>1</sup> Tons per year.

<sup>2</sup> Tons per construction period.

Sources: California Emissions Estimator Model v. 2016.1.1; SJVAPCD 2015b

“Mitigated emissions” for construction emissions are those that occur with implementation of SJVAPCD Regulation VIII, which is designed to reduce fugitive dust emissions during construction activities. These measures include the following:

- Air emissions related to the project shall be limited to 20% opacity (opaqueness, lack of transparency) or less, as defined in SJVAPCD Rule 8011. The dust control measures specified below shall be applied as required to maintain the Visible Dust Emissions standard.
- The contractor shall pre-water all land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and phase earthmoving.
- The contractor shall apply water, chemical/organic stabilizer/suppressant, or vegetative ground cover to all disturbed areas, including unpaved roads, throughout the period of soil disturbance.
- The contractor shall restrict vehicular access to the disturbance area during periods of inactivity.
- The contractor shall apply water or chemical/organic stabilizers/suppressants, construct wind barriers and/or cover exposed potentially dust-generating materials.
- When materials are transported off-site, the contractor shall stabilize and cover all materials to be transported and maintain six inches of freeboard space from the top of the container.
- The contractor shall remove carryout and trackout of soil materials on a daily basis unless it extends more than 50 feet from site; carryout and trackout extending more than 50 feet from the site shall be removed immediately. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden. If the project would involve more than 150 construction vehicle trips per day onto the public street, additional restrictions specified in Section 5.8 of SJVAPCD Rule 8041 would apply.

TABLE 3-3  
ESTIMATED AIR POLLUTANT EMISSIONS FROM PROJECT OPERATIONS

<b>Pollutant</b>	<b>SJVAPCD Significance Threshold</b>	<b>Unmitigated Emissions</b>	<b>Mitigated Emissions</b>
ROG	10	0.63	0.62
NO <sub>x</sub>	10	1.09	0.99
CO	100	3.59	3.37
SO <sub>x</sub>	27	0.01	0.01
PM <sub>10</sub>	15	0.67	0.60
PM <sub>2.5</sub>	15	0.38	0.36

Note: All figures are in tons per year.

Sources: California Emissions Estimator Model v. 2016.1.1; SJVAPCD 2015b

“Mitigated emissions” for operational emissions are the result of the following conditions applicable to the project, incorporated in CalEEMod:

- Improvement in accessibility to town center.
- Improvement in local pedestrian network.
- SB X7-7 in 2009 sets an overall goal of reducing per capita urban water use by 20% by December 31, 2020. The California Green Building Code also mandates a 20% reduction in indoor water use.
- AB 341 establishes the goal of diverting 75% of California’s waste stream from landfills by 2020.

a, b) Air Quality Plan Consistency and Violation of Air Quality Standards.

As noted in the Environmental Setting, SJVAPCD has attainment plans for ozone and particulate matter, while the State has an attainment plan for carbon monoxide. As indicated in Tables 3-2 and 3-3, project construction and operational emissions would not exceed SJVAPCD significance thresholds for criteria pollutants, under both unmitigated and mitigated conditions. The project would not interfere with the implementation of the attainment plans, as the SJVAPCD significance thresholds were established in part to ensure that project emissions are consistent with air quality plans applicable to the San Joaquin Valley Air Basin.

Project construction may generate localized dust emissions at levels above existing ambient conditions, which is of concern given the proximity of residences to the project area. Implementation of the emission reduction measures specified in SJVAPCD Regulation VIII, described above, would further reduce dust emissions generated by the project, which are estimated to be below SJVAPCD significance thresholds even without Regulation VIII implementation.

c) Cumulative Emissions.

As described above, total project operational emissions would be below SJVAPCD significance thresholds for criteria pollutants. While the project would contribute emissions of ozone precursors and particulate matter to existing nonattainment conditions, the emissions would be well below the significance thresholds, which were developed in part to ensure that individual project emissions would not interfere with the implementation of attainment plans applicable to the Air Basin. Therefore, project emissions would not make a cumulatively considerable contribution to air quality impacts.

d) Exposure of Sensitive Receptors.

Sensitive receptors include single-family residences adjacent to the project site. Project operations would not generate any emissions that would affect these sensitive receptors.

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to expose receptors to emissions that violate state and/or federal CO standard even if the broader Basin is in attainment for federal and state levels. The GAMAQI indicates that a project would create no violations of the CO standards if neither of the following criteria are met (SJVAPCD 2015b):

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity (See Section 3.16, Transportation/Traffic, for an explanation of LOS).

As discussed in Section 3.16, Transportation/Traffic, a traffic study was conducted in 2004 for the original project, which proposed 77 residential units. The traffic study evaluated LOS conditions at nine intersections. Under existing plus project (EPAP) conditions, all but three intersections would operate at an acceptable LOS (D or better) during AM and PM peak hours.

The three exceptions would operate at LOS E or F, which were the same LOS as under existing conditions without the project. Mitigation measures recommended by the traffic study would improve LOS at these three intersections to LOS A or B during peak hours (T.Y. Lin International/CCS 2004). Impacts of the proposed project would be similar to those of the original project, although somewhat reduced due to the smaller number of residential units proposed. Implementation of the mitigation measures described in the 2004 traffic study would ensure that LOS at the three intersections would not meet the SJVAPCD criteria for a potential CO hotspot. The project would have no adverse impact on CO emissions.

Project construction emissions of diesel particulate matter, which is classified as a TAC, could affect single-family residences near the project site. Diesel particulate matter emissions would only have adverse effects on residents if they experienced long-term exposure, and these emissions would cease once construction work is completed. Therefore, impacts of diesel construction emissions on these residences are considered less than significant.

The project is located adjacent to the Union Pacific Railroad tracks. Diesel locomotives generate emissions of diesel particulate matter, to which residences near the railroad tracks would be exposed. This exposure would be for a longer time period than exposure to construction emissions, as railroad operations are expected to continue into the foreseeable future. The SJVAPCD has determined that TAC exposure is significant if the maximally exposed individual risk equals or exceeds 10 in one million (SJVAPCD 2015b).

Potential cancer risks associated with railroad operations along the Union Pacific tracks were modeled for another residential project in the Stockton area. The analysis indicated that a 70-year exposure to diesel PM emissions from the railroad would result in an incremental (or "excess") cancer risk of less than 2.0 cancers at the project site boundary along the railroad tracks (Air Permitting Specialists 2007). This potential risk is well below the 10 cancers per million significance threshold. In addition, the project proposes a setback of approximately 100 feet from the railroad tracks. Therefore, exposure to diesel particulate matter emissions from railroad operations are considered less than significant.

#### e) Odors.

No substantial odors are expected to be emitted from this residential development. Project impacts related to odors are considered less than significant.

### 3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Adversely impact, either directly or through habitat modifications, any endangered, rare, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?		√		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified				√

in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?

			√
			√
			√
	√		

## NARRATIVE DISCUSSION

### Environmental Setting

The project site consists of former agricultural land with few trees in association with one on-site single-family residence located on the southwest corner of the project site. The Calaveras River, contained by existing levees, is adjacent to the north project boundary, and provides no wetland habitat values on the project site. Lands to the east, south and west are urbanized in residential or commercial uses, and no active agricultural uses remain in the surrounding area.

The proposed project site provides suitable habitat for Swainson's hawk foraging, and trees in the project vicinity may provide suitable habitat for Swainson's hawk nesting. Other sensitive species may utilize the project site and adjoining waterways. Due to the high level of disturbance of the project site, however, the potential for the occurrence of threatened and endangered species is considered very low. Impact assessment and mitigation measures for sensitive species is addressed by implementation of the adopted Habitat Conservation Plan for San Joaquin County, as discussed below.

The proposed project site is located within the City's Urban Service Boundary and is within the HAB 3 (Multi-Purpose) zone as defined by the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSHCP). The SJMSHCP is a comprehensive program for assessing and mitigating the biological impacts of land development. A project that complies with the Plan can be considered to result in less than significant impacts on biological resources under CEQA. However, participation is generally optional; that is, projects may use the SJMSHCP to reach compliance with the various statutes and regulations that apply to biological

resource protection or it may comply with those requirements independently, without the benefit of the Plan. The SJMSHCP is locally implemented by the San Joaquin County Council of Governments (COG). The compliance process outlined in the Plan has been adopted by federal and state agencies with jurisdiction or trusteeship over biological resources. In addition, the SJMSHCP has been adopted by San Joaquin County, the COG, the City of Stockton and other incorporated cities and entities in San Joaquin County.

The project site contains one multi-stemmed oak shrub, with no branch greater than six inches in diameter. This tree, which is located mid-way along the project site frontage on Alvarado Avenue, is not of heritage size.

## Environmental Impacts and Mitigation Measures

### a) Effects on Special-Status Species.

The project site contains potential foraging habitat for Swainson's hawk, a State threatened species. The project would convert this potential habitat to urban development, thereby reducing foraging habitat. The amount of converted foraging habitat is small and is an infill project, nevertheless, this is considered a potentially significant impact.

Although no burrowing owls or ground squirrel burrows were observed on the site, the site may potentially support burrowing owl nesting and/or foraging. This is considered a potentially significant impact.

The project site is within the coverage area of the SJMSCP. As described above, the SJMSCP includes a fee program and ITMMs that would minimize the impacts of development on listed species such as Swainson's hawk, burrowing owl and others. The project is located in SJMSCP Category C Ag Habitat Open Spaces, Pay Zone B. Mitigation measures described below would require participation in the SJMSCP, which would reduce impacts on these and other special-status species to a level that would be less than significant.

Level of Significance: Potentially significant

#### Mitigation Measures

BIO-1: The ODS shall mitigate for the proportionate loss of potential wildlife habitat from the project site by applying for coverage, paying required fees and implementing Incidental Take Minimization Measures (ITMMs) as required by the adopted San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).

Significance After Mitigation: Less than significant

### b) Riparian and Other Sensitive Habitats.

The project site consists of a vacant site vegetated with non-native annual grassland. There are no riparian or other sensitive habitats on the project site. The project would have no impact on riparian and other sensitive habitats.

c) Wetlands.

There are no wetlands or other Waters of the United States either on or adjacent to the project site. The project would have no impact on wetlands.

d) Fish and Wildlife Movement.

There are no streams either on or adjacent to the project site, so no fish or wildlife movements utilizing such streams would be disturbed. There are no large trees on or near the project site that could be used by migratory or resident bird species for nesting. The project would have no impact on fish and wildlife movement.

e) Local Biological Requirements.

The City of Stockton has a Heritage Tree Ordinance that requires a permit for the removal of specific types of oak trees. However, there are no Heritage oak trees on the project site, so the Heritage Tree Ordinance would not apply. There are no other applicable City policies or ordinances to this project. The project would have no impact on local biological requirements.

f) Conflict with Habitat Conservation Plans.

As discussed in a) above, the project would be required to participate in the SJMSCP as mitigation for potential impacts on special-status species. Implementation of Mitigation Measure BIO-1 would remove any conflict between the project and the SJMSCP, and would reduce impacts to a level that would be less than significant.

### 3.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		√		
b) Cause a substantial adverse change in the significance of a unique archaeological resource (i.e., an 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 contains information needed to answer important scientific research questions, has a special and particular quality such as being the oldest or best available example of its type, or is directly associated with a scientifically recognized important prehistoric or historic event or person)?		√		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		√		



d) Disturb any human remains, including those interred outside of formal cemeteries?

	√		
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## NARRATIVE DISCUSSION

### Environmental Setting

The potential cultural resources of the project site – prehistoric archaeology and historical resources – were evaluated in a Cultural Resources Study prepared by Solano Archaeological Services (SAS) (2017). The SAS study included consultation with the Native American Heritage Commission (NAHC) and tribal entities identified by the NAHC, a search of the California Historical Resources Information System (CHRIS) data bases and an archaeological field survey of the project site. The purpose of the SAS study was to identify the existence or potential existence of historical resources or unique archaeological resources on the site as defined by CEQA. A copy of the SAS study is shown in Appendix B.

### Stockton Municipal Code Cultural Resource Requirements

The Stockton Municipal Code (SMC) establishes requirements for the protection of historical and archaeological resources, including human remains, that may be impacted by a development project in SMC 16.36.050 as follows:

#### 16.36.050 Cultural resources.

If a historical or archaeological resource or human remains may be impacted by a development project requiring a discretionary land use permit, the Secretary of the Cultural Heritage Board shall be notified, any survey needed to determine the significance of the resource shall be conducted, and the proper environmental documents shall be prepared. In addition:

A. Historical Resources. Resources that have been identified as a landmark or part of a historic district in compliance with Chapter [16.220](#) (Cultural Resources) shall require a certificate of appropriateness (Section [16.220.060](#)) if any exterior changes to the resource are proposed.

B. Archaeological Resources. In the event that archaeological resources are discovered during any construction, construction activities shall cease, and the Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State and Federal law.

C. Human Remains. In the event human remains are discovered during any construction, construction activities shall cease, and the County Coroner and Director shall be notified immediately in compliance with CEQA Guidelines 15064.5 (d). A qualified archaeologist shall be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify the most likely descendent of the Native American to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. (Prior code § 16-310.050)

## Prehistory and Ethnography

The earliest well-documented entry and spread of humans into California occurred at the beginning of the Paleo-Indian Period (10,000–6000 B.C.). Evidence of sites inhabited by small, highly mobile social units has been found in the contexts of ancient pluvial lake shores and coast lines.

Few archaeological sites have been found in the Valley that date to the Paleo-Indian or the Lower Archaic (6000–3000 B.C.) time periods; however, archaeologists have recovered a great deal of data from sites occupied by the Middle Archaic period (3000–500 B.C.), when foraging subsistence strategies gave way to more intensive procurement practices. Acorn meal, fish, and game were nutritional mainstays. Permanent villages that were occupied throughout the year were established, primarily along major waterways. Trade was conducted with inhabitants of the Coast Ranges and Sierra Nevadas. Artifacts include charmstones, basketry, baked clay, and worked shell and bone.

Regular, sustained trade according to complex, formalized exchange systems took place during the Upper Archaic Period (500 B.C.–A.D. 700). Reliance on acorns increased, mortar and pestle technology developed, and stone and shell artifacts grew more distinctive.

The Emergent Period (A.D. 700–1800) was characterized by technological and social changes. More intensive fishing, hunting, and gathering strategies were aided by bow and arrow technology and carefully shaped mortars and pestles. These advances led to an increase in population. A wider variety in mortuary patterns appeared and cremation was used for some higher status individuals. Territorial boundaries between groups became well established, and exchange of goods between groups included more goods and became further regularized. Wealth was increasingly linked to social status.

The project area is located in Northern Valley Yokuts ethnographic territory. Because of their rapid decimation as a result of disease, missionization, and Euro-American settlement, the Northern Valley Yokuts are generally not well documented in the ethnographic record. Information on the Yokuts' lifeways has been compiled by ethnographers from various sources; primarily military and missionary reports and diaries written during the Spanish and Mexican periods.

The Northern Valley Yokuts were organized into at least 11 small political units or tribes. Each tribe had a population of approximately 300 people, most of who lived within one principal settlement that usually had the same name as the political unit. Within the villages, structures included sweathouses, ceremonial chambers, and oval single-family dwellings made of tule. Ethnographically, the Northern Valley Yokuts occupied the land on either side of the San Joaquin River from the delta to south of Mendota. The Diablo range probably marked the Yokuts' western boundary; the eastern edge would have lain along the Sierra Nevada foothills. The late prehistoric Yokuts may have been the largest ethnic group in pre-contact California. Northern Valley Yokuts material culture included a wide range of implements including mortars, pestles, snares, bows, spears, tule boats, basketry, and cradles.

Euro American contact with the Northern Valley Yokuts began with infrequent excursions by Spanish explorers traveling through the Sacramento-San Joaquin Valleys in the late 1700s to early 1800s. Many Yokuts were lured or captured by missionaries and taken to Mission San Jose or Santa Clara. The malaria epidemic of 1833 decimated the indigenous population, killing thousands of the tribesmen. The influx of Europeans during the gold rush era further reduced the

population because of disease and violent relations with the miners. Though there was no gold in the Yokuts territory, miners passing through on their way to the diggings caused a certain amount of upheaval.

### Historic-Era Background

The Spanish (and later Mexican) governments of California encouraged settlement by awarding large plots of land, called ranchos, to prominent men; the current project site was part of one such grant, Charles M. Weber's El Campo De Los Franceses land grant. Weber convinced several other settlers to locate to this area by offering them land. Many former miners, who had seen the richness of the San Joaquin Valley on their way east, returned to settle and farm the area. Weber founded the City of Stockton in 1850, and the City incorporated that same year.

One of the key components to the settlement of the San Joaquin Valley was the availability of transportation. In 1868 the Central Pacific Railroad Company began construction on a rail yard in Lathrop, near Weber's rancho, and a settlement grew up around the rail yard, which connected the San Joaquin Valley with southern California. This revolutionized the transportation network, facilitating passenger travel and the ability of farmers and ranchers to sell their goods to distant markets.

During the late 1800s, the San Joaquin Valley became the center of California's wheat belt. The expansion of large-scale irrigation in the early 1900s led to the production of a variety of fruits and vegetables, vineyards, alfalfa, and cotton, among other crops. In addition, the manufacture of agricultural tools and equipment became a major industry in Stockton. Several new inventions from the region revolutionized farming techniques, including the Stockton Gang Plow, the Marvin Combined Harvester, and Benjamin Holt's caterpillar tractor technology.

The establishment of a state highway system in the early-to-mid 1900s was the next major transportation development. This included two north-south highways through the Central Valley. One corresponded to today's State Route (SR) 99 in the interior; the second to U.S. Highways 1 and 101 along the western slope of the Coast Range. These routes led to the growth of residential, commercial, and industrial complexes along these corridors and development of the modern freeway system.

The United States military developed an Army Air Force base at Old Stockton Field and the Stockton Naval Supply Depot during World War II. Local manufacturers benefitted by building and maintaining army equipment as well as shipbuilding. However, agricultural and related industries maintained their status as the driving force and influence in the Stockton economy. Over the years the farmers of the region have continued to make agriculture the state's top industry. By the 1990s, agricultural annual income in San Joaquin County exceeded \$1 billion. During the late 20<sup>th</sup> century, Stockton's main successes in business continued to relate to the activity and support of processing, growing, and transportation of agricultural products.

### Record Search and Survey Results

The search of CHRIS databases indicated that numerous cultural resource studies had been conducted in the vicinity of the project but that no prior surveys of the project site itself had been conducted. SAS conducted a field survey of the project in July 2017. The survey noted the presence of a "modern" house and residence in the southwest corner of the project site; no other structures were noted on the project site. No cultural resources were identified during the field survey.

On further research, it was determined that the existing house, classified in the field as “modern,” is over 100 years in age. The house has, however, been so extensively modified that it does not retain any substantial historical character and is not considered a historical resource. This structure has been recorded as such; a copy of the historical record is shown in Appendix B. An application for the demolition of this historic structure will need to be submitted to the Community Development Department.

## Paleontological Resources

The project site does not contain any known paleontological resources or unique geological features. The vast majority of paleontological specimens from San Joaquin County have been found in rock formations in the foothills of the Diablo Mountain Range, but remains of extinct animals, such as mammoth, can be found virtually anywhere in the County, especially along watercourses such as the San Joaquin River and its tributaries (San Joaquin County 2009). Geological materials underlying the project site include the recent (Quaternary) sedimentary deposits of the Modesto Formation (Wagner et al. 1991). Numerous vertebrate fossil sites have been associated with the Modesto Formation in the Central Valley, including land mammals, birds, reptiles, and amphibians (California High Speed Rail Authority 2012).

## Environmental Impacts and Mitigation Measures

### a, b) Historical and Archaeological Resources.

A cultural resources study of the project site included a records search at the Central California Information Center at California State University Stanislaus, contact with the Native American Heritage Commission (NAHC), and a field survey. The survey identified no historical or archaeological resources on the site. The Central California Information Center had no documentation of prehistoric or historic-era resources within, or adjacent to, the project site.

Subsurface cultural resources could be uncovered by project construction work, although the project site has been intensively disturbed by past agricultural activities. Mitigation described below sets forth procedures to be implemented, consistent with Stockton Municipal Code 16.36.050, to protect cultural resources should any be uncovered during project construction. Implementation of this mitigation measure would reduce potential impacts on historical and archaeological resources to a level that would be less than significant.

Level of Significance: Potentially significant

### Mitigation Measures:

CULT-1: If any subsurface cultural or paleontological resources are encountered during project construction, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist or paleontologist, as appropriate, can examine these materials and make a determination of their significance. If the resource is determined to be significant, recommendations shall be made on further mitigation measures needed to reduce potential effects on the resource to a level that would be less than significant. Such measures could include 1) preservation in place or 2) excavation, recovery and curation by qualified professionals. The City of Stockton CDD shall be

notified of any find, and the ODS shall be responsible for mitigation of any significant cultural or paleontological resources pursuant to CEQA Guidelines and Section 116.36.050 of the Stockton Municipal Code.

Significance After Mitigation: Less than significant

c) Paleontological Resources and Unique Geological Features.

The project site is flat and contains no geological features that may be considered unique. As described above, the project site is underlain by the Modesto Formation, which has been a source of paleontological finds. Given past disturbance of the project site, it is unlikely that any paleontological resources would be found, but general provisions for the discovery of previously unknown paleontological resources are considered appropriate. Mitigation Measure CULT-1 sets forth procedures to be implemented to protect paleontological resources should any be uncovered during project construction. Implementation of this mitigation measure would reduce potential impacts on these resources to a level that would be less than significant.

d) Human Burials.

The site has been fully and substantially disturbed through previous agricultural uses and the construction of Alvarado Avenue to the west, the Calaveras River levee to the north, the Union Pacific Railroad right-of-way to the south, and the orchard cultivation to the east. Based on this previous disturbance and on fieldwork completed in the project vicinity in 2005, it is unlikely that any human burials would be found on the project site. As of any burials, particularly Native American burials, would be a potentially significant impact, general provisions for the discovery of previously unknown burials are considered appropriate.

The California Public Resources Code as applied in CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. All work in the vicinity of the find shall be halted and the County Coroner shall be notified to determine if an investigation of the death is required. If the County Coroner determines that the remains are Native American in origin, then the County Coroner must contact the NAHC within 24 hours. The NAHC shall identify the most likely descendants of the deceased Native American, and the most likely descendants may make recommendations on the disposition of the remains and any associated grave goods with appropriate dignity. If a most likely descendant cannot be identified, the descendant fails to make a recommendation, or the landowner rejects the recommendations of the most likely descendant, then the landowner shall rebury the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance.

Compliance with the provisions of CEQA Guidelines Section 15064.5(e), which are re-stated as mitigation measures in Section 3.17 Tribal Cultural Resources, would ensure that impacts on any human remains encountered during project construction would be less than significant.

### 3.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				√
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			√	
ii) Strong seismic ground shaking?		√		
iii) Seismic-related ground failure, including liquefaction?		√		
iv) Landslides?				√
b) Result in substantial soil erosion or the loss of topsoil?	√			
c) Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				√
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	√			
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				√

### NARRATIVE DISCUSSION

#### Environmental Setting

##### Project Site Soils

The project site lies in the San Joaquin Valley in central California. The San Joaquin Valley is in the southern portion of the Great Valley Geomorphic Province. The Great Valley, also known as

the Central Valley, is a topographically flat, northwest-trending, structural trough (or basin) about 50 miles wide and 450 miles long. It is bordered by the Tehachapi Mountains on the south, the Klamath Mountains on the north, the Sierra Nevada on the east, and the Coast Ranges on the west. The San Joaquin Valley, the southern portion of the Great Valley, is filled with thick sedimentary rock sequences that were deposited as much as 130 million years ago. Large alluvial fans have developed on each side of the Valley. The larger and more gently sloping fans are on the east side of the Valley, and overlie metamorphic and igneous basement rocks. These basement rocks are exposed in the Sierra Nevada foothills and consist of metasedimentary, volcanic, and granitic rocks.

The sediments that form the Valley floor were derived largely from erosion of the Sierra Nevada. The smaller and steeper slopes on the west side of the Valley overlie sedimentary rocks more closely related to the Coast Ranges. Most of the soils in the San Joaquin Valley consist of sand, silt, loamy clay alluvium, peat, and other organic sediments. These soils are the result of long-term natural soil deposition and the decomposition of marshland vegetation. The Geologic Map of the San Francisco-San Jose Quadrangle (Wagner et al. 1991) designates the underlying geology of the project site as the Modesto Formation, consisting of Quaternary sediments.

According to the U.S. Department of Agriculture's Soil Survey of San Joaquin County (SCS 1992, NRCS 2016), the soil on the project site is Jacktone clay. This somewhat poorly drained, nearly level soil is found in basins and is moderately deep to hardpan. It was formed in alluvium derived from mixed rock sources. Permeability is slow in Jacktone clay. Runoff is slow, and the water erosion hazard is slight. The shrink-swell potential of this soil is high.

### Seismic and Geologic Hazards

The project site is not in an area included in the Alquist-Priolo Earthquake Fault Zones (California Geological Survey 2015). However, the project site, along with the rest of San Joaquin County, is subject to seismic shaking from fault features east and west of the County, including the Hayward/Rodgers Creek, San Andreas, and Calaveras Faults (San Joaquin County 2009). Soil compaction and settlement can result from seismic groundshaking. If the sediments which compact during an earthquake are saturated, soils may lose strength and become fluid; water from voids may be forced to the ground surface, where it emerges in the form of mud spouts or sand boils – a process called liquefaction. Based on known information, areas of the County with groundwater less than 50 feet from ground surface in unconsolidated sediment are susceptible to liquefaction, including lands near river courses (San Joaquin County 2009).

## Environmental Impacts and Mitigation Measures

### a-1) Fault Rupture Hazards.

There are no active or potentially active faults within or near the project site. As noted above, the project site is not within an Alquist-Priolo Earthquake Fault Zone. The project would have no impact related to fault rupture.

### a-2, 3) Seismic Hazards.

The project site, along with the rest of the County, is subject to seismic shaking from fault features east and west of the County. Individual improvements would incorporate engineering

design features that would be in accordance with the California Building Code, which contains design criteria that would enable structures to withstand projected seismic shaking.

As noted above, areas of the County with groundwater less than 50 feet from ground surface in unconsolidated sediment are susceptible to liquefaction. The approximate depth to groundwater within the project site is estimated at approximately 40 feet below ground surface (SJCFCWCD Groundwater Report 2015). The soil on the project site is not unconsolidated sediment, but a clay soil with moderate depth to hardpan. Liquefaction on the project site is considered unlikely.

The project would have a less than significant impact on seismic hazards.

a-4) Landslides.

The project site is in a topographically flat area, so no landslides would occur. The project would have no impact on this issue.

b) Soil Erosion.

The Jacktone clay soil on the project site has a low potential for erosion. Project construction activities would loosen the soil, leaving it exposed to potential water and wind erosion. The eroded soils, in turn, could be transported off the project site. Compliance with SJVAPCD Regulation VIII, which is discussed in Section C(3), Air Quality, would reduce potential erosion impacts.

In addition, the project would be required to comply with the provisions of the City of Stockton storm water program, which incorporate the Construction General Permit, issued by the State Water Resources Control Board (SWRCB). These requirements are discussed in more detail in Section 3(C)(9). The Construction General Permit is required for all projects that disturb one acre of land or more. The permit requirements include preparation of a Storm Water Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer to address potential water quality issues. The SWPPP includes implementation of Best Management Practices to avoid or minimize adverse water quality impacts. Best Management Practices fall within the categories of Temporary Soil Stabilization, Temporary Sediment Control, Wind Erosion Control, Tracking Control, Non-Storm Water Management, and Waste Management and Materials Pollution Control. Only Best Management Practices applicable to the project would become part of the SWPPP. Mitigation Measure GEO-1 would require preparation of the SWPPP, in compliance with the Construction General Permit.

In short, the project has potentially significant impacts related to erosion, but compliance with SJVAPCD Regulation VIII and implementation of Mitigation Measure GEO-1 would minimize the amount of soil erosion that leaves the construction site. Soil erosion impacts would be less than significant with mitigation.

Level of Significance: Potentially Significant

Mitigation Measures

GEO-1: The ODS shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project and file a Notice of Intent (NOI) with the State Water Resources Control Board prior to commencement of construction activity, in compliance with the Construction General Permit and City of



Stockton storm water requirements, including the Stockton Municipal Code. The SWPPP shall be available on the construction site at all times. The ODS shall incorporate an Erosion Control Plan consistent with all applicable provisions of the SWPPP within the site development plans. The ODS shall submit the SWRCB Waste Discharger's Identification Number (WDID) to the City prior to approval of development or grading plans.

Significance After Mitigation: Less than significant

c) Geologic Instability.

The soils underlying the sites where the facilities would be constructed have not been identified as inherently unstable or prone to failure. Existing facilities have not had an adverse effect on soil stability identified with them, and the project would not change existing stability conditions. Appropriate engineering design would avoid potential adverse effects. The project would have no impact on the stability of soils.

d) Expansive Soils.

As noted above, the shrink-swell potential of the Jacktone clay soil on the project site has been classified as High. Expansive soils can lead to damage of buildings and supporting infrastructure if not addressed. This is considered a potentially significant impact. Implementation of Mitigation Measure GEO-2 would identify expansive soil impacts and implement recommended measures to address expansive soils, thereby reducing impacts to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

GEO-2. A site-specific, design-level geotechnical study shall be completed for the project site before a grading permit is issued. The study shall identify potential geotechnical issues related to project development, including the presence of expansive soils in the construction area, and recommend design and construction features to reduce the potential impact of these issues on project facilities. Geotechnical design recommendations included in the study shall be incorporated in the project design and implemented during project construction.

Significance After Mitigation: Less than significant

e) Adequacy of Soils for Sewage Disposal.

The project would not use, and does not propose to install, any septic systems. The project would have no impact related to soil adequacy for sewage disposal.

### 3.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			√	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			√	

## NARRATIVE DISCUSSION

### Environmental Setting

#### Existing Conditions

Greenhouse gases (GHGs) are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth's atmosphere. GHGs are both naturally occurring and are emitted by human activity. GHGs include carbon dioxide (CO<sub>2</sub>), the most abundant GHG, as well as methane, nitrous oxide and other gases. GHG emissions in California in 2014 were estimated at 441.5 million metric tons carbon dioxide equivalent (CO<sub>2</sub>e) – a decrease of 9.4% from the peak level in 2004. Major GHG sources in California include transportation (36%), industrial (21%), electric power (20%), commercial and residential (9%), and agriculture (8%) (ARB 2016). Total GHG emissions from the city of Stockton in 2005 were 2,360,932 metric tons CO<sub>2</sub>e. Of the total emissions, approximately 48% percent came from on-road transportation and 33% came from building energy use (City of Stockton 2014).

Increased atmospheric concentrations of GHGs are considered a main contributor to global climate change, which is a subject of concern for the State of California. Potential impacts of global climate change in California include reduced Sierra Nevada snowpack, increased wildfire hazards, greater number of hot days with associated decreases in air quality, and potential decreases in agricultural production (Climate Action Team 2010).

Unlike the criteria air pollutants described in Section 3.3, Air Quality, GHGs have no "attainment" standards established by the federal or State government. In fact, GHGs are not generally thought of as traditional air pollutants because their impacts are global in nature, while air pollutants mainly affect the general region of their release to the atmosphere (SJVAPCD 2015b). Nevertheless, the U.S. Environmental Protection Agency (EPA) has found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act due to their impacts associated with climate change (EPA 2009).

#### GHG Plans and Policies

The State of California is identifying strategies and implementing GHG emission reduction programs through AB 32, the Global Warming Solutions Act of 2006, which requires total statewide GHG emissions to reach 1990 levels by 2020, or an approximately 29% reduction from

2004 levels. In compliance with AB 32, the State adopted the Climate Change Scoping Plan in 2008, and updated the plan in 2014. Primary strategies addressed in the original Scoping Plan included new industrial and emission control technologies; alternative energy generation technologies; advanced energy conservation in lighting, heating, cooling and ventilation; fuels with reduced carbon content; hybrid and electric vehicles; and methods for improving vehicle mileage (ARB 2008). The 2014 update highlighted California's progress toward meeting the 2020 GHG emission reduction goal and established a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050 (ARB 2014).

In 2016, the State Legislature passed and the Governor signed Senate Bill (SB) 32. SB 32 extends the GHG reduction objectives of AB 32 by mandating statewide reductions in GHG emissions to levels that are 40% below 1990 levels by the year 2030. The State has recently released a draft Scoping Plan for public review that sets forth strategies for achieving the SB 32 target. The draft Scoping Plan proposes to continue many of the programs that were part of the previous Scoping Plans, including the cap-and-trade program, low-carbon fuel standards, renewable energy, and methane reduction strategies. It also addresses for the first time GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (ARB 2016).

The SJVAPCD adopted a Climate Change Action Plan in 2008 and issued guidance for development project compliance with the plan in 2009. The guidance adopted an approach that relies on the use of Best Performance Standards to reduce GHG emissions. Projects implementing Best Performance Standards would be determined to have a less than cumulatively significant impact. For projects not implementing Best Performance Standards, demonstration of a 29% reduction in project-specific (i.e., operational) GHG emissions from business-as-usual conditions is required to determine that a project would have a less than cumulatively significant impact (SJVAPCD 2009).

The City of Stockton adopted a Climate Action Plan (CAP) in 2014, in compliance with a legal settlement related to its General Plan 2035 and associated EIR. The CAP "outlines a framework to feasibly reduce community GHG emissions in a manner that is supportive of AB 32 and is consistent with the Settlement Agreement and 2035 General Plan policy" (City of Stockton 2014). The CAP set a GHG emission reduction target of 10% below 2005 GHG emission levels by 2020. To achieve this target, the CAP incorporates a Development Review Process through which development projects document the incorporation of measures that would produce a 29% reduction from 2020 business-as-usual GHG emissions, consistent with the SJVAPCD target. The majority of the GHG reductions in Stockton would occur through State regulatory programs and local programs that are producing or will produce GHG emission reductions that would help to reduce total emissions associated with a project by approximately 25% from business-as-usual levels. Development must identify the Best Management Practices that would provide the additional 4% reduction in GHG emissions (City of Stockton 2014).

## Environmental Impacts and Mitigation Measures

### a) Project GHG Emissions and Consistency with GHG Reduction Plans.

The CalEEMod model estimated the total GHG construction and operational emissions associated with the commercial and residential development (see Appendix A). Table 3-4 presents the results of the CalEEMod run. "Mitigated emissions" for construction and operational emissions are defined in Section 3.3, Air Quality.

Based on results from the CalEEMod run, total project construction GHG emissions would be 369.37 metric tons CO<sub>2</sub>e for the assumed construction period. Neither the State nor SJVAPCD has established significance thresholds for GHG emissions from construction activities or from project operations. However, construction emissions would be limited to a short time period and would cease once work is completed. In addition, implementation of SJVAPCD Rule 9510, Regulation VIII and other rules described in Section 3.3, Air Quality, is expected to reduce incrementally the amount of GHGs generated by project construction.

TABLE 3-4  
ESTIMATED GHG EMISSIONS FROM PROJECT

GHG Emission Type	Unmitigated Emissions	Mitigated Emissions
Construction <sup>1</sup>	369.37	369.37
Operational <sup>2</sup>	764.76	663.47

<sup>1</sup> Total GHG emissions for construction period in metric tons CO<sub>2</sub>e.

<sup>2</sup> Annual emissions in metric tons CO<sub>2</sub>e.

Source: California Emissions Estimator Model v. 2016.1.1.

Project operational emissions would be approximately 764.76 metric tons CO<sub>2</sub>e annually under “unmitigated” conditions (i.e., without implementation of any reduction measures). However, with implementation of the reduction measures described in Section 3.3, Air Quality, operational emissions would be approximately 6 metric tons CO<sub>2</sub>e annually – an approximately 13.24% reduction in GHG emissions from unmitigated levels. This exceeds the 4% reduction in operational GHG emissions the Stockton CAP requires to meet the 29% reduction goal called out in both the State’s and SJVAPCD’s plans.

It should be noted that the 4% reduction for development projects specified in the CAP assumes that certain State and local measures are already adopted. These include the 20% water conservation measure and the waste reduction measure, which were included in the “mitigated” GHG emissions. With the waste and water emission reductions factored out of the project reductions, the mitigated project emissions would be approximately 11.3% below the unmitigated total, which would still exceed the 4% reduction requirement for individual projects. Based on this, project impacts related to GHG emissions and applicable GHG emission reduction plans are considered less than significant.

### 3.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			√	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			√	
c) Emit hazardous emissions or handle hazardous or				√

acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

			√
			√
			√
		√	
		√	

## NARRATIVE DISCUSSION

### Environmental Setting

This section focuses on hazards associated with hazardous materials, proximity to schools and airports, and wildfires. Geologic and soil hazards are addressed in Section 3.6, Geology and Soils, and potential flooding hazards are addressed in Section 3.9, Hydrology and Water Quality.

#### Hazardous Materials

Data on hazardous material sites in the State of California are kept in the GeoTracker database, maintained by the SWRCB, and in the EnviroStor database, maintained by the California Department of Toxic Substances Control (DTSC). Both GeoTracker and EnviroStor provide the names and addresses of hazardous material sites, along with their cleanup status.

A search of GeoTracker and Envirostor indicated 25 cases within 1 mile of the project site requiring no further action. There are two sites of potential concern within 1 mile of the project site. At 4204 N. Sutter Street, 0.3 miles west of the project site, is an open LUST cleanup site undergoing assessment, where San Joaquin County is overseeing the excavation of soil contaminated with fuel resulting from an agricultural tank removed in 1989. The current site

assessment began March 30, 2017. At 1206 E. March Lane, 0.7 miles northeast of the project site, is a LUST project site that has been under assessment for soil and groundwater contamination since 11/17/2007. A feasibility study is pending (DTSC 2016, SWRCB 2016).

### Wildland Fires

Wildland fires are an annual hazard in San Joaquin County. Wildland fires burn natural vegetation on undeveloped lands and include rangeland, brush, and grass fires. Long, hot, and dry summers with temperatures often exceeding 100°F add to the County's fire hazard. Human activities are the major causes of wildland fires, while lightning causes the remaining wildland fires. High hazard areas for wildland fires are the grass-covered areas in the east and the southwest foothills of the County (San Joaquin County 2009). The project site is not within these areas.

### Airport Hazards

There are no public airports or private airstrips in the vicinity of the project.

## Environmental Impacts and Mitigation Measures

### a, b) Hazardous Material Transport, Use and Potential Release.

Project implementation would not involve the transport, use, or disposal of hazardous materials, nor would it involve the potential for release of hazardous materials or emissions into the environment, either on-site or in the project vicinity. There will be no routine transport, use, or disposal of hazardous materials associated with the project. However, the proximity of the Union Pacific Railroad to the site is a potentially significant contamination risk.

Railroads represent risks associated with accidents that could result in injury to persons or damage to structures on adjoining or nearby lands. The UPRR is located adjacent to the eastern boundary of the property. This line supports approximately 28 train trips per day, some of which include hazardous materials. Based on 2002 Federal Railroad Administration and USDOT statistics, it is estimated that in any given year there is an approximately 4% chance of a railroad accident, and a 1.2% chance of a hazardous materials transportation incident, occurring adjacent to the project site.

As the project site is located adjacent to the UPRR, the proposed development would be exposed to risks associated with train accidents, some of which may involve hazardous material releases. As discussed above statistical information indicates the risk of accidents or incidents is relatively low. The proposed development is consistent with required City setbacks from the railroad and would be separated from the right-of-way by an earth berm and masonry sound wall. The masonry sound wall is discussed further in Section 11, Noise. This treatment would reduce hazard concerns to less than significant.

### c) Hazardous Materials Releases near Schools.

The project site is not located within a quarter-mile of an existing or proposed school. The nearest school is Acacia Community Charter School, approximately 0.3 miles northeast of the project site. The project would have no impact on this issue.

d) Hazardous Materials Sites.

The occurrence of hazardous materials or hazardous waste in off-site areas was also evaluated in the database search. Two sites within a 1-mile radius were identified as areas of potential concern in the hazardous materials and/or hazardous waste databases consulted. However, records indicate that one of the reported incidents represented a localized episode of minor soil contamination discovered in conjunction with an on-site tank closure, and the other incident represented minor fuel contact with soil and the local aquifer. The aforementioned incidents were low-priority as well as site-specific. Given their distance, these sites are not expected to affect conditions on the project site. The project would have no impact related to hazardous material sites.

e, f) Public Airport and Private Airstrip Operations.

The project site is not located near any public airports or private airstrips. It is not located within an airport land-use plan. The project would have no impact on this issue.

g) Emergency Response and Evacuations.

Project construction work would mostly occur on the parcel, with work on adjacent roads limited to connection to utility lines. Such work is not expected to require closure of the roads, so project construction is not expected to substantially obstruct emergency vehicles or any evacuations that may occur in the area. Project operations would not obstruct any roadways. Project impacts on emergency response or emergency evacuation plans would be less than significant.

h) Wildland Fire Hazards.

The project site is not in a region susceptible to wildfires. The land in the area is agricultural or developed, neither of which has a high wildfire potential. The project would reduce the existing fire hazard on the parcel by replacing the existing grasses and weeds with a paved and developed area. Project impacts related to wildfires would be less than significant.

### 3.9 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		√		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			√	
c) Substantially alter the existing drainage pattern of			√	

the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?

f) Otherwise substantially degrade water quality?

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

		√	
		√	
	√		
			√
			√
			√
		√	

## NARRATIVE DISCUSSION

### Environmental Setting

#### Surface Waters

There are no existing water resources on the project site; however, the Calaveras River (contained by a levee system) is located approximately 200 feet north of the north project boundary. The project area is drained by the City of Stockton storm drainage system.

#### Groundwater

The project site is within the Eastern San Joaquin County groundwater subbasin. The groundwater in the project vicinity generally follows the surface topography, gradually sloping from east to west. The water table in the project area is located approximately 40-50 feet below the ground surface (SJCFCWCD Groundwater Report, 2016).



## Water Quality

Surface water quality in the Central Valley is managed by the Central Valley Regional Water Quality Control Board (RWQCB) by means of The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan), revised in June 2015. The beneficial uses of surface waters in the region include municipal and domestic water supply; industrial service and process supply; agricultural irrigation; groundwater recharge; navigation; contact and non-contact recreation; commercial and sport fishing; migration of aquatic organisms; wildlife habitat; and habitat for rare, threatened, and endangered species. The SWRCB determined that the quality of these waters does not fully support all of the beneficial uses assigned to the water bodies in the project vicinity (RWQCB 2015). Water quality impacts are a result of tidal fluctuations; Sacramento River and San Joaquin River inflows; local agricultural, industrial, and municipal diversions and returns; and inadequate channel capacities.

The SWRCB has the responsibility under the federal Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) program for the control of storm water quality. Additional storm water regulation is established in the NPDES area-wide municipal separate storm sewer system (MS4) permit system administered by the SWRCB, which requires affected jurisdictions, including the City of Stockton, to adopt and implement a Storm Water Management Program (SWMP). The City of Stockton has adopted a SWMP, which is intended to minimize the potential storm water quality impacts of development, including both construction and post-construction activity. The Stockton SWMP consists of a variety of programs, including controls on illicit discharges, public education, controls on City operations, and water quality monitoring (City of Stockton 2009a). The requirements of the SWMP are enforced primarily through the City's Storm Water NPDES permit, issued by the Central Valley RWQCB.

## Flood Hazards

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map locates the proposed project in Zone X, an area outside of the 100-year floodplain and protected by levees (FEMA #06077C0460F, October 16, 2009).

Based on information provided by the Department of Water Resources (DWR), the project site would not be subject to a 200-year flood at a depth of 3 feet or greater (City of Stockton 2016).

A risk of flooding exists during large flood events in the San Joaquin River and from Delta flooding accompanied by high tides (City of Stockton 2007).

Levee failure is also a potential problem. Levee failures are a constant threat in any system that is dependent on constructed levees for flood protection. Periodic levee reconstruction and active levee maintenance programs help to control this risk. Levees are always subject, however, to site specific structural failure, erosion, damage from vegetation and rodents. Earthquakes also are a source of potential levee failure. Each of these potential levee failures has a low probability of occurrence (City of Stockton 2007).

Extreme events such as upstream dam failures could also cause flooding in the City. New Hogan Dam on the Calaveras River upstream of the City is an earth and rockfill dam owned by the Corps of Engineers. The reservoir behind the dam holds 325,000 acre-feet of water that could cause five to ten feet of flooding in large areas of the City in the event of a catastrophic dam failure. New Melones Dam on the Stanislaus River and Camanche Dam on the Mokelumne River, also of earth and rock fill, would flood the City to significant depths if either of these dams were to fail. The

Office of Emergency Services maintains inundation maps for each of these dams and others in the San Joaquin River watershed, and a dam failure plan is integrated into the City's Emergency Operations Plan (City of Stockton 2007).

## Environmental Impacts and Mitigation Measures

### a, f) Surface Waters and Water Quality.

The project would not directly affect surface waters in the vicinity. As noted in Section C(6), Geology and Soils, construction activities could loosen soils, which could be transported off site by runoff and could eventually enter surface waters. This is considered a potentially significant impact.

As previously noted, the City of Stockton has adopted a SWMP, which is intended to minimize the potential storm water quality impacts of development. Program elements most applicable to land development include construction storm water discharge requirements, industrial discharge requirements and the incorporation of post-construction Best Management Practices (BMPs) in new development.

Post-construction elements of the SWMP are governed by City ordinances that require compliance with the City's adopted Storm Water Quality Control Criteria Plan (SWQCCP), as outlined in the City's Phase 3 Storm Water NPDES permit issued by the RWQCB, Central Valley Region (Order No. R5-2007-0173). The SWQCCP identifies a range of post-construction BMPs that must be incorporated into development plans. BMPs include provisions for water quality control as well as volume reduction (City of Stockton 2009b). Under NPDES requirements applicable to the City, storm water discharge volumes associated with new development cannot exceed existing discharges. Volume control can be achieved through a combination of low-impact development and specific volume control measures. The proposed project would be required to conform to the applicable requirements.

Storm water from areas of new development must be treated using the post-construction BMPs specified in the SWQCCP. These BMPs, which provide water quality treatment and volume control for runoff from building, paving and other site development areas, include vegetated buffer strips and swales, detention basins, vaults and wetlands, and various filtration and infiltration and structures devices, among others. These measures will be specified during the design phase of the project. The ODS must annex into a City maintenance assessment district to provide funding for the operation, maintenance and replacement costs of the storm water best management practices. In addition, the ODS shall be responsible for the costs of forming the Assessment District, including, but not limited to, the City-selected Assessment District Council, Engineer's Report, Proposition 218 vote, and noticing requirements.

Compliance with the applicable permits, programs and regulations, which are specified in the mitigation measures below, would reduce impacts to a level that would be less than significant. In addition, implementation of Mitigation Measure GEO-1, described in Section C(6), Geology and Soils, would minimize impacts from construction activities, along with compliance with SJVAPCD Regulation VIII.

Level of Significance: Potentially Significant

### Mitigation Measures

- HYDRO-1: The ODS shall submit a Storm Water Quality Control Criteria Plan for the project that shall include post-construction Best Management Practices as required by Title 13 of the Stockton/San Joaquin SWQCCP. The project SWQCCP will be reviewed and approved by the Stockton Municipal Utilities Department prior to the Certificate of Occupancy.
- HYDRO-2: The ODS shall must create a zone within the Stockton Consolidated Storm Drainage Maintenance Assessment District No. 2005-1, prior to the recordation of a Final Map, to provide funding for the operation, maintenance and replacement costs of the storm water best management practices. In addition, the ODS shall be responsible for the costs of forming the Assessment District, including, but not limited to, the City-selected Assessment District Council, Engineer's Report, Proposition 218 vote, and noticing requirements.
- HYDRO-3: The ODS shall comply with any and all requirements of, and pay all associated fees as required by, the City's Storm Water Pollution Prevention Program as set forth in its NPDES Storm Water Permit.

Significance After Mitigation: Less than significant

#### b) Groundwater Supplies.

The project would not draw directly from groundwater but would be connected to the City's water system, which is in part supplied from groundwater wells. The project would replace an existing vacant parcel of grasses and weeds with urban development, including pavement. This would substantially reduce the amount of precipitation that would percolate into the ground, thereby reducing groundwater recharge. Given the small acreage of the project site, the project is not expected to interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Project impacts on groundwater are considered less than significant.

#### c, d, e) Drainage Patterns and Runoff.

The project would alter existing storm drainage patterns, due to grading and the installation of pavement and storm drainage facilities. In addition, proposed improvements on the project site would result in the generation of additional runoff due to the introduction of impervious surfaces. Off-site drainage will be delivered to the City's drainage system in accordance with City standards and specifications. Project impacts on drainage and runoff would be less than significant.

#### g, h) Residences and Other Structures in 100-Year Floodplain.

The project would not introduce housing or other structures into the 100-year floodplain. The site is in Zone X, which is outside the 100-year floodplain.

The project is within the 200 year floodplain, but would not be subject to 200-year flooding greater than 3 feet in depth. The project would have no impact related to this issue.

i) Dam and Levee Failure Hazards.

The project site is not in an area that would be flooded by a 200-year flood at a depth of 3 feet or greater. The site is protected from 100-year flooding by an existing levee along the Calaveras River. Proposed street improvements will not be permitted within 15 feet of the existing levee tow, and new structures will not be allowed within 50 feet of the levee toe. Dam and levee failures have a low probability of occurrence. The project would have a less than significant impact on this issue.

j) Seiche, Tsunami, and Mudflow Hazards.

Tsunami and seiches are not considered to be a significant threat in Stockton. However, it is acknowledged that Rough and Ready Island is located adjacent to the San Joaquin River. If one of the nearby faults were to experience substantial movement, a seiche could be produced, which could potentially damage near-by levees. It is anticipated that since the San Joaquin River is relatively shallow in the vicinity of the Stockton, the expected size of a seiche wave would be no more than a few feet in height and, therefore, would have little or no effect to the project site. Project impacts would be less than significant.

### 3.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				√
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			√	
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?				√

## NARRATIVE DISCUSSION

### Environmental Setting

The proposed project is located in an urbanized area of central Stockton. The project site is a vacant parcel surrounded primarily by residential development on the west, and by a railroad and light industrial developments on the east. The current Stockton General Plan designation for the parcel is Low-Medium Density Residential, and the current City zoning is RM, Medium Density Residential. Existing land uses immediately surrounding the site are as follows:

North: Calaveras River, multi-family residences  
East: Union Pacific Railroad, industrial  
South: Single-family residential neighborhood

West: Single-family residential neighborhood

The Calaveras River levee exists along the northern boundary of the project area. This area is designated as a public right-of-way and used as a bike and pedestrian path, in addition to serving as an access for levee maintenance. All improvements associated with the project will be set back approximately 15 feet from the toe of the levee, and no residences will be allowed within 50 feet of the levee; thus no land use conflicts are anticipated with this area.

## Environmental Impacts and Mitigation Measures

### a) Division of Established Community.

The project site is located within a residential community and is consistent with surrounding land uses. The project would have no impact on established communities.

### b) Conflicts with Plans, Policies and Regulations Mitigating Environmental Effects.

The project site is currently designated Low-Medium Density Residential and zoned RM, Medium Density Residential. The existing zoning does not allow for a single-family development. The project applicant is requesting rezoning of the parcel to RL Single-Family Residential. The rezoning would allow for the land uses proposed by the applicant. The zoning currently in place for the project site were not adopted for the purpose of avoiding or mitigating environmental effects, but for regulating land uses. It is not expected that the proposed rezoning would have an adverse effect on the local environment.

Additionally, an active segment of the Union Pacific Railway is located along the eastern boundary of the project site. Land use conflicts may result from juxtaposition of the proposed residences with the railroad. Mitigations to reduce these concerns to a less than significant level are discussed further in Section 3.8, Hazards and Section 3.11, Noise. The project would be consistent with the Stockton General Plan as well as any related plans, policies and regulations that are adopted to avoid or mitigate environmental effects. Project impacts would be less than significant.

### c) Conflict with Habitat Conservation Plans.

As noted in Section 3.4, Biological Resources, the project would participate in the SJMSCP. The project would have no impact related to habitat conservation plans or similar plans.

## 3.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				√
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use				√

plan?

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## NARRATIVE DISCUSSION

### Environmental Setting

The City of Stockton has not identified any mineral resources in the vicinity of the project site. The California Division of Mines and Geology, now part of the California Geological Survey, has classified portions of the state into Mineral Resource Zones (MRZs). The project site and vicinity is classified as being within MRZ-1, indicating that no significant mineral deposits have been identified (City of Stockton 2007).

### Environmental Impacts and Mitigation Measures

a, b) Availability of Mineral Resources.

There are no identified mineral resources areas on the project site. The project would have no effect on the availability of or access to locally designated or known mineral resources. The project would have no impact on mineral resources.

### 3.12 NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		√		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				√
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			√	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			√	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				√
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				√

## NARRATIVE DISCUSSION

### Environmental Setting

#### Noise Background

As described in the Stockton General Plan 2035 Background Report, as sound reaches unwanted levels, it is considered noise (City of Stockton 2007). Noise levels are defined in terms of decibels (dB), which are typically adjusted for perception of loudness by the A-weighting network (dBA). Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level ( $L_{eq}$ ), which corresponds to a steady-state, dBA sound level containing the same total energy as a time-varying signal over a given time period (usually one hour).

The  $L_{eq}$  shows very good correlation with community response to noise, and it is the basis for other noise descriptors such as the Day-Night Average Sound Level ( $L_{dn}$ ). The  $L_{dn}$  represents an average sound exposure over a 24-hour period, with noise occurring during the nighttime (10:00 p.m.-7:00 a.m.) weighted more heavily to account for the greater sensitivity of people to noise during this time period.

#### Existing Noise Conditions

The main sources of noise at the project site are vehicle traffic on Alvarado Avenue, which runs along the western border of the project site, and railroad noise from the Union Pacific Railroad (UPRR) tracks running along the eastern border of the project site.

Land uses adjoining the project site are residential to the north, south, and west. To the east, land uses are predominantly light industrial, which are not considered to be noise-sensitive.

To determine existing noise conditions at the project site, Bolland & Brennan, Inc. conducted noise level measurement on November 11-12, 2003. This noise study predicted that exterior noise levels, which are due primarily to railroad operations, will measure between 71 and 74 dB  $L_{dn}$  at first floor facades. Based on standard residential construction, these exterior noise levels would be reduced to approximately 50-55 dB  $L_{dn}$  inside houses with windows closed.

#### Noise Regulations

Stockton Municipal Code Chapter 16.60.040 (Standards) establishes 65 dB  $L_{dn}$  as the maximum allowable exterior noise level standard for residential outdoor activity areas and 45 dB  $L_{dn}$  for interior areas.

In addition, Stockton Municipal Code Chapter 16.60.030 limits noise considered a public nuisance.

## Environmental Impacts and Mitigation Measures

### a) Exposure to Noise Exceeding Local Standards.

The proposed residential project would not involve the potential for generation of noise in excess of the adopted City standards. Alvarado Avenue provides access for relatively minor traffic at present, and it is not anticipated to carry substantial traffic volumes in the future and would not subject the site to substantial traffic noise. Future noise levels along Alvarado Avenue are not anticipated to exceed 65 dB within 100 feet of the nearest travel lane. City noise standards would therefore not be exceeded within the proposed project as a result of traffic sources.

The UPRR, running along the eastern boundary of the project site, would expose future residents to noise levels that exceed the City standard. The Bollard and Brennan analysis of the noise impacts for the development of this area indicates that mitigation would be necessary to reduce the predicted noise levels in this area to a level that would be acceptable for residential development.

Level of Significance: Potentially Significant

#### Mitigation Measures

- NOISE-1: Air conditioning or mechanical ventilation systems should be installed so that windows and doors may remain closed.
- NOISE-2: Exterior doors shall be solid core with perimeter weather-stripping and threshold seals.
- NOISE-3: For second floor facades of the perimeter lots that do not receive shielding from barriers, and second floors of interior lots that do not have shielding from barriers, the following building design and materials shall be used. Exterior walls shall consist of 3-1/2" insulation; 5/8-inch exterior sheet rock mounted to a minimum 2x4 studs; 2" DRYVIT insulation board; DRYVIT or Stucco finish. Interior walls shall be 5/8" sheet rock. Windows and sliding glass doors shall have a minimum STC rating of 35. This requirement only applies to the facades on the side of the house facing the railroad track.
- NOISE-4: Glass in both windows and doors shall not exceed 20% of the floor area in a room.
- NOISE-5: Roof or attic vents facing the noise source shall be boxed so that there is not a direct path of sound into the attic spaces.
- NOISE-6: Temporary noise impacts resulting from project construction shall be minimized by restricting hours of operation by noise-generating equipment to 7:00 a.m. to 10:00 p.m. Monday through Friday, and to 7:00 a.m. to 6:00 p.m. on Saturday and Sunday when such equipment is to be used near noise-sensitive land uses, and by requiring residential type mufflers where applicable.



- NOISE-7: Operation by noise-generating equipment to 7:00 a.m. to 10:00 p.m. Monday through Friday, and to 7:00 a.m. to 6:00 p.m. on Saturday and Sunday when such equipment is to be used near noise-sensitive land uses, and by requiring residential type mufflers where applicable.
- NOISE-8: The ODS shall construct the noise barrier wall as shown in Figure 9 and described in the Bollard and Brennan report (Alvarado Avenue Residential Project, September 2004).
- NOISE-9: An updated acoustical report may be prepared that defines equivalent alternative mitigation measures that may supersede mitigations NOISE-1 through NOISE-8, subject to the approval of the Community Development Director.

Significance After Mitigation: Less than significant

b) Exposure to Groundborne Noise.

Groundborne vibration is not a common environmental problem. It is typically associated with transportation facilities, although it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment. The project will be exposed to groundborne noise from the UPRR running along the eastern border of the project site. Implementation of mitigation measures NOISE-1 through NOISE-5, as well as NOISE-8, above, would reduce impacts to a level that would be less than significant.

c) Permanent Increase in Ambient Noise.

The project would result in a permanent increase in ambient noise levels over existing conditions, as the site is currently vacant. As noted in a) above, noise levels are not expected to exceed established City standards. Project impacts on permanent noise levels are considered less than significant.

d) Temporary or Periodic Increase in Ambient Noise.

Project construction would temporarily elevate ambient noise levels, due to the use of construction equipment and vehicle traffic to and from the construction site. Project construction noise would cease once construction work is completed. Temporary noise increases from project construction are considered less than significant.

e, f) Public Airport and Private Airstrip Operations Noise.

The project site is not located within an airport land use plan or within 2.0 miles of an airport or private airstrip. Therefore, the project would not expose persons to excessive airport-related noise. The project would have no impact in this issue area.

### 3.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			√	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				√
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				√

## NARRATIVE DISCUSSION

### Environmental Setting

As of January 1, 2016, the population of Stockton was estimated at 315,592. Stockton had an estimated 100,146 housing units as of January 1, 2016. Single-family detached units (typical houses) accounted for approximately 64.9% of total housing units in Stockton, with multifamily units of two or more per building accounting for 26.9% (California Department of Finance 2016).

### Environmental Impacts and Mitigation Measures

#### a) Population Growth Inducement.

The project would create 39 new single-family residences. At a rate of 3.14 residents per residence, this would result in a potential population increase of 122 people within the subdivision. The project would add to the supply of housing, but would not result in a significant impact to the population to the City of Stockton. Population increases associated with the development of the project site and other infill sites have been accounted for in the Stockton General Plan. Project impacts on population growth would be less than significant.

#### b, c) Displacement of Housing or People.

The project site is vacant, so the project would not displace any housing units or persons. The project would have no impact on this issue.

The proposed rezoning from RM Residential, Medium-Density to RL Residential Low-Density, would involve a small reduction the inventory of lands designated for medium-density residential development in the City of Stockton. The existing inventory of land for medium-density residential development is considered more than adequate, and the reduction associated with the project will not result in any significant effect on potential for development of medium-density residential units.

### 3.14 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

b) Police protection?

c) Schools?

d) Parks?

e) Other public facilities?

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	√		
	√		
	√		
	√		
	√		

### NARRATIVE DISCUSSION

#### Environmental Setting

The project is located within the City of Stockton. Public services are provided to the project area by the Stockton Fire Department, the Stockton Police Department and the Stockton Unified School District. The City also provides park and recreation services. Detailed information about each of these services is provided on the City of Stockton website.

#### Environmental Impacts and Mitigation Measures

a) Fire Protection.

The Stockton Fire Department provides fire protection services for the project site. The Fire Department has 12 stations throughout the greater Stockton metropolitan area. The first responder to the project site is Station 9, located at 550 East Harding Way, approximately 1.6 miles south of the project site. The station is equipped with three firefighters and a fire engine. The second responder would be Station 4, located at 5525 Pacific Avenue, approximately 1.5 miles northeast of the project site. This station is equipped with three firefighters, a fire engine, and a fire truck (pers. comm. Rick Stubstad). All public fire protection agencies in San Joaquin County operate under a master mutual aid agreement, under which other fire agencies may be called upon to provide assistance should the resources of one agency be exhausted (San Joaquin County 2009).

The project would generate a demand for fire protection services, but it can be served by the Stockton Fire Department without new or expanded fire protection facilities. While new facilities would not likely be required as a result of the project, future development would be required to pay Public Facility Fees to the City for future construction of Fire Department facilities that may be required. The proposed project would then have a less than significant environmental impact associated with its demand on fire services.

Level of Significance: Potentially significant

Mitigation Measures:

SERV-1: The ODS shall pay required Public Facility Fees toward the design, construction, maintenance, and expansion of public facilities.

Significance After Mitigation: Less than significant

b) Police Protection.

The Stockton Police Department provides law enforcement services for the project site. The main station is located at 22 East Market Street, approximately 4 miles northwest of the project site. It is the Police Department's goal to respond to all priority one emergency calls with a five-minute time period. The authorized sworn staffing to population ratio is 1.53; however recent challenges with hiring and retention result in an actual sworn officer to population ratio of 1.4.

The project would generate a demand for police protection services, but as it is anticipated to add fewer than 120 residents to the city, the increase in service calls would not be significant. The project would be served by existing police protection resources and would not require the construction of new facilities or physically alter existing facilities. While new facilities would not likely be required as a result of the project, future development would be required to pay Public Facility Fees as described in a) above to the City for construction of Police Department facilities that may be required in the future.

Construction of the proposed masonry wall along the north boundary of the project site would reduce police visibility of the area north of the wall, resulting in local and general security concerns. From a policing perspective, reducing the length of the wall would be desirable providing that offsetting railroad noise mitigation can be prescribed for Lot 18, such as increased wall and window noise attenuation along the north wall of the future residence on this parcel, is incorporated into the project.

Project construction would, through the location of construction materials and equipment on the unoccupied site, involve new crime opportunities during the construction period. This issue would be addressed by the mitigation measure below. With implementation of this mitigation measure, impacts on police protection services would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

SERV-2: The proposed noise wall along the north line of the site may be shortened to provide increased visibility to law enforcement, provided that the noise mitigation requirements for the future residence on Lot 18 are increased so as

to offset the reduction in noise mitigation effect resulting from shortening the wall, as determined by a qualified acoustical consultant.

SERV-3: The ODS shall coordinate with the Stockton Police Department as required to establish adequate security and visibility of the construction site.

Significance After Mitigation: Less than significant

c) Schools.

The project site is within the boundaries of the Stockton Unified School District.

Students from kindergarten through 8<sup>th</sup> grade would have a choice between four schools:

- Cleveland Elementary School, located at 20 East Fulton Street
- El Dorado Elementary School, located at 1540 North Lincoln Street
- Victory Elementary School, located at 1838 West Rose Street
- Wilson Elementary School, located at 150 East Mendocino Avenue

High school students would attend Stagg High School, located at 1621 Brookside Road.

Student generation associated with the project, based on the 39 proposed multi-family residential units, would amount to 28 students at a rate of 0.71 students per residence. SUSD has confirmed that sufficient capacity exists within the school system to accommodate project-related student generation at the nearest public schools (pers. comm. Carmen Jimenez).

To assist in meeting school construction costs, the SUSD collects developer fees in accordance with state law. The project will contribute to these fees in conjunction with building permit issuance. Collection of these fees will be sufficient to reduce potential schools impacts to less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

SERV-4: The ODS shall pay adopted developer fees toward construction of new schools prior to issuance of construction permits in accordance with the rate schedule established by SUSD.

Significance After Mitigation: Less than significant

d, e) Parks and Other Public Facilities.

See Section 3.15, Recreation, below.

### 3.15 RECREATION

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		√		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		√		

## NARRATIVE DISCUSSION

### Environmental Setting

Parks and recreational services are provided by the City of Stockton. The nearest park is Oak Park, a 60-acre facility located on East Alpine Avenue, approximately 0.5 miles south of the project site. Facilities available at this park include restrooms, playgrounds, barbecues, picnic areas, basketball courts, baseball and softball fields, tennis courts, a swimming pool, an ice skating rink, and a senior center. The project site is also served by the Cesar Chavez Main Library, located at 605 North El Dorado Street, approximately 1.5 miles south of the project site. Recreational facilities in the vicinity of the project include an east to west bicycle and pedestrian pathway along the northern bank of the Calaveras River. Access to the Calaveras River is available at the northern end of Alvarado Avenue.

### Environmental Impacts and Mitigation Measures

a, b) Recreational Facilities.

The project would add approximately 122 residents to the neighborhood. While new facilities would not likely be required as a result of the project, future development would be required to pay Public Facility Fees as described in Section 3.14 above.

The City of Stockton has established the Stockton Consolidated Landscape Maintenance District #96-2 (CLMD) to provide a mechanism for funding the maintenance of existing public parks. Funding for Park maintenance shall be provided by annexation of the development into the CLMD. The mitigation measures as described below provide assurance that park maintenance funding will be perpetually provided.

Level of Significance: Potentially significant

Mitigation Measures:

REC-1: The Prior to recordation of any Final Map, the ODS shall form a new zone of the Stockton Consolidated Landscape Maintenance District 96-2, and approve an

assessment providing for the subdivision's proportionate share of the costs to maintain any public parks within the service area for this subdivision or serving this subdivision. ODS may request to annex to an existing zone of the Stockton Consolidated Landscape Maintenance District 96-2 provided the subdivision is within the service area of a park for which a zone of the Stockton Consolidated Landscape Maintenance District 96-2 has already been formed.

Formation of a new zone shall result in an assessment being established that includes, but not limited to, costs for: 1) annual maintenance of the park and 2) administrative costs. The assessment levied shall contain a provision that will allow the maximum annual assessment to be increased in an amount equal to the greater of: 1) three percent (3%) or 2) the percentage increase of the Consumer Price Index (CPI) for the San Francisco – Oakland – San Jose County Area for All Urban Consumers, as developed by the U.S. Bureau of Labor Statistics, for a similar period.

- REC-2: Prior to recordation of any Final Map, the ODS shall establish a maintenance entity acceptable to the Community Development Director, the Parks and Recreation Director and the Public Works Director to provide funding for the maintenance for, and if necessary replacement at the end of the useful life of, improvements including but not limited to common area landscaping, landscaping in the right-of-way, sound walls and/or back-up walls (all “Improvements”) serving or for the special benefit of this subdivision.

If the ODS elects to provide maintenance for the Improvements through a maintenance assessment district, the ODS shall form a new zone of the Stockton Consolidated Landscape Maintenance District 96-2 that includes the entire subdivision. The entire subdivision may be considered for annexation to an existing zone of the Stockton Consolidated Landscape Maintenance District 96-2, provided the type, intensity and amount of the Improvements to be maintained are similar to Improvements in the zone to which annexation is proposed. Formation/annexation shall result in an assessment being approved that shall be levied on all property owners to pay their proportionate share of the costs of maintaining, in perpetuity, the improvements serving or for the special benefit of this subdivision

The assessment shall be established including, but not limited to, costs for: 1) annual maintenance of Improvements; 2) replacement of the wall(s) at the end of its useful life; and 3) administrative costs. The assessment levied shall contain a provision that will allow the maximum annual assessment to be increased in an amount equal to the greater of; 1) three percent (3%) or 2) the percentage increase of the Consumer Price Index (CPI) for the San Francisco-Oakland-San Jose County Area for All Urban Consumers, as developed by the U.S. Bureau of Labor Statistics, for a similar period. The owners, developers and/or successors in interest shall be responsible for maintenance of the Improvements until the District has generated sufficient revenue to fund the maintenance.

Significance After Mitigation: Less than significant

### 3.16 TRANSPORTATION/TRAFFIC

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

### NARRATIVE DISCUSSION

#### Environmental Setting

Information for much of this section is provided by a traffic impact study for the project conducted by KD Anderson Transportation Engineers (2013). Appendix D contains the traffic impact study, which includes a description of the methodology used to analyze project traffic impacts.



## Streets and Traffic Volumes

Primary access to the project is via Alvarado Avenue from Alpine Avenue, and via Essex Street from El Dorado Street, both of which are urban arterial streets. Other roadways in the immediate vicinity of the project site consist of local streets, the majority of which are two-lane roads. Usage of these local streets is relatively low.

The traffic impact study evaluated existing traffic conditions on nine key intersections in the vicinity of the project site, during both the morning and evening peak hour for traffic. Traffic conditions on streets and roads and at intersections are commonly described as a Level of Service (LOS). LOS is a qualitative measure of traffic conditions represented by letter designations A through F, with A representing the best conditions and F the worst. LOS on road segments are based on comparison of traffic volumes to road capacity (refer to Appendix D for more details). Table 3 in Appendix D presents existing traffic conditions at the nine study intersections.

## Transportation Policies

The Transportation and Circulation Element of the Stockton General Plan sets forth policies and implementation measures related to transportation in the City. Policy TC-2.1 of the Circulation Element states that the City shall maintain LOS D or better on the City's street system, with limited exceptions that do not apply to this project.

The City of Stockton has issued Transportation Impact Analysis Guidelines for traffic impact studies. The Guidelines affirm D as the minimally acceptable LOS for City streets and intersections. They also state that impacts on road segments with an existing LOS of E or F (i.e., unacceptable LOS) would be considered significant if project traffic would increase traffic volumes by greater than five percent. Impacts at intersections with an unacceptable LOS would be considered significant if project traffic would increase average delay at the intersection by greater than 5 seconds.

The SJCOC adopted the latest version of its Regional Congestion Management Plan (RCMP) in 2012. The RCMP is designed to coordinate land use, air quality and transportation planning to reduce potential congestion from traffic generated by development (SJCOC 2012b). It has designated a roadway and intersection network on which traffic congestion would be monitored and programs to reduce congestion would be targeted. None of the street segments included in the traffic impact study are part of the RCMP.

## Environmental Impacts and Mitigation Measures

### a) Consistency with Applicable Plans, Ordinances and Policies.

The project will add traffic to the study area circulation system. The traffic impact study analyzed Existing Plus Approved Projects (EPAP) background conditions, which assumes traffic and roadway improvements associated with approved but not yet constructed development proposals and pending roadway improvement projects. In addition, the traffic impact study analyzed traffic conditions on the study road segments under EPAP conditions with the proposed project. Under EPAP plus project conditions, the existing street system has the capacity to accommodate projected traffic without exceeding adopted overall minimum Level of Service standards or otherwise exceeding the incremental traffic increase permitted under traffic study guidelines at

locations where minimum standards are not satisfied without the project. Table 10 in Appendix D presents EPAP and EPAP Plus Project traffic conditions at the nine study intersections.

The cumulative impacts of the proposed project and other regional development have been evaluated within the context of future conditions associated with the City of Stockton's Year 2035 General Plan. The traffic impact study analyzed Year 2035 Plus Project conditions. Under these conditions, one location will be impacted. The project will result in conditions at the El Dorado Street / Fargo Street intersection deteriorating from LOS B to LOS F. As LOS F exceeds the adopted minimum Level of Service standard, this impact is significant. Table 12 in Appendix D presents Year 2035 Plus Project conditions at the nine study intersections.

The City of Stockton has adopted Public Facilities Fees for Street Improvement to finance street improvements required to mitigate the impacts of new development. If off-site intersection and roadway segment improvements identified above are currently included in the calculations for the Street Improvement Fee, the payment of the current Public Facilities Fee constitutes the developer's proportionate share of participation for improvements. For improvements not included in the Public Facilities Fee calculation (including interim street improvements), the owners, developers and/or successors-in-interest will be responsible for payment of the proportionate share, based on traffic loadings, for these improvements.

Level of Significance: Potentially significant

Mitigation Measures:

TRANS-1: The ODS shall make a fair-share contribution to funding the cost of signalizing the El Dorado Street / Fargo Street intersection.

Significance After Mitigation: Less than significant

b) Conflict with Congestion Management Program.

As described above, the project would adversely affect LOS at the El Dorado Street / Fargo Street intersection under cumulative plus project conditions. Implementation of Mitigation Measure TRANS-1 would improve LOS at the intersection to an acceptable level, which would make intersection operations more consistent with the objectives of the Regional Congestion Management Plan. Project impacts are considered less than significant with mitigation.

c) Air Traffic Patterns.

As discussed in Hazards and Hazardous Materials, C(8), the project is not in the vicinity of any public airports or private airstrips. Thus, it would not adversely affect air traffic patterns. The project would have no impact on this issue.

d) Traffic Hazards.

The traffic impact analysis study does not identify any traffic hazards that would result from the proposed project. Road hazard impacts are considered less than significant.

e) Emergency Access.

Access to the project site would be provided off both Alvarado Avenue and Essex Street, thereby providing adequate access for emergency vehicles. The project would have no impact on emergency access.

f) Conflict with Non-vehicular Transportation Plans.

The project is not expected to interfere with future plans for the installation of bike routes in the vicinity, as described in the San Joaquin Council of Governments Regional Bicycle Master Plan (SJCOG 2012a). The project would also install sidewalks, which would increase the safety of any pedestrian traffic in the area. Project impacts on non-vehicular transportation plans are considered less than significant.

## 17. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

	√		
	√		

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

### NARRATIVE DISCUSSION

#### Environmental Setting

In 2015, the California Legislature enacted AB 52, which focuses on consultation with Native American tribes on land use issues potentially affecting the tribes. The intent of this consultation is to avoid or mitigate potential impacts on “tribal cultural resources,” which are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe.” More specifically, Public Resources Code Section 21074 defines tribal cultural resources as:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included or determined to be eligible for inclusion in the California Register of Historical Resources, or included in a local register of historical resources; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 [i.e., eligible for inclusion in the California Register of Historical Resources].

Under AB 52, when a tribe requests consultation with a CEQA lead agency on projects within its traditionally and culturally affiliated geographical area, the lead agency must provide the tribe with notice of a proposed project within 14 days of a project application being deemed complete or when the lead agency decides to undertake the project if it is the agency's own project. The tribe has up to 30 days to respond to the notice and request consultation; if consultation is requested, then the local agency has up to 30 days to initiate consultation. The subject matter of the consultation may include the type of CEQA environmental review required, the significance of tribal cultural resources associated with a project site, and project alternatives or mitigation measures. Consultation shall be considered concluded when the parties agree to mitigate or avoid a significant effect on a tribal cultural resource, or when a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

As previously noted, the project area is located within lands claimed by the Yokuts at the time of initial contact with European Americans. Section C(5), Cultural Resources, discusses the Yokuts in more detail.

## Environmental Impacts and Mitigation Measures

### a, b) Tribal Cultural Resources.

As discussed in Section C(5), Cultural Resources, no resources specific to local tribes were identified on the project site, but the possibility of undiscovered resources, including tribal cultural resources, during project construction was acknowledged. Mitigation Measure CULT-1 would generally address potential project effects on cultural resources uncovered during project construction.

In accordance with AB 52, consultation was requested for the project by the Wilton Rancheria, a tribe whose traditionally and culturally affiliated geographical area includes the project site. The City and the Rancheria held a consultation meeting on September 18, 2017, which was also attended by the United Auburn Rancheria. After consultation, the City and the Wilton Rancheria agreed to mitigation measures that address the concerns of the Rancheria about potential project impacts on tribal cultural resources. These mitigation measures are presented below. Implementation of these measures would reduce potential impacts on tribal cultural resources to a level that would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

TCR-1: The ODS shall retain a qualified professional archaeologist and a local Native American Tribal Representative (NATR) to monitor all ground disturbing activities that occur within the project site.

TCR-2: In the event that construction encounters evidence of human burial or scattered human remains, construction in the vicinity of the encounter shall be immediately halted. The ODS shall immediately notify the County Coroner, the Stockton Community Development Department, and the NATR. Construction activity in the vicinity of the encounter shall not proceed until the qualified archaeologist/NATR can evaluate the nature and significance of the find. Appropriate federal and State agencies also shall be notified, in accordance with the provisions in the Archaeological Resources Protection Act (16 USC 469), Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-30013), California Health and Safety Code section 7050.5, and California Public Resources Code section 5097.9 *et al.*

The ODS will be responsible for compliance with the requirements of CEQA as to human remains as defined in CEQA Guidelines Section 15064.5, with California Health and Safety Code Section 7050.5, and as directed by the County Coroner. If the human remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission, also identifying the NATR that has been working on the project. The NAHC will notify and appoint a Most Likely Descendant. The Most Likely Descendant will work with the archaeologist and the NATR to decide the proper treatment of the human remains and any associated funerary objects.

TCR-3: In the event that any other tribal cultural resources are encountered during project construction, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist/NATR can examine the materials and make a determination of their significance pursuant to the criteria identified in the CEQA checklist above. If the resource is determined to be significant, the archaeologist shall make recommendations, in consultation with the NATR, as to mitigation measures needed to reduce potential effects on the resource to a level that would be less than significant. The ODS will be responsible for retaining the archaeologist and the NATR and implementing their recommendations of the archaeologist, including submittal of a written report to the the Stockton Community Development Department and the NATR documenting the find and its treatment.

TCR-4: Construction foremen and key members of trenching crews shall be instructed to be wary of the possibility of destruction of buried cultural resource materials. They shall be instructed to recognize signs of historic and prehistoric use and their responsibility to report any such finds, or suspected finds, immediately to the archaeologist and the NATR so damage to such resources may be prevented.

Significance After Mitigation: Less than significant

### 3.18 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			√	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			√	
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			√	
d) Are sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			√	
e) Has the wastewater treatment provider which serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			√	
f) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			√	
g) Comply with federal, state and local statutes and regulations related to solid waste?			√	

### NARRATIVE DISCUSSION

#### Environmental Setting

Wastewater treatment and collection services in the City of Stockton, including the project site, are provided by the City. Sewage treatment services are provided at the City's Regional Wastewater Control Facility (RWCF), located on Navy Drive in Stockton. The RWCF currently processes approximately 33 million gallons per day (mgd) of wastewater on average and has a treatment capacity of 55 mgd. A 10-inch sewer line is in place along Alvarado Avenue.

Water service in the project vicinity is provided by Cal Water, which relies on both surface and groundwater for its supplies. Existing 8-inch water mains are in place along Alvarado Avenue.

Storm water drainage service in the area is managed by the City of Stockton. The storm drainage connection points would include a 24-inch storm drain and a 30-inch pipe in Alvarado Avenue. Storm drainage flows to the Sutter & Calaveras Pump Station. Flows are discharged from this point into the Calaveras River.

As discussed in Section C(9), Hydrology and Water Quality, the City has a SWMP and a SWQCCP that are designed to regulate storm water quality in accordance with NPDES permit conditions.

The City has two franchise haulers that provide solid waste collection services. For the project site, Waste Management would provide collection service. There are three active sanitary landfills in San Joaquin County: the Forward Landfill on South Austin Road with available capacity to 2020, the North County Landfill on East Harney Lane with available capacity to 2048, and the Foothill Sanitary Landfill on North Waverly Road with available capacity to 2082 (CalRecycle 2016). There is no shortage of landfill facilities space within the City.

## Environmental Impacts and Mitigation Measures

### a, e) Wastewater Systems.

The project would involve the extension of sewer lines within proposed new streets. Constructed in conjunction with the street improvements, new sewer lines would in turn connect to existing City sewer lines in the area.

The RWCF currently has approximately 22 mgd of capacity to serve additional development. The proposed project would involve increases in sewage generation as new homes are built and occupied. Collection System No. 3 was designed to serve the project area, and the City has indicated that there is sufficient capacity in the system to accommodate the proposed project. The properties would connect to the City's sewer system via the 10-inch line located in Alvarado Street. These pipes would be of adequate size to satisfy the requirements of the City of Stockton's Wastewater Collection System Master Plan (pers comm. John Wotila).

### b, d) Water Systems and Supply.

The project would connect to existing water lines in the area. No new or extended water mains would need to be installed.

As of 2015, the City had 96,480 acre-feet of water per year available by right or from safe yield. Cal Water has indicated that sufficient water supplies are available to serve the project (pers. comm. John Wotila). The existing lines have been sized to adequately serve the project, and no significant impacts on water services are anticipated.

### c) Stormwater Systems.

There are no existing impervious surfaces on the project site, which is currently undeveloped land with light ruderal vegetation. The proposed project would result in the construction of new impermeable surfaces that would increase runoff from the site. Flows generated by the proposed project would not require changes to the existing City storm drainage system (pers. comm. John Wotila). Project impacts related to storm drainage facilities are considered less than significant.

f, g) Solid Waste Services.

The project would generate a demand for solid waste services. As indicated in Environmental Setting above, existing landfills in the County would have sufficient capacity to accommodate the amount of solid waste that would be generated by the project (pers. comm. Jennifer Cosby). The project would comply with applicable federal, state and local statutes and regulations related to solid waste. Project impacts on solid waste are considered less than significant.

### 3.19 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		√		
b) Does the project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		√		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		√		

### NARRATIVE DISCUSSION

#### a) Findings on Biological and Cultural Resources.

The project's potential biological and cultural resource impacts were described in Sections 3.4 and 3.5, respectively. Potentially significant environmental effects were identified in these issue areas, but all of the effects would be reduced to a less-than-significant level with mitigation measures that would be incorporated into the project.

#### b) Findings on Individually Limited but Cumulatively Considerable Impacts.

As described in this Initial Study, most of the potential environmental effects of the project would either be less than significant, or the project would have no impact at all, when compared to the baseline. Where the project involves potentially significant effects, these effects would be



reduced to a less-than-significant level either with proposed mitigation measures or by compliance with required permits and applicable regulations.

The potential cumulative impacts of urban development of the site were accounted for in the Stockton General Plan EIR (2007). The potential environmental effects identified in this Initial Study have been considered in conjunction with each other as to their potential to generate other potentially significant effects. The various potential environmental effects of the project would not combine to generate any potentially significant cumulative effects, except for traffic.

As noted in this Initial Study, a traffic impact study for the original project was prepared in 2005, while an updated study to account for a changed project was prepared in 2011 (see Appendix D). The 2011 update analyzed the potential cumulative impacts of the project on the same nine intersections studied under EPAP conditions, based on development of land uses and roadway improvements associated with the City of Stockton General Plan in 2035. The traffic impact study analyzed intersection conditions during both morning and evening peak hours for traffic, both without and with the project.

The results of the 2011 traffic study indicate that LOS under cumulative (Year 2035) plus project conditions would be at an acceptable level at all but two of the study intersection. The El Dorado Street/Alpine Avenue intersection would operate at LOS E during the evening peak hour under cumulative plus project conditions. However, the intersection would operate at LOS E under cumulative conditions without the project, and the incremental change in overall delay at the intersection would not exceed the City of Stockton threshold used to determine impact significance. The proposed project is expected to have less of an impact, as substantially fewer housing units would be constructed than the 2011 traffic study considered.

The other intersection that would be affected under cumulative conditions is El Dorado Street/Fargo Street. The 2011 traffic study indicated that LOS at this intersection during the evening peak hour would decline from B to F with the project, which is unacceptable by City standards (LOS would decline to C without the project, which is an acceptable LOS). Since the proposed project would construct fewer housing units than the number considered in the 2011 traffic study, impacts on this intersection are expected to be considerably less. However, since the exact impact cannot be determined, project impacts on the El Dorado Street/Fargo Street intersection are considered potentially significant. In addition, the 2011 traffic study indicated that the project under study would contribute to the need for a traffic signal at the Alpine Avenue/Alvarado Avenue intersection under cumulative conditions. Although the project would not have a specific LOS impact, the intersection eventually would carry traffic volumes that satisfy signal warrants.

Mitigation described below would contribute to the improvement of LOS at the affected intersections under cumulative conditions to acceptable levels by City standards. Cumulative project impacts after implementation of the mitigation measure would be less than significant.

Level of Significance: Potentially significant

Mitigation Measures:

CUMUL-1: The ODS shall make a fair-share contribution to funding the signalization of the El Dorado Street/ Fargo Street intersection and the Alpine Avenue/Alvarado Avenue intersection. The Stockton Public Works Department shall determine the fair-share contribution of the ODS to these

improvements, based on the proportionate share of project traffic to the total traffic under cumulative (Year 2035) conditions.

Significance After Mitigation: Less than significant

c) Findings on Adverse Effects on Human Beings.

Potential adverse effects on human beings were discussed in Section 3.6, Geology and Soils (seismic hazards); Section 3.8, Hazards and Hazardous Materials; Section 3.9, Hydrology and Water Quality (flooding); and Section 3.16, Transportation/Traffic (traffic hazards). For many of these issues, no hazards that could have an adverse impact on humans were identified. For potential hazards that were identified, mitigation measures described in the appropriate technical section would reduce impacts to a level that would be less than significant.

## 4.0 REFERENCES

### 4.1 DOCUMENT PREPARERS

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This IS/MND was prepared by BaseCamp Environmental for use by and under the supervision of the City of Stockton. The following persons were involved in preparation of the IS/MND:

BaseCamp Environmental

Charlie Simpson

Amy Gartin

Faith Dunham

Terry Farmer

Krista Simpson

### 4.2 DOCUMENTS CITED

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Air Permitting Specialists. 2007. Evaluation of Health Risks from Existing Train Traffic near Proposed Bear Creek East and West Development Projects, Stockton, California. August 18, 2007.

Brown and Caldwell. 2016. Draft 2015 Urban Water Management Plan. Prepared for City of Stockton. May 2016.

California Air Resources Board (ARB). 2008. Climate Change Scoping Plan: A Framework for Change. Adopted December 2008.

\_\_\_\_\_. 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. May 2014.

\_\_\_\_\_. 2016. California Greenhouse Gas Emissions for 2000-2014 – Trends of Emissions and Other Indicators. June 17, 2016.

California Climate Action Team. 2010. Climate Action Team Biennial Report – Executive Summary. April 2010.

California Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program (FMMP). 2014. San Joaquin County Important Farmland 2014 (map).

California Department of Finance. 2016. Report E-5 - Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2016, with 2010 Benchmark. Released May 1, 2016.

California High Speed Rail Authority. 2012. Paleontological Resource Report – Addendum, Fresno to Bakersfield Section Hanford West Bypass. Prepared by PaleoResource Consultants. July 2012.

City of Stockton.

\_\_\_\_\_. 2007. Stockton General Plan 2035 Background Report. December 2007.

- \_\_\_\_\_. 2009a. City of Stockton National Pollutant Discharge Elimination System Municipal Stormwater Program Stormwater Management Plan. Prepared by Larry Walker Associates. April 2009.
- \_\_\_\_\_. 2009b. City of Stockton and County of San Joaquin Final Stormwater Quality Control Criteria Plan. Prepared by Larry Walker Associates. March 2009.
- \_\_\_\_\_. 2014. City of Stockton Climate Action Plan. Prepared by ICF International. August 2014.
- \_\_\_\_\_. 2016a. Stockton 2040 General Plan Update, Existing Conditions Technical Memorandum: Cultural Resources. June 28, 2016.
- \_\_\_\_\_. 2016b. Stockton 2040 General Plan Update, Existing Conditions Technical Memorandum: Hazards and Safety. June 28, 2016.
- Federal Emergency Management Agency. 2009. Flood Insurance Rate Map (FEMA #06077C0470F). San Joaquin County, California. Effective Date October 16, 2009.
- Jensen & Associates. 2003. Archaeological Inventory Survey, Alvarado Avenue Residential Subdivision Project. November 6, 2003.
- KD Anderson and Associates. 2011. Updated Traffic Impact Analysis for Calaveras Estates #3 Annexation, Prezone & Tentative Subdivision Map, Stockton, CA. December 14, 2011.
- Regional Water Quality Control Board (RWQCB). 2015. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region: The Sacramento River Basin and the San Joaquin River Basin. Fourth Edition, Revised June 2015 (with Approved Amendments).
- San Joaquin Council of Governments. (SJCOG) 2000. San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP). November 14, 2000.
- \_\_\_\_\_. 2012a. San Joaquin Council of Governments Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan. Adopted September 2012.
- \_\_\_\_\_. 2012b. San Joaquin County Regional Congestion Management Program. November 15, 2012.
- San Joaquin County. 2009. San Joaquin County General Plan Background Report, Public Review Draft. Prepared by Mintier Harnish. July 2, 2009.
- San Joaquin County Flood Control and Water Conservation District (SJCFWCDD). 2015. Groundwater Report, Spring 2015.
- San Joaquin Valley Air Pollution Control District. 2009. Final Staff Report – Climate Change Action Plan: Addressing Greenhouse Gas Emissions Impact under the California Environmental Quality Act. December 17, 2009.
- \_\_\_\_\_. 2015a. Ambient Air Quality Standards & Valley Attainment Status. SJVAPCD website, <http://www.valleyair.org/aqinfo/attainment.htm>. Accessed December 7, 2015.
- \_\_\_\_\_. 2015b. Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). March 19, 2015.
- Solano Archaeological Services. 2017. Cultural Resources Letter Report: Cultural Resources Study – Calaveras Estates 4, Stockton, California. July 24, 2017.

- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). 2016. Custom Soil Resource Report for San Joaquin County, California. August 16, 2016.
- U.S. Department of Agriculture, Soil Conservation Service (SCS). 1992. Soil Survey of San Joaquin County, California.
- U.S. Environmental Protection Agency (EPA). 2009. Endangerment and Cause of Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act. Federal Register Vol. 74, No. 239, pp. 66496-66546. December 15, 2009.
- Wagner, D. L., E. J. Bortugno, and R. D. McKunin. 1991. Geologic Map of the San Francisco-San Jose Quadrangle, California, 1:250,000. California Division of Mines and Geology, Regional Geologic Map Series.

### 4.3 INTERNET SOURCES CITED

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- California Department of Conservation. 2014. Important Farmland Map of San Joaquin County. <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/sjq14.pdf>
- California Department of Resources Recovery and Recycling (CalRecycle). 2016. Facility/Site Summary Details, San Joaquin County. Available online at <http://www.calrecycle.ca.gov/SWFacilities/Directory/Detail/>. Accessed April 6, 2016.
- California Department of Toxic Substances Control (DTSC). 2016. EnviroStor database, [www.envirostor.dtsc.ca.gov](http://www.envirostor.dtsc.ca.gov). Accessed August 16, 2016.
- California Department of Transportation (Caltrans). 2015. List of Officially Designated State Scenic Highways. Available online at [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/scenic\\_hwy.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm). Accessed January 25, 2016.
- California Geological Survey. 2015. CGS Information Warehouse: Regulatory Maps. Available online at <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>. Accessed January 25, 2016.
- San Joaquin Valley Air Pollution Control District. 2015a. Ambient Air Quality Standards & Valley Attainment Status. SJVAPCD website, <http://www.valleyair.org/aqinfo/attainment.htm>. Accessed December 7, 2015.
- State Water Resources Control Board. 2016. GeoTracker website, [www.geotracker.swrcb.ca.gov](http://www.geotracker.swrcb.ca.gov). Accessed August 16, 2016.
- Summary Details, San Joaquin County. Available online at <http://www.calrecycle.ca.gov/SWFacilities/Directory/Detail/>. Accessed April 6, 2016.

#### 4.4 PERSONS CONSULTED

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Jennifer Cosby, Relationship Manager, Waste Management, Inc. May 5, 2017.

Carmen Jimenez, Ed Services Assistant, Stockton Unified School District. April 28, 2017.

Rick Stubstad, Battalion Chief, Stockton Fire Department. April 28, 2017.

John Wotila, Engineer, Stockton Municipal Utilities Department. May 24, 2017.

## 5.0 NOTES RELATED TO EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers, except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analyses Used: Identify and state where they are available for review.
  - b) Impacts Adequately Addressed: Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures: For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures, which were incorporated or refined from the earlier document, and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a

previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The checklist in CEQA Guidelines Appendix G is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.